

Land, Materials, and Construction Site: Decommodification Through Alternative Construction

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0. *Abstract.*

The definition of decommodification is contested. Researchers see decommodification either as a strategy to move beyond capitalism or a way to reform current conditions. Some researchers interpret it as a process that seeks to disentangle society from the market yet others claim it is individual actions that replace profit-based exchange. Through the exploration of, and engagements with, alternative construction practices, this thesis complicates the definition of decommodification by arguing that these competing definitions are mutually existing in dialectical relationships. When decommodification simultaneously suggests an overcoming of the profit motive whilst reinforcing existing conditions, and whilst it can be observed as both action and process, then to fully define decommodification these contradictions must be exposed.

From land banking, and construction finance, to subordinated labour, there are standard procedures that have been scripted around financial capital making it appear as though profit based construction practices are the only option. This thesis asks: how does the engagement with, and analysis of, alternative construction practices suggest that the definition of decommodification should incorporate the contradictions - firstly of efficacy, and secondly of actions versus process?

The research engages with REACH Homes, a small not-for-profit house builder. It uses a unique, modified participatory action research (PAR) methodology that consists of an initial phase of improving REACH's practice, akin to a traditional PAR project, and a subsequent stage that analyses those practices. The analysis of REACH's alternative construction practices indicates how decommodification can be understood both as an action and as a process. It also shows that whilst decommodification can be used as a tool by capital to overcome its inherent contradictions, decommodification presents an alternative to the reified present and therefore could play a role in moving beyond capitalism.

The thesis also adds to the literature on social architecture through the exploration of decommodification. Literature on the purpose of social architecture ranges from arguing that social architecture provides immediate benefit to seeing it act in a vanguard-esque manner of creating realities beyond capitalism. Because this thesis uses alternative construction practices to show that another option to capitalist construction is possible, it adds to social architecture by placing it within struggles beyond capitalism without overstating its role.

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1. Introduction.

"The government says y'need to build more houses and they [house building companies] say if we build more houses and we build them faster we can't charge as much for them, so why would we want to do that? It doesn't make any economic sense... with it all being driven by money it's never gonna work and that's why it's so important that this works, because we can show a completely different model and a completely different way of making a success out of building houses that people actually want, where they want them."

(17/08/18 interview with Jon Johnson of REACH Homes)

Construction is organised around three domains - land, materials, and the construction site - and the procedures that formalise these domains are predicated on the universal equivalent, money. In today's context these construction procedures are increasingly financial, stemming from construction finance - which is primarily built upon a return on investment for pension funds. This reliance to return investment manifests itself as financial procedures in the three domains of construction - for land, e.g. in land banking, for materials, e.g. in viability assessments, and for the construction site, e.g. in the lack of innovation, rolling back of regulations, and precarious labour force.

REACH Homes are a small, not-for-profit housebuilder in Sheffield whose alternative construction practices seek to replace the universal equivalent with alternative equivalence, a non-countable and non-profit based economic interaction. Through a participatory engagement with REACH Homes, this thesis uses decommodification as a lens to decode alternative construction practices and in doing so brings into question the definition of decommodification.

In this context, alternative construction practices are understood as other ways of building, in relation to the formal, profit based sector. Peredo & McLean (2019) argue that the use of the word alternative in alternative economies side-lines the fact that they do occur within the capitalist economy. By not using the word alternative, Peredo & McLean are able to criticise the notion that the economy is only made of profit based exchanges - alternatives do not exist externally to capitalism they are accounted for within it. This thesis uses the word alternative to highlight the issue of reification that makes it appear as though only profit based construction practices exist and are possible. This does not mean that the thesis argues that these alternatives provide ways in which to overcome capitalism, it merely shows that there are other options.

There are two contentions within the definition of decommodification that this thesis addresses. Firstly, is the understanding of decommodification as a process, that moves away from market dependency, or as an action, that is subsumed within the larger economy. Scholars, including La Grange & Pretorius (2005), understand decommodification as diverse ways to engage in the economy without profit based exchange, from stealing to reciprocal exchange, in this way decommodification can be seen as various singular economic actions. Others, including Vail (2010), understand it as *"any political, social, or cultural process that reduces the scope and influence of the market in everyday life"* (Vail, *ibid*:310), in this way decommodification can be seen as a

Polanyian (2001) countermovement - a process that seeks to limit the market. Secondly, and stemming from the notion of decommodification as limiting the scope of the market, decommodification's efficacy as a tool to overcome capitalism is brought into question. Scholars such as Vail (ibid) and Gerber & Gerber (2017), argue that decommodification can be used as part of a progressive transition beyond capitalism, however others, such as Room (2000) argue that because it is accounted for already within the economy it can only serve to reform capitalism.

Through the observation of alternative construction practices, this thesis argues that these two contradictions contained within the contested definition of decommodification should be rationalised and understood as dialectical. This rationalisation started from Adorno's part and whole dialectic:

"the whole in question shows itself to consist of parts, though not simply as a mere sum of parts to which it might be reduced but rather – and this is decisive here – in such a way that these parts themselves constitute a reciprocal relationship, and stand in a dynamic relation to one another, so that the whole can no more be grasped by simply adducing the parts than it can by simply acknowledging and resting content with the undifferentiated whole itself, rather than analysing it with regard to its individual features."

Adorno (2017:137)

Here Adorno argues that capitalism is too complex to be known in totality, it is in constant flux. However by studying individual parts, a slightly more complex understanding of the whole can be attained. Yet through this complex understanding of the whole, a realisation emerges that there is yet more to understand about the nature of capitalism. In this way, the whole and the parts of capitalism are in a dynamic relationship that is made ever more complex through the ever changing economic relations of production. By exploring alternative construction practices, a more complete picture of contemporary capitalism is revealed in the field of construction. Furthermore, Adorno's dialectic provided a framework for analysing decommodification through its minutia. This meant analysing each individual claim made by other theorists to realise that both the efficacy and the dichotomy of actions and processes in decommodification should be understood in a contradictory relationship. Applying Adorno's dialectic allowed the research problem to emerge:

The purpose of this study was to critically explore decommodification in the context of alternative construction practices. The study focused on REACH Homes, who emerged in reaction to the commodification of housing. Through the engagement and improvement of REACH's alternative construction practices, decommodification was revealed to provide a greater understanding of contemporary capitalism. Alternative construction practices revealed not only how they themselves were incorporated into the economy, but also provided insights into the formal practices they were providing an alternative to. Decommodification emerged for REACH at the moments when their construction practices faced the most pressure from commodification; these domains were land, materials, and the construction site. From these fields the thesis claims that decommodification should be understood as contradictory, it can act as a process or an action, it can lessen the effects of commodification whilst being within a capitalist present, and it emerges as a reaction to commodification without necessarily being a

conscious reaction.

Adorno's dialectic, alongside the research problem, worked together to inform the thesis' methodology. This is primarily based on a participatory action research methodology (PAR), supported by case study and research by design methods, which enabled me to engage with REACH and collectively undertake cycles of action and reflection. This engagement was crucial to supporting REACH in many of their attempts to build by providing them in-depth support and knowledge of the technical and architectural side of construction. From this, a learning and changing process took place within REACH's alternative construction practices as required. The research departed from the participatory methods inherent in PAR to further analyse REACH's alternative construction practices not only so they can be deployed in other settings but also so that the thesis can add to debates on decommodification.

Alternative equivalence was a primary alternative construction practice undertaken by REACH. This practice took place in the domains of land, materials, and construction site to allow economic interactions without money. The thesis makes a distinction between the words equivalence, as a non-countable equal, and equivalent, as a countable equal. As such Marx's universal equivalent, money, applies to exchange value through the exchange of commodities for a set amount (i.e. $x \text{ commodity} = y \text{ money}$). Conversely where REACH acquires - for example - land by providing energy, the energy, acquired through REACH's solar panels, varies and both parties mutually accept this. In this example, REACH engages in the transferral of use values without counting the amount of energy required to justify the land acquisition, as such this economic interaction can be understood as an equivalence. This equivalence can be understood as decommodified in that no party is attempting to profit from the interaction and so it is defined in the thesis as an alternative equivalence.

The three domains of land, materials, and construction site can be understood through this debate. Whilst in formal modes of construction equivalents of monetary exchange are dominant, REACH is constantly searching for equivalencies in order to circumvent the monetary logic of formal construction. These equivalents form chains that regularise formal construction meaning that, for instance, purchasing a material can be guaranteed through purchase orders, delivery logistics, labour relations, pay, etc. Through alternative equivalence, REACH attempts to disentangle the logics of profit based construction. This creates precarity because the regularised equivalents are no longer guaranteed. For instance, if REACH provides a waste collection service and uses it to gain materials this is an equivalence that does not guarantee the amount, or type, of materials REACH will acquire. The three domains of land, materials, and construction site are regularised through equivalents and for REACH became the key staging grounds for their attempts to establish alternative equivalence. As such, these domains form the thesis' three empirical chapters.

For activists the thesis provides concrete examples of the successes and failings of alternative construction practices whilst questioning the efficacy of activism in overcoming capitalism. For researchers, this analysis on decommodification extends not just into existing debates on the word but also wider into Marxist questions of reformism and deeper understandings of capitalism, through Adorno's part and whole dialectic. Because of their integration within a world economy, alternative construction practices are encapsulated within capitalism. Their recording in this thesis therefore

reveals a minuscule part of capitalism that can expand outwards to provide a greater knowledge of the whole. The exploration into the efficacy of decommodification through construction also adds to debates on the purpose of social architecture. Some see its role as improving the lives of participants, others see it as leading a gradual change beyond capitalism. This thesis shows that one benefit of social architecture is that it shows an alternative to profit-based construction practices is possible. The thesis' methodology is of interest to researchers engaging in participatory methods but who want to draw theory from the research that can be applied in other settings with other groups. This introduction provides a brief summation of REACH, an overview of the outputs of the work by exploring decommodification and the methodology, and also lays out the chapter structure.

REACH Homes

Housing has been commodified to the point where its use value is secondary to its exchange value. Whilst the value of homes are forever increasing more people are locked out of access to the shelter they require. Because this commodification most affects the consumers of housing there has been a reinforced countermovement against the practices of housing consumption and housing's distribution, from Community Land Trusts, to squats, to housing co-operatives; these are mainly focussed on critiquing the transformation of housing as an asset and proposing alternatives that prioritises housing's use value. Yet within this countermovement, there has been little focus on the production of housing. Within this context, REACH emerges:

"REACH Homes is a not-for-profit business which aims to change the housing market. Our eco-homes, converted from shipping containers, start from just £35,000, cost 90% less to heat than a traditional home and use >60% recycled local materials."
(Website, 04/07/18)

Founded in 2016, REACH (Recycled, Environmental, Affordable, Container, Housing) is a small business with a few core members and a wider group of volunteers and occasional paid workers. It emerged after founder Jon couldn't afford a home in the market but realised he could afford to build one using waste materials. This house became the prototype for REACH and to date is one of two completed structures by them, the other being an office for the Ecology Building Society.

REACH were not chosen as an exemplar case of decommodification; as Adorno's part and whole dialectic suggests there isn't necessarily one case that would reveal more about understanding capitalism than another. REACH were chosen because of my established contact with Jon and that they were more active in spatial production than other potential cases. Furthermore, as I was already aware of REACH's practice, I knew they were performing decommodification, albeit not explicitly. It is worth reiterating that decommodification is not a part of REACH's lexicon and instead is used by the thesis in the analysis stage once I had removed myself from REACH.

Through the lens of decommodification it became clear that REACH constantly thought in terms of alternative equivalencies - this practice provided ways to circumvent formal relations of construction without the necessity of profit. This has a methodological

implication because when searching for cases that are practicing decommodification researchers can seek cases where alternative equivalence is being established as a starting point.

1.1 Contributions to Knowledge

Decommodification

As explored in the opening section, this thesis adds to debates on decommodification by examining its contested definition and using alternative construction practices to work through two contestations. The first is the understanding of decommodification as action and decommodification as process, the second is the efficacy of decommodification to overcome capitalism. These are worked through dialectically to understand both sides of each contestation as having truth within them, as such the definition of decommodification should be complicated to reflect this.

As an action, decommodification can be understood as individual economic interactions within a wider economy that serves to reproduce existing realities through economic actions that are not based around profit. Examples of this in the thesis include trading land for energy or acquiring waste UPVC windows to help clear out a manufacturer's yard. As singular actions these aren't trying to critique, or act as a countermovement to, profit based exchange; instead they are immediate ways REACH can access the materials they need to build without having money to purchase them. As a process, decommodification shows alternative ways to order aspects of the economy through attempts to reduce the prevalence of exchange value. To understand this, REACH is best looked at as a whole; in this sense their economic actions and construction practices, regardless of whether they are commodified, are acting towards REACH's collective vision of reducing profit in the housing construction sector. The thesis shows that both of these conditions of decommodification are observable and so debates around defining the word shouldn't be split over whether it is an action or a process but complicated to show that it is both.

The efficacy of decommodification as a means to overcome capitalism is a more contested subject. This thesis doesn't aim to provide answers of how to move beyond capitalism but merely to contest the theory that it is possible, through decommodification, to gradually move to a more socialised economy (see Vail, 2010; Gibson-Graham et al, 2013; Gerber & Gerber, 2017). Simultaneously, it also contests the theory that decommodification is only able to reproduce existing conditions and, therefore, should be disregarded in struggles beyond capitalism (see Room, 2000). Decommodification as a reproduction of capitalism is first seen through REACH's aim, which is effectively to reform both housing production and distribution to not be based around profit. This outcome, if it were possible, applies to one sector of the economy and is similar to the nationalisation of housing both historical in the UK and more contemporary in certain European countries. This is backed in the literature, because whilst Polanyi (2001) shows how decommodification can emerge as a countermovement as increasing commodification becomes overwhelming for people living under capitalism, Harvey (2014) suggests that this countermovement can serve to offset capitalist contradictions because the decommodification of some aspects of the economy can allow exchange value to flourish in others. Furthermore, the quote in the introduction for REACH above suggests that whilst REACH may be against the profit motive in housing they are using their method to fit within the

existing economy by subscribing to the government wish to “build more houses”. This raises the question of what, if any, is the efficacy of decommodification. The empirical chapters show how REACH became politically educated through decommodification, in engaging with alternative construction REACH learnt about housing economics and the standard procedures of formal construction. Furthermore, alongside this learning was an experimentation by REACH in which new ways of creating these alternative construction practices in order to deduce how they operate within the existing construction sector. It also shows how alternative construction practices, outside of profit based solutions are possible, breaking through the reified image of formal construction. Empirically this was demonstrated through the practice of alternative equivalence. By breaking away from regularised procedures of construction, the alternative construction practice showed that non-profit modes of construction are possible but they are precarious. In this way the thesis’ argument of REACH is similar to Marx’s (in Jossa, 2005) argument of co-operatives - they serve to show how an alternative society might be ordered but of themselves do not show any clear way out of the present. Luxemburg (1986) argues that the production processes need to be seized and appropriated rather than changed within capitalism, ultimately this is what the efficacy of decommodification suggests. Whilst alternative equivalence in this thesis shows an alternative to reified construction, it is inherently precarious. The benefit of showing that operating without profit is possible is to say that formal modes of construction could be seized and appropriated to operate without profit - that profit isn’t natural. Decommodification doesn’t show a way to seize formal modes of construction but does serve as an educational tool within an overall strategy of moving beyond capitalism.

In summation, decommodification can be part of an overall strategy of overcoming capitalism but on its own it fails to provide an emancipatory method because it ends up as a tool to offset capitalist contradictions without moving beyond them. In this way it should be understood as a dialectic between these two theories.

Supplementing Participatory Action Research

To enable the documentation of alternative construction practices whilst also zooming out to complement the definition of decommodification the thesis builds upon participatory action research methodology (PAR). McTaggart (1997:39) explains PAR is “*motivated by a question to improve and understand the world by changing it and learning how to improve it from the effects of the changes made.*”; this change based methodology was critical for my engagement with REACH because it allowed us to act and collectively reflect on those actions. Fals-Borda (1987) also claims that as well as change being an output in PAR, another output is the engagement with participants to support their understanding of class position and to use a collective, co-produced intervention, created within the PAR project, as part of their struggle for emancipation. With REACH I participated in construction, grant writing, newsletter editing, design, logistics, and more. Each of these was key in identifying areas of improvement and collectively working through them.

Had the research only been focussed on REACH’s interventions and alternative construction practices, a more orthodox understanding of PAR methodology would have been sufficient. There are several reasons why this needed to be modified. Firstly is

the issue of who PAR research is for. Because the outputs of PAR are firstly participants learning how to change the world through their actions and secondly a political education for the participants, they are quite insular with little scope for transferring this knowledge outside of the participants. Whilst this takes into account that every scenario and context is different, it does not appreciate that there are generalities that can be applied so that each time a different group engages with, for example, alternative construction practices they don't have to start from scratch and reinvent the wheel. This localised approach also sat at odds with Adorno's whole and part dialectic, which became a key driver for the work, because Adorno argues a greater understanding of the whole can be ascertained from the particular. In this sense I was cautious about taking an orthodox approach to the research. I argue that alternative construction practices, such as alternative equivalence, have applicability outside of REACH. Furthermore, both the successes and failures of REACH in undertaking alternative construction practices can serve as an educational tool for other groups. Secondly, and following on from the first point, because of PAR's co-produced outputs I would not be able to engage in debates of decommodification despite being able to see clear criticisms of established decommodification theories emerging before me in the field. The co-produced outputs of PAR would mean that either REACH would have to engage in this theoretical exercise, of which I know (precisely because of my engagement) they did not have the interest or the time to devote to the topic, or I would have to abandon it. Thirdly, I was not totally in agreement with REACH on the feasibility of their vision. Where REACH saw their goal as taking profit out of housing I saw them as a way of demonstrating that alternatives to formal - profit-based - construction exist. In a PAR project this would place us in tension as the undertaking of the change based methodology would be for different outputs. As explored in chapter 3 (methodology), to support my deviation from orthodox PAR I employed elements of both case study and research by design (RbD) methodologies. The personal reflections inherent in RbD allowed me to create distance from REACH to reflect on my input into the project; the engagement with REACH was also supported by RbD's design methods. The Case study methods of observation and informal interviews allowed me to simultaneously be aware of the actions of others in REACH whilst undertaking my own actions. This was supported by the analysis inherent in case study methodologies which provided the distance necessary from the engagement with REACH to reflect on it. This contribution to PAR expands the knowledge acquired from participating with REACH and applying it outside of the immediate context. Both of the contributions to knowledge, complicating decommodification and building on PAR, are focussed at certain points of the thesis. The main aim of the empirical work is to show the complication of decommodification through alternative construction practices and the methodology primarily focuses on the building of PAR, yet both contributions also appear throughout the thesis. For example, the methodology inevitably supports the groundwork for the empirical data to be collected and the complication of decommodification is the basis of the movement away from orthodox PAR. As such the chapter structure, whilst showing where to find specific contributions to knowledge, inevitably excludes how both contributions permeate throughout.

1.2 Chapter Structure

The literature review serves to frame the financialisation of housing as increasingly focussed on exchange, over use, value. It then focuses on the construction of housing more specifically, narrowing down from looking at housing financialisation in production, distribution, and consumption. Within these first two sections groups are introduced that have tried to counteract this increasing financialisation. The chapter then provides an in-depth analysis on decommodification literature; this is crucial to introduce debates on decommodification as action and process and the efficacy of decommodification. This also frames the following, methodology, chapter by suggesting that the output of the thesis is not solely on the improvement of REACH. This conclusion means the thesis cannot use a solely PAR methodology.

The Methodology chapter shows how the thesis deployed a PAR methodology that was altered to allow REACH's alternative construction practices to be interpreted through the lens of decommodification; this adjustment to PAR methodology provides the first contribution to knowledge. The first section explores the research question to contextualise the need for a unique methodology. The subsequent section explores the three orthodox methodologies that the thesis builds upon to finalise the methodology. Research by design (RbD) was deployed to incorporate architectural design methods. Participatory action research (PAR) was the primary methodology as I worked with REACH in reflective cycles of planning, action, reflection on our next steps. Finally I incorporated case study analysis to provide distance for myself from the research and to reflect on decommodification. After establishing the methodology, demonstrating the validation strategy became critical; this included a reflection on my positionality as it may appear to clash between the engagement phase and the analysis phase. The selection process of REACH is then explained, showing how not only the case but also the research problem was narrowed down through this search and how the plan changed pre-fieldwork. Finally the data collection process describes the methods and in doing so sets up an introduction to REACH.

The contextual chapter introduces REACH Homes by starting from an initial look at left wing activism in Sheffield that then filters down into an exploration of the commodification of housing, through policies such as Right to Buy, and historic housing activism. This leads into a brief exploration of present day housing activism in Sheffield that introduces REACH Homes. This shows how REACH emerged from the personal situation of REACH's founder who could not afford a house on his police pension. It then details the organisation of REACH to show how it is quite a small core group made up of irregular volunteers and some paid staff when possible. The final section explores the projects of REACH to date with a rough timeline of events.

The three empirical chapters that follow explore the alternative construction practices of REACH within three different fields. Land, materials, and construction site were selected as the empirical chapters for two reasons. First they roughly align to the primary aspects of construction - the site on which the building is placed, the materials it is made from, and the labour that makes it. Secondly, they were the areas REACH found most commodified and so in order to build they were the areas REACH most had to create alternative construction practices. The first empirical chapter explores REACH's attempts

to acquire and gain permission to develop land. It introduces alternative equivalence as a type of alternative construction practice used by REACH to acquire the relevant parts to build without monetary exchange; alternative equivalence is the main practice I witnessed REACH using and so it is analysed in depth to reveal more about REACH's construction and more generally the nature of construction. This includes an analysis of the limitations of alternative equivalence; through looking at land transactions it becomes clear that the motivations and requirements of actors engaging in alternative equivalence are crucial for assessing the success of the practice. Furthermore these motivations and commitments are most often influenced by regulatory requirements and languages that are only bureaucratically required in order to build and so serve as a barrier for many alternative construction practices. The chapter argues that land acquisition and development is a flashpoint for showing financialisation in the construction sector; it shows how REACH struggled to get land from the Council and how regulatory arrangements can be sidestepped if they hinder the process of profit accumulation. For alternative construction practices, the chapter shows how regulatory arrangements need to be either acknowledged or sidestepped around in order to be able to build. It also starts to question the efficacy of decommodification by showing how it served to educate REACH about the financialisation of construction through their engagement with alternative practices whilst also implying how decommodified construction can serve to offset the contradictions of construction.

The material empirical chapter continues the analysis of alternative equivalence found in the land acquisition chapter. It starts by showing how the success of alternative equivalence is predicated on the value of the objects in exchange, the less exchange value it has, the more likely the alternative equivalence is to be successful. This retroactively feeds into the successes of the alternative equivalencies in the land acquisition chapter and shows how waste is a primary gain by REACH through alternative equivalence. It then argues that alternative equivalence should be understood in context with other economic actions in order to see how it can offset capitalist contradictions. Finally the section shows how the languages and procedures surrounding materiality in construction are at odds with REACH's alternative construction practices, where the acquisition of materials is precarious, meaning they have to find ways to bypass the requirements or struggle to fit within them. This chapter goes further into the debate of the efficacy of decommodification by showing that if the success of alternative equivalence is predicated on a low exchange value then the practice is not challenging capitalist economics but providing an offset for the waste created in the production process. It also further introduces the idea of decommodification as an action by showing how alternative equivalence fits within a wider ecology of economic practices; this further implies how these decommodified actions are accounted for within the economy.

The construction site chapter continues to show the connectedness of alternative construction practices to the wider economy. This explains that in order to understand labour relations on the alternative construction site there has to be an acknowledgement of formal labour relations and that the two are inevitably intertwined. The following section explores how innovation on the construction site overcame REACH's lack of capital. Lack of money is a feature of many alternative construction practices, whilst this isn't to claim that if REACH had the money they would just build houses using standard construction procedures it does mean that alternative construction practices attempt to overcome this lack; this is particularly obvious in alternative equivalence where different things are exchanged. The final section shows how alternative construction practices

provide a blurring of the boundaries between the construction site and residency. This is in contrast to formal construction where builders are expected to finish the job and leave, with some potential snagging checks, with REACH Jon, as builder-cum-resident, critiques this idea by being intimately acquainted with the prototype. Furthermore it connects the current actions of REACH with its future visions to show how they are acting within the present to attain their future goals. This chapter explores further the dialectic of decommodification as process and action. Individual actions, such as providing a CV reference in exchange for labour simply serves to offset the contradictions in capitalism of employment, yet when this is connected to REACH's future vision of providing not-for-profit housing then decommodification is part of a process to lessen commodified housing. This feeds into debates about the efficacy of decommodification because if the aim of REACH's decommodification is only to limit the commodification of housing then their project serves to offset the contradictions of the financialisation of housing - that less people are able to afford housing, rented or otherwise, but capital requires people to live in order to generate profit.

The final chapter reinforces the arguments of the thesis; making explicit the contributions to knowledge and how they fit within the wider discipline. The contribution to the efficacy of decommodification provides within it a questioning of the role of social architecture. Social architecture's purpose is contested, some argue it is in the provision of immediate benefit to participants and others argue it provides the spaces that a post-capitalism will inhabit. This thesis' argument, that the value of decommodification is in the testing and demonstrating of ideas outside of the profit-based norm, suggests that the role of social architecture, from a left perspective, is to show an alternative to reified modes of construction and inhabitation.

2. Housing & Decommmodification.

In our global financialised world, housing is at the forefront of profit accumulation (Marcuse & Madden, 2016). Its use value has been sidelined for its exchange value. This shift has been facilitated through processes of commodification, from government deregulation to the selling of public assets (Dorling, 2014; Rolnik, 2019). This commodification happens not just at a consumption and distribution level, where the potential profit to be made from a house is expected to increase over time based on externalities (Harvey, 2014), but also at the production stage where there is a speculation on value to profit ratios (Wainwright, 2015). Despite this, much of the countermovement against the commodification of housing focuses on housing consumption without considering its production; hence there is a proliferation of housing co-ops and community land trusts etc that engage with capitalist modes of construction, ultimately replicating the current conditions of production. As such, Pickerill & Maxey (2009) argue there needs to be a holistic delivery of alternative forms of housing that encompasses both production and consumption and Mullins & Moore (2018) call for further research into the production of alternative housing¹. This thesis moves further from these sources by contextualising the emergence of these alternative construction practices and understanding them as acting within a countermovement to commodification that seeks to decommmodify housing whilst also exploring the dimensions that facilitate in the emergence of alternative construction practices. Understanding debates around the relationship of commodification and decommmodification then becomes not only a critical lens to analyse the construction practices undertaken within alternative forms of construction, through the case study of REACH, but also through this analysis proposes a complication of the critical lens itself. In this sense the thesis becomes not only a way to document alternative practices of REACH's construction but a way to reflect on decommmodification and how it emerges from these construction practices.

Understanding the term financialisation is crucial in following this argument. Lenin (2008) traces the roots of finance capital to increasing monopoly which ultimately leads to the commodification of money. He describes this process as the way in which industrialists cease to own capital but loan it from the bank. The bank wants to see a return on this loan and so finance capital is the way in which money generates more money. Therefore, financialisation in this thesis is understood as the process in which money is treated increasingly like a commodity, something that is acquired and traded for in its own right as opposed to as the universal equivalent of exchange. Housing financialisation is the process by which banks increasingly control the economy of housing, using it as a speculative asset to generate further money. This is not a new process, Lenin (2008) explores it in relation to land, he states that "*Speculation in land situated in the suburbs of rapidly growing big towns is a particularly profitable operation for finance capital*".

1. This separation of production from distribution and consumption stems from Marx (1972), who argued that separating them propagates the falsehood that although methods of distribution and consumption may change bourgeois social relations within production have always existed. Therefore in order to refute this claim they need to be understood in totality.

The first two sections of the chapter focuses on the contextual grounding of REACH as part of a countermovement against the commodification of the housing sector. This allows the third section to become the theoretical grounding, introducing the concept of decommodification and how decommodification is observable from existing practices. In order to situate this argument the three concepts of housing consumption and distribution, housing production, and decommodification emerge. Housing consumption and distribution situates the present condition of housing financialisation, how it emerges through land speculation, and explores the responses to this. It positions the emergence of this present condition through regulations and attitudes and then explores how it is reinforced through regulations today. This section is crucial to understand why REACH faced difficulty in practicing alternative construction by explaining the entrenchment of profit within contemporary views of housing and showing how this is defended against deviation.

Housing production explores how the financialisation of housing does not begin at the moment of distribution and consumption but is pervasive throughout the construction process. This situates construction as a primary method for reproducing profit accumulation; thus it explores strategies that defend construction's accumulation potential. This focuses on not just the separation of labour but the sourcing of materials and how they are united on the construction site through design. It also explores modes of construction that follow different economic models to producing profit in order to situate REACH. This section foregrounds how REACH performs differently to a commodified normative practice within construction and why they faced difficulty in their attempts to deviate from normalcy whilst engaging with other actors in the sector.

Whilst the chapter thus far explores practices that emerge in reaction to the commodification of housing production, distribution and consumption, what becomes clear is that they are at the margins and non-standard. They are acting as a countermovement; in reaction to, the commodification of housing. The final section of the literature review explores the relationship of commodification and decommodification. Simply by acknowledging that alternative construction practices exist foregrounds an economic ecology that is not made of only market transactions. This situates REACH not just within the deviation of construction practices but within this ecology as part of the generalised countermovement against housing commodification and this allows a complication of the definition of decommodification within political economy. This section argues that understandings of decommodification are in contradiction, they should be seen dialectically. One understanding, decommodification as process is the countermovement towards commodification, that attempts to limit the hegemony of market processes. The other, decommodification as action, understands decommodification as one aspect within the political ecology that not only doesn't act as a countermovement but may also be complicit in the reproduction of commodification. Both of these definitions are observable through the alternative construction practices of REACH and how they interact with the wider economy. However as a countermovement, decommodification's efficacy must also be brought into question. Furthermore the section questions the consciousness of practicing decommodification. Groups that utilise decommodification as part of a countermovement against commodification processes may not be aware of what it is and it may be being deployed out of a lack of funds. For example, REACH use

primarily waste materials in their construction and this is done to critique the amount of waste created by the construction industry, however it is also done because REACH can access these materials cheaply or for free thus there is a duality of decommodification that emerges when observing REACH's construction practices that couldn't necessarily be theorised. REACH seems to act both out of critique of the present housing sector and out of struggling to maintain and expand their position within it; the first stage of understanding this is understanding the housing sector.

2.1 Housing Distribution and Consumption

Mason (2016) and Perretti (2017) believe the current economy can effectively be described through an examination of the car wash. In the 50s, the car wash embodied the future of automation as a sign of a utopia whereby robots would take on the menial jobs of humanity, emancipating workers from their labour. Fast forward to the past decade and we can see a rapid decline in the automated car wash with a significant rise in the hand car washes manned by immigrant labour. Mason (ibid) uses this to demonstrate that the *"entire economic system is geared to distributing the proceeds of globalisation upwards and its costs downwards"*, creating a bizarre system of reverse industrialisation where the opening of the global labour market has succeeded in undercutting a machine through growing wage inequalities. It is precisely these global labour markets that facilitated the downturn of industrial surplus (Chomsky, 2015) leading capitalists to invest in assets such as space rather than industry, which accrue profit through speculation (Harvey & Wachsmuth, 2012; Lefebvre, 2003). Understanding the capitalist's moves to acquire assets, Perretti (ibid) states that the automated car washes are often located in desirable city centre locations and as such the sites have been bought out and replaced by speculative luxury accommodation, the function of the car wash is then moved to the in-limbo dead spaces on a city's periphery. This suggests the way in which the built environment is commodified to be used as an extremely efficient tool to offload the surpluses that capital produces. The rising exchange value of the automated car wash site, brought about by speculative investments in the surrounding city, has priced out the car wash, however the use value or need for people to have their cars washed is still present; as such a cheaper site is needed whereby the exchange value does not outweigh the use value. A forgotten piece of land on a city's periphery can provide a perfect solution: the land is cheap, the cost of installing new machines is expensive - but there is an abundance of precarious labour in the area which can be harnessed, and the benefit of tapping into this labour is that when the next inevitable wave of investment causes the displacement of the car wash the whole operation can be quickly taken down and the workers fired.

This example starkly highlights the dominance of exchange value over use value within land ownership. The next section explores how housing plays a role in this through its transformation into a speculative asset within the present moment.

Housing's financialization

"The UK has been and continues to be one of the epicentres and laboratories of the theoretical formulation and practical transformation of housing into a financial asset." (Rolnik, 2019:13).

Housing across the globe is increasingly viewed as a speculative asset, and the UK is at the forefront of this process (Rolnik, ibid). Older people live in houses too big for them whilst younger people struggle to pay their spiralling rent whilst scraping together

enough to get a mortgage. The logic of a house as a tool for investment emerges not just from the companies whose cranes are dotting the skyline but also for families where their house is a nest egg because the value of housing has risen far more rapidly than wages (Leijten, 2020). These examples, and the field at large, explore mainly the distribution (how housing is attained, where, and how it is spread across the globe) and consumption (how housing is used) of housing. In order to understand this logic of housing there needs to be an understanding of land as a (fictitious) commodity; as Harvey (2013:28-29) states:

"Land is not a commodity in the ordinary sense. It is a fictitious form of capital that derives from expectations of future rents. Maximising its yield has driven low- or even moderate-income households out of Manhattan and central London over the last few years, with catastrophic effects on class disparities and the well-being of underprivileged populations."

Land is understood as a fictitious commodity because it wasn't created for the market. Polanyi (2001) warned that the commodification of land has the potential to suggest a market hegemony. Peredo & McLean (2019) argue this is because land doesn't have to satisfy the needs of the buyers of land and so exchange value can be maximised without considering the actual use value.

In the quote above, Harvey (ibid) also makes the connection between land and housing. He explains that the exchange value of land is calculated from the expected potential rent and this demonstrates that there must be, or will be, some productive or consumptive activity on the land that justifies the exchange value. These expected rates do not occur independently however. Surrounding pieces of land are connected to each other. As certain areas of land attract more investment, a self-perpetuating cycle of development and investment has occurred leading to speculative investments and soaring prices in city centres, whilst those who can no longer afford those prices are displaced (Madden & Marcuse, 2016). The housing market is represented by soaring house and rental prices in the private sector whilst the public sector stock continues to diminish (Kentish, 2017). This leads Madden & Marcuse (ibid) to conclude that housing, as a physical urban asset, has become a primary factor in the reproduction of the present capitalist moment; Residential displacement due to development, extraction, and construction is now rivalling armed conflicts and disasters with the number of people it has displaced. Housing became the central commodity in the 2008 crash.

The financial crisis of 2008 manifested through the urban scale (Brenner et al, 2012). At a global scale it was driven by the neoliberal ideology of homeownership for use as an asset, at a national scale it was allowed by the restriction of the state from any involvement that may impede profit. This led to a local urban scale of soaring and speculative house prices that couldn't be sustained (Harvey, ibid; Marcuse, 2012). When a citizen purchases a property they stimulate demand; therefore allowing the owners of adjacent properties to command a greater exchange value in the market. The crisis revolved around this speculation of property values, fuelled by Low income people being *"systematically drawn into the financial system in order to access basic resources such as shelter"* (Palomera, 2014:105) - the financialisation of housing. A housing bubble was created whereby banks would increasingly provide mortgages to increasingly less creditworthy buyers in order to keep increasing existing property prices, because if no

one was purchasing the housing, then the whole system would collapse (Harvey, *ibid*; Marcuse, *ibid*); the bubble inevitably popped when the value of the mortgages was realised. The expansion of capital into the field of subprime mortgages as an effort to generate further surplus created the contradiction that the people who owned the properties simply could not afford to pay their mortgages. It was urbanisation's need to absorb capital surplus that sparked this specific process to create the urban crisis; however rather than crises marking an end to destructive capitalist practices, they serve instead to create a rationalisation of capitalism as a way to correct over accumulation processes, in this case the banks' (Harvey, 2001).

Rather than triggering a reconfiguration of housing affordability, house prices since 2008 have continued to rise and financialisation has increasingly been focussed on the rental sector (Rolnik, 2019). Contradictions within housing are converging and Harvey (2014) argues that the next capitalist crisis will revolve partially around rising rent due to the unaffordability of housing; this renting situation has been made more acute through the UK's state housing sector. As government backed construction falls, the housing shortage has led to landlords being able to raise their rents to over 50% of what the council rates would be (Kentish, 2017) with little repercussions.

There are also policies that have supported this. The 2012 Localism act of Cameron's coalition intensifies speculation by forcing families to accept the housing offered to them, often miles away from their social networks; If they refused the council was discharged of their duty to house them (Minton, 2017). This supports creating wealthy areas of investment whilst displacing communities. The government also introduced the growth and infrastructure Act 2013 which allowed house builders to oppose planning obligations for affordable housing. The government's position was that deregulating the planning system was the best way to stimulate the housing market after the housing crisis (Bowie, 2017), which had seen a drop in construction of 68% in 2012 (Dorling, 2014). Instead this led to underhand ways for housebuilders to bypass most affordable housing production through viability assessments which have stipulations that for a development to be viable it must make a return of 20%. Even when affordable housing is constructed the definition for affordable housing was, and is, 80% of market rate, meaning an affordable house in London would cost £450,000 and £250,000 outside of London (Bowie, *ibid*; Minton, *ibid*). Perhaps most insidious was the Bedroom Tax, a cut in housing benefit applied to any resident who has unoccupied bedrooms in their council house, the aim was to reduce spending on housing however the numbers were overstated and It has served to increase poverty and inequality for the most vulnerable (Butler & Siddique, 2016).

These outcomes suggest that housing has legitimised neoliberal policies. In this environment, private businesses and landlords flourish in a climate of speculation and land banking whilst tenant's wellbeing is placed second to profit (Dorling, *ibid*). Furthermore, this is legitimised through councils who have such little budget that they are competing against each other to woo private capital (Brenner, 2016). In the present, the linking of housing benefit to private rent simply means landlords can put prices up as the government has to pay, 40% of former council homes are now owned by private landlords, and between 2010 and 2015 the 5 biggest housebuilder companies saw a 480% rise in profit but they are still using viability assessments to claim that affordable housing isn't viable (Minton, *ibid*). Yet for tenants, due to the lack of social housing the current government's Housing and Planning Act 2016 marked the end of lifetime

tenancies, meaning that social housing renters have to move to private accommodation within 2 to 5 years (Dorling, *ibid*; Minton, *ibid*). Through these varied processes of commodification, housing increasingly becomes easily tradable as a financial asset, in this way housing is understood as financialised (Rolnik, 2019; Leijten, 2020; Wijburg, 2020).

This section has contextualised the present UK housing situation within contemporary policies. The financialization of the house is the crucial first step to understanding REACH's emergence because REACH was born from its founder not being able to afford a home. The next step in understanding REACH's emergence, as well as the housing countermovement and condition more widely, is through the policies that emerged as an attack on the welfare state and were driven through by the Thatcher government.

Historicising the Housing condition

Since the first moments of enclosure, brought about by primitive accumulation, land has always been seen as a commodity to be speculated upon, however the inherent nature of compound growth within capitalism has led to exchange values being the primary output of housing and land as opposed to the use they can provide (Brenner et al, 2012; Harvey, 2013; Brenner et al, 2016). This hegemony of profit into the urbanisation process has been brought about by the continuing evolution of neoliberal urban policy from the late 1970s to the present. This section explores this evolution in policy.

The Housing Act of 1980, the Right to Buy policy, forced Councils to diminish their stock by selling to tenants at a reduced rate; this policy was used not only for the UK government to gain support from the working class but also to provide an income stream for the government whilst privatising one of its largest assets, and cut a main funding stream from city councils - many of which were in open revolt against central government over industrial downturn (Holden, 2016). This example serves to reinforce the argument that Housing is not just an outcome of political planning (Madden & Marcuse, 2016; Turner, 2016), housing policy including and succeeding the Thatcher government has been a vehicle to justify an austerity agenda (Bowie, 2017). This suggests a reflexive relationship that argues attitudes towards housing can be an indicator of wider policy. This is important to historicise the changing attitudes towards housing.

The economic downturn of industrial cities was attributed in part to globalisation opening new labour sources, which could be cheaply exploited (Chomsky, 2015), and consumption markets, which meant wages could be diminished as the producer of the commodity was no longer its consumer. The previously non-commodified infrastructures that were required to keep the labour force healthy and content were no longer required as the domestic labour force was no longer a primary factor in the accumulation process (Harvey, *ibid*). As a result, neoliberal economic restructuring oversaw huge cuts to urban policy funding, *"including tax abatement, land grants, cutbacks in public services, the privatisation of infrastructural facilities and so forth - in order to lower the cost of investment, social reproduction and public administration within their jurisdictions"* (Brenner et al, *ibid*: 63). The ideological position behind these changes was to encourage big business investment and provide a reconfiguration of society towards privatised consumption. This left the once public infrastructures (from trains to

healthcare, housing to factories) to be reframed as a burden on society (Gibson-Graham et al, 2013) and thrust into contradictory market logics which saw their commodification piecemeal to generate short term profit. This left citizens lacking crucial infrastructures as the spaces occupied by these infrastructures became increasingly geared towards favouring exchange over use value as they moved more from spaces of production to consumption. This enabled, and was supported by, a succession of Thatcherite housing policies, including diminishing public housing stock, abolishing rent controls, deregulating the private rented sector, introducing buy to let, and giving housing benefits to subsidise private rented tenants (Bowie, 2017; Minton 2017).

This reduction of welfare state policies, brought about by the opening of new labour markets, has led to a de-centring process and a contraction of state led non-commodified construction projects, which has seen only one state owned home being Built to replace every five sold under the Right to Buy policy (Kentish, 2017). The policies of the Thatcher and Major governments were supported through the Blair government (Bowie, ibid). The decent homes programme enabled the transfer of 200,000 council homes a year to housing associations which cut direct public investments into the social housing stock, causing commodification (Minton, ibid) as housing associations do not receive tax income.

Since then a series of subsequent UK governments have, either through neglect or by design, continued this trend. Housing policy since the 1980s has been focussed on public services being provided by the private sector and a retreat of government through an austerity agenda (Bowie, ibid). this trend can be demonstrated by comparing the years leading up to the Thatcher government which witnessed roughly 100,000 houses built by the state and 150,000 built by the private sector, and the years post the 1979 election in which although the private sector has remained largely the same, the state has barely built any (Minton, ibid).

This section serves to highlight the reflexive relationship that housing, and attitudes towards it, has to policy. This historicising allows a contextualisation of different attempts at solving the contemporary housing problem and frames REACH as one such attempt.

Proposed Solutions

The free market answer to the contemporary housing problem is for the further deregulation of the planning system - the argument being that loosening regulations allows developers to build more smaller homes which will bring prices down, this is critiqued as being too simple. The UK housing market is primarily an Investor market which is different to a user market - investors are attracted to the extra supply which feeds inflation and speculation and excludes users (Minton, 2017). The extent to which it is an investor market is staggering, with Dorling (2014) noting that housing equity represents 61% of the UK's net worth.

Reformists, such as Bowie (2017:39), call for:

"Expanding the programme of social housing, building houses as well as flats, and building in mixed tenure and mixed-income areas would enable access to social housing to be widened again to include more working households and reduce the stigmatisation

of both the tenure and its occupants."

But how is this different from what came before which was critiqued for being too centralised, alienating, and controlling rather than liberating (see Turner, 2017; Ward, 1983) and was torn apart by neoliberal policies? This solution is also not realisable in the UK at present which is under increasing pressures from austerity measures and a central government that is continuing the Thatcher legacy.

Other proposals acknowledge both the state's and private sector's failings Thompson (2015:1024) explains:

"Mutual housing models provide a third option to the familiar dualist categories of public/private sector, state/market provision—as non-profit, voluntary, community-led, place-based membership associations (Bailey 2012). The key function of mutual models—which range from Garden Cities and tenant co-partnerships, through co-ownership societies, cooperatives, co-housing, mutual homeownership societies, and community self-build—is their capacity to "lock in" the value of land and assets, to protect commonwealth from private expropriation."

Mullins & Moore (2018) term these models as community-led housing. They all critique both the state and market solutions and this is a manifestation of Turner's (2017) argument, that emerged from a critique of the welfare state, that a central state is too authoritarian to deliver housing needs and that the market will always place profit over user needs. These examples are crucial to explore as REACH also emerges from this position. Community-led housing operates outside the established party political ideologies of left pro-state and right pro-market and Mullins (2017) argues this is because of a received support from the liberal-conservative coalition in the UK to bring into use around 9,000 empty homes:

"Recognition took the form of a new funding programme dedicated to community-based groups who were not registered social housing providers and who wanted to bring empty privately owned properties into use. Funding through this new programme, known as the Empty Homes Community Grants Programme (EHCGP), eventually reached £50 million between 2012 and 2015"

Mullins, 2017:145

Despite the funding provided to the scheme, the legacy of the policy has been minimal and there is still a lack of public awareness around community-led housing.

Perhaps the most well known of these models are community land trusts (CLTs). They fix the cost of land through community ownership and this stops speculation (Minton, 2017) through decommodifying land. As Thompson (2015:1026) states CLTs undermine *"neoliberal financialisation of land by blocking the rights of individuals to profit on their share of equity"*.

These housing models are becoming increasingly popular (Hodkinson, 2012), however the barriers these models face are primarily access to land and finance (Mullins & Moore, *ibid*) meaning these models are often out of reach for those most in need of housing as they don't have the capital to participate. Minton (*ibid*:127) suggests these models are not engaging in the production of housing, where costs could be minimised through self-production, only in its consumption when arguing that CLTs need to find *"local*

authorities to assist local groups who invest a huge amount of time and energy in getting these projects of the ground". However, having to fit within the expectations of the local authorities to achieve funding and meet regulations may dilute the tenets of CLTs, "*local control, leadership and community-based economies*" (Mullins & Moore, *ibid*:9). Furthermore this prerequisite time may serve to exclude the most vulnerable who need to work and have little free time or who are physically unable to give their time.

Because of their necessity to work within the market Benson & Hamiduddin (2017:4) argue that "*rather than challenging the structure of these economies, they most often offer alternatives within as opposed to outside the market*". However Peredo & McClean (2019) argue that although CLTs have not reversed the market hegemony over economic life they still act as one part of a countermovement against the continual processes of commodification within land and housing. They argue that the first step of understanding these as a countermovement is understanding the way in which the market limits their efforts of decommodification and realising that engaging with the existing market is the only way to move towards further decommodification of housing consumption. Thompson (*ibid*) agrees, stating that CLTs protect the initial consumer and all consumers afterwards, however what is missing from the critique provided by CLTs is the critique of housing's production. This is where REACH differs from housing movements such as CLTs because it engages in the construction process, the logic being that if REACH was a decommodified home ownership scheme, akin to a CLT, then the builders would derive a profit from the buyers, and so REACH would have to charge more to residents to make up for the high price of construction. In order to understand REACH's response to housing production the next section will explore the existing relations of the construction process.

2.2 Housing Production

As explored in the previous section, studies into housing financialisation explore the commodification of housing consumption and distribution practices, alongside the activism against financialisation (see Minton & Watt, 2016; Lima, 2019; Rolnik, 2019; Leijten, 2020; Wijburg, 2020). Within these studies there is a focus on housing consumers, as they are the ones most affected by the rising prices of housing and this, alongside recent evolving financialisation, may explain why there is a focus on consumption practices. These studies rarely explore the financialisation of housing production, construction more generally, and how a countermovement against it might be articulated. There is a danger in only focussing on the consumption and distribution of housing without considering the production. Marx (1972) argues that only focussing on changes in distribution naturalises the bourgeois production process so that it is never questioned, reification, as such debates occur around different distribution and consumption methods without questioning the way in which exploitative production occurs. Furthermore, he argues that production, distribution, and consumption should be understood together in order to avoid this naturalisation process. As such the production of housing plays a key role in this thesis as not only situating REACH's practice but also as a way to critique the contemporary analysis of housing financialisation.

Relations of construction

Contemporary UK construction is a complex sector. Construction accounts for 7% of the UK's GDP and employs 2 million people; as such it is often understood as an early warning system for economic indicators - if the industry slows down it can indicate a recession (Chappel & Dunn, 2017). The trinity of positions in construction is the client, who commissions the building, the contractor, who builds the building, and the architect, who designs the building. From this trinity there are numerous contractual and labour relations; for instance there are subcontractors who are employed by the contractor meaning the contractor is still liable for the work produced by the subcontractors, there are varied procurement processes such as D&B where the architect is employed initially by the client to design the building and then novated over to the contractor during construction, and there are different ways to hire contractors, from competitive tenders (most often used by the public sector to ward off corruption claims) to having a preferred contractor in mind (Chappel & Dunn, *ibid*). As the commissioner of the building it is the client who puts the money in, however with large developments the costs can far exceed their own reserves and so they have to acquire finance.

Construction finance

The main way buildings are funded is through construction finance, construction

finance is understood as investors providing money in order to get a return on their investment through profit on the building (Merna et al, 2010). Unlike the recent intense financialisation of housing consumption, finance for construction is not a new practice and has played a role historically:

"An early recorded application of project finance dates back to 1299, when the English Crown negotiated a loan from Frescobaldi, a leading Italian merchant bank, for which payment was to be made in the form of output from the Devon silver mines. The bank received a 1-year lease for the total output of the mines in exchange for paying all operating costs without recourse to the Crown if the value or amount of the extracted ore was less than predicted"

(Merna et al, *ibid*:1)

In this pre-capitalist example, the projected output from the mine was deemed financially safe enough for the bank to invest in the project. Moving through history, with the development of the bourgeois mode of production the global nature of financing allowed construction to expand the peripheries of capitalism through the development of the railways (Linder, 1994). Harvey (2001) explains that to allow for its inherent compound growth, capitalism requires a geographical expansion that spatially fixes capital in place. This becomes contradictory because new modes of accumulation that emerge require different spaces. For example in Sheffield, as the manufacturing industry became increasingly unprofitable in the 1980s, cultural spaces took over and developed new spaces. Thus there is a cycle of creative destruction where buildings are created for accumulation and destroyed (or transformed) to allow new modes of accumulation to replace them. The capital that went into the moment of creation is devalued. Within this cycle of geographical creative destruction, construction plays a key role by providing the labour and capital required to spatially fix capitalism.

Capitalism produces the surplus product that urban growth is reliant upon; and capitalism itself is reliant on urban growth to absorb that surplus (Harvey, 2013); this has led to space being continually reframed as a method of absorbing and speculatively producing more capital (Lefebvre, 2003; Harvey, 2014). This relationship became more apparent during the transition in the West to neoliberalism in the 1980s. As factories moved overseas, there was a downturn in industrial surplus leading to a drive to invest in assets, such as space, which were seen as fiscally safer than industry (Harvey & Wachsmuth, 2012; Lefebvre, 2003). Ferro¹ (2016:95) supports the notion of the key role that construction plays within capitalism, citing it as *"one of the main devices – together with monopoly, colonialism, imperialism, etc. – used by capital to fight against its worst nightmare: the inevitable tendency of the rate of profit to fall with the constant advance of the productive forces"*. Ferro argues that within capitalism, construction is the process of not only concretising accumulation but also recreating it through cycles of creative destruction.

Whilst differences in socio-economic conditions change the nature of the financialisation of housing over time, the nature of the process is similar. In contemporary construction, financing is often required and is often secured from banks, insurance, and other finance companies (Collier et al, 2008). This financing works because the profit potential of

1. A Brazilian architect whose research explores, among other areas, capitalist relations of construction.

construction outweighs the risk of investment (Collier et al, *ibid*; Merna et al, *ibid*). For example, in order for Construction projects in the UK to be considered viable today a scheme's value must equal its costs and there must be a profit rate of 20% - which is factored into the costs (Wainwright, 2015). This viability loophole allows developers to not provide affordable or social housing (which is mandated through section 106), by artificially increasing the costs (i.e. specifying expensive interiors that will never be used) and artificially lowering the value (i.e. undervaluing the location). The developers claim that the only way to achieve their 20% profit, which is a requirement, is to remove the section 106 requirement for affordable or social housing (Wainwright, 2015). This argues that housing construction in the UK is a vehicle primarily for profit - rather than for need. By making profit foundational to construction, the viability assessment secures construction as a relatively safe financial investment.

Understanding that finance is a crucial part of construction that necessitates the pursuit of profit to justify the investment contextualises the difficulty that REACH had in securing capital in order to build. Their business model doesn't have profit as an end goal and so there would be no return on a financier's investment. Within contemporary construction the entrenchment of pursuing profit is built into the method; as such the regulations are formatted to uphold this pursuit of profit within construction.

Regulations

Ross (2016:235) argues that regulations in a neoliberal context have shifted because *"governmental roles traditionally associated with the state are intentionally deconstructed to create opportunities for entrepreneurial activity"*. This has led to a shift from rigid regulations that were strictly followed to performative regulations that are less strict which has meant simultaneously a freeing of design from proscribed methods and a way to circumvent regulations. In this way *"regulation changes from an activity in which we recognise common threats, and develop universalised means to counter them, to one through which we make calculated decisions balancing individual opportunities for profit and loss"* (Ross, *ibid*:243); in other words safety in construction is placed secondary to profit. The most striking example of this in recent times is the Grenfell Tower tragedy. The building did not comply with building regulations and the abstraction and segmentation of the present construction regulations means it's unclear who's at fault which has led to a prolonged enquiry whilst similar buildings are at risk. Perhaps worse is the relationship between the local Council and capital which, on top of having £274 million in reserve, offered tax rebates for the top rate of council tax payers (Syal and Jones, 2017); this money could've been invested into better quality housing.

This shift of regulations from developing universal safety protocols to maximising profit supports further deregulation and lobbying. One example comes from John O'Brien, from BRE, who spoke to BBC news stating *"The chancellor's reason for dropping the Code for Sustainable Homes and then the zero carbon homes commitment was because these could not be achieved while still coming in at £1,000/m²"* (in Harrabin, 2015). O'Brien disagreed with the chancellor and provided a number of precedents from housing schemes that have met these targets for that cost.

It is not just sustainability regulations that are lobbied against however, *"The Home*

Builders Federation has been lobbying for a reduction in regulations. It says this will reduce costs and help increase supply at a time of housing shortage" (Harrabin, 2015); the federation claims that loosening regulations is in the best interest of the public to increase housing supply and tackle the present condition. Following the logic that loosening housing regulations would increase housing supply there is no guarantee that developers would want to produce more housing. The issue with producing too much housing is that it devalues housing prices on the market and therefore creates a disincentive for production because less profit can be acquired. This is assuming that once the housing is produced it is sold to residents as opposed to investors who would use the housing as an asset. Following this logic, deregulation seems to be a way in which housing can be produced cheaper without necessarily making it more affordable; hence it is another way to financialise housing production. Loosened policies that make it easier for developers to build include the Permission in Principle 2017 and the Housing and Planning Act 2016 (which includes a section whereby the secretary of state can override planning obligations for developers) (see Bowie, 2017; Minton, 2017). It is not just regulations that uphold the capitalist mode of production, the way the industry is structured through labour also plays a large role.

Division of labour

As well as capitalism's need to deploy its accumulation and its ability to speculate on space, the labour relations within construction are what makes these practises feasible (Ferro, 2016). Ferro (ibid) argues that construction is a manufacture, as opposed to an industry, because it relies more heavily on labour power than machines to produce. Because of this construction produces more surplus value than industry. Surplus value is understood as the value created by workers in excess of their own cost of labour which is appropriated by the capitalist for profit (Marx, 2013). Therefore in an industry, where there is more machinery than workers, the surplus value is less than in a manufacture, where there are more workers than in industry, because there is more labour to be exploited.

Because of the accumulation possible within construction the labour power within it has to be segmented to minimise any resistance to profit accumulation (Ferro, ibid). Segmenting labour into neat professions weakens labour power (Harvey, 2017). By having a series of different professions on the building site, joiners, brickies, scaffies, etc each task requires less training than having to learn all of these tasks; this creates a more precarious workforce because the workers are easily replaceable as their job requires little training; thus there is potentially a vast number of workers available to replace them. Through the separation of these labours, the construction industry is only reunited through the capital that binds these labours together yet it is also capital that broke them apart thus maintaining construction's reliance on capital (Ferro, ibid)¹.

This labour takes place on the building site. Building sites are understood as constantly renegotiated, contingent, and chaotic spaces (Cicmil, 2005; Löwstedt, 2015). There are

1. Rudofsky (1964) suggests this relation is absent where construction isn't commodified, as labourers play a more overall role in the construction process.

clear delineations of hierarchy through uniforms, such as hard hat and hi-vis colours that help to reinforce the machismo and division of labour (Löwstedt, *ibid*). Material procurement takes on a critical role within the management of the construction site and feeds into its chaotic nature:

"Construction firms cannot consider the price alone but must also take into account geographical proximity of the supplier and the associated delivery time. Firms also need to weigh the lower cost of ordering large quantities against the difficulty of storing the procured material on a congested construction site. Quality of the material and reliability of the suppliers are important factors that firms need to keep in mind during the procurement process"

(Sawan, 2018:974)

Löwstedt (*ibid*) explains how materials laying around would get in the way of construction as there was no dedicated place for them to be. Up to 60% of a project's cost may be on materials so material management should be a critical task (Petchpong et al, 2005). Materials are most often bought by the contractor from a vendor or manufacturer as and when they are needed. Although some materials are specified by the submission to planning permission, usually by the architect (Chappell & Dunn, 2017), other, non-aesthetic, materials only need to conform to relevant regulations and can be sourced throughout the build.

Architects are seen as disconnected from the messy realities of site, Löwstedt's (*ibid*) ethnographic study on site witnessed:

"That no plan could in detail account for the high degree of unpredictability embedded in the building process; the complex chains of dependencies and variations between social interactions, materiality, and the unpredictable physical environment, and so on"

Furthermore the distrust towards the architects Löwstedt witnessed appeared to come from *"a collective pride related to onsite craftsmanship and the trait of being a good 'problem solver'"*. This seems to agree with Ferro (*ibid*) who argues that the division of labour is deliberately structured through division to minimise the skill required by the labourer so that they are more replaceable and less able to withhold their labour. Capital's ability to reunite these divided labours is mediated through the design of the building.

Architecture, and the other design professions within construction, is the vehicle through which disjointed labour, land, and materials come together to form a building (Ferro, 2016); because of this, architecture is understood as complicit in the reproduction of capitalist relations (Tafuri, 1976; Dovey, 2005). Within this complicity is a continual obscuring of labour relations. Deamer (2016:137), argues that the development of capitalism from a focus on production to a focus on consumption has meant that architects *"have forgotten that they labour at all, convinced, as they are, that 'design' stands outside the dirty world of both labour and the political economy"*. This difficult reconciliation of architect as both labourer and artist is reiterated by Chappel & Dunn (2017:6) *"Architects, like most other professionals, must have clients in order to practise. Unlike the painter, the author or the poet, they are not at liberty to choose their subject"*. Alongside design, architects have to coordinate the other designers, make the design work within the regulations, and negotiate with the local authority for permission to build - planning permission. These appear as secondary processes to the

illusion architecture creates.

"Reflecting upon construction destroys architectural illusions, because it shows that even the best plan is a device for the conventional domination of labour, and that we, as designers, are responsible for this device."

In this quote, Kapp (2016:125) argues that architecture works to obscure the processes of production and by revealing this process the domination of labour within construction is revealed. Turner (2017) argues that the construction industry is deliberately obscured to increase the dependency of the layman on professionals and thus maintain the subordinated mode of production. Ferro (ibid) agrees, arguing that design is the process within capitalist production that keeps the varied subordinated labours on the construction site simultaneously united and separate from each other in order to allow the dominance of capital within construction.

For REACH, the division of labour was totally different and based upon where labour was most required and who had the expertise to perform it. Because REACH didn't need to uphold the profit motive, labour isn't required to be subordinate and workers took on various roles as required. It is therefore critical to understand how labour is subordinated in contemporary construction to see how REACH differs from this normative practice.

It is this subordinate labour that has led architecture to be seen as complicit in reproducing capitalist relations. Lefebvre (2003) argues that architects work to replicate everyday life thus embedding existing ideology. Within architecture, this opinion of complicity has led to a post-political rejection of theory in favour of formal explorations (Deamer, 2015). Understanding the historical shift of the architectural profession retreating into aesthetic explorations is crucial to situate recent shifts within the profession and housing movements that have rejected a focus on just aesthetics and argue a return to understanding the processes for construction. This can be done through exploring the history of autonomy and the response by its critics that argue that architects should return to exploring the processes of production.

Understanding autonomy

In the late 1960s to the early 1970s there was a growing discontent with modernism within architecture (Aureli, 2013), Day (2010:219) believes that social housing was the key battleground that revealed the broken promise *"between the initial visions and the progeny of cheap developments that followed"* which *"provided a powerful image for a wider crisis in social confidence"*. Above all it was a critique within the left of those who sought to reform capitalism by those who opposed capitalism (Aureli, 2008; Deamer, 2015; Kaminer, 2016). Central to this argument was the modernist notion of the plan, which was denounced by the radicals who opposed capitalism as embodying the alienation and social-control of the urban environment - which served only to create a hegemony of capitalist growth (Stickells, 2011; Kaminer, 2016). This critique spawned two schools of thought that, whilst ontologically similar, were fundamentally different in method.

On the one hand were radicals and activists finding a voice in the Paris riots of May

1968 through the critique of architecture's subservience to state capitalism (Stickells, 2011; Kaminer, 2016). Although Kaminer sees different forms of these groups emerging they all rallied around a critique of the plan through participatory design, encouraging citizens to take control of their urban environments and attempting emancipation from capitalism (Stickells, 2011; Kaminer, 2016). Whilst these groups intervened in the urban environment they did not achieve long term reform and the scale of which their intervention achieved in empowering the citizens to take control of their environment is questioned (Stickells, 2011).

On the other hand were the autonomists, intellectuals from Italy who built upon operaismo, a reignition of working class politics, to aim to produce an alternative to capitalism through "*political action within the institution, and eventually against it*" (Aureli, 2008:45). They understood architecture's limited role in capitalist hierarchy but believed it could be used to reinterpret the city to not be focussed on labour (Aureli, 2008; Day, 2010; Rice, 2011). This was to be made through an understanding of form not as an image or an icon but as understanding its political capabilities to allow and deny certain actions, this is the original intent of autonomy (Aureli & Tattara, 2009). It is critiqued for only occupying a niche of architectural intelligentsia that does not relate to wider practitioners (Coleman, 2015), however this is the point, to position itself counter to accepted practises; a more immediate critique is that there has not been the emergence of a new political subject.

Accompanying these movements' critique of modernism was an attack driven from neoliberal ideology that tapped into the critique of the plan to call for a "*freeing of urban development from the constraints of planned society and a return to land and property speculation*" (Kaminer, 2016:50). Combined with the left critique they succeeded in the destruction of the modernist middle ground of reformism, however the left lost out to this neoliberal response, leading to the rise of the proponents of deregulated markets and the recluses of the left to knowledge production (Aureli, 2008; Kaminer, 2016).

The demise of the left was accompanied by the process of appropriation for autonomy, a crucial moment being the fifteenth Triennial in Milan where the architecture exhibition, on autonomy, was opened to architects who did not hold autonomy's crucial emphasis on political context (Aureli, 2008; Day, 2010). Following this Tafuri (1976) released his book *Architecture and Utopia*, which claimed architecture could only work within and for the furthering of the capitalist project. Tafuri (ibid) saw that one of the issues with architecture was naturalisation. The way in which buildings are produced using practices such as land banking, construction finance, and subordinated labour has become naturalised making it appear as though there is no alternative to the endless growth and ensuing inequality of profit based logics. This theory echoes Lukacs' (1975) concept of reification. Lukacs argues:

"Reification requires that a society should learn to satisfy all its needs in terms of commodity exchange. The separation of the producer from his means of production, the dissolution and destruction of all 'natural' production units, etc., and all the social and economic conditions necessary for the emergence of modern capitalism tend to replace 'natural' relations which exhibit human relations more plainly by rationally reified relations."

There emerged a group of architects who wholeheartedly adopted Tafuri's critique and reasoned that they could still be understood as engaging with Marxist literature whilst

also limiting their practise to simply explorations in form and image - the new notion of autonomy (Deamer, 2015). This definition fuelled the belief that architects could practise as autonomous agents, artists of form free from society to create a visual masterpiece that only they should have agency in (Till, 2009; Imrie & Street, 2017). This definition became the mainstream and led Aureli (2008) to argue it has trivialised the original debates of the inherently political nature of form, to become an autonomy of architecture cut off from society creating a post-political architecture - postmodernism, born out of the 1970s realisation that western revolt could only be formulated as dispersed and without challenging hegemonic institutions (Aureli, 2008).

The postmodern interpretation of autonomy has permitted architects to retreat from social duties, "*detach themselves as humans*" - along with the socio-political trappings that this entails, and this has allowed architects to perceive their world as autonomous; abstracted from context in order to create the illusion that architects can have control over their ordered world, working within the frameworks granted to them by higher powers (Till, 2009:25). Till (ibid) argues this is a self-defence method as a way of clinging onto what little control that architects have, or perceive to have, left. This has resulted in a bizarre situation where it is obvious to the outside world that the products and production of architecture could never be considered as independent activities, bound up as they are in regulations, specification, management, and design of the built environment. Yet architects as a whole, Till (ibid) argues, have self-inflicted this condition and retreated further into their towers of increasingly questionable foundations. Marcos de Almeida Lopes (2016) argues however that architects cannot be held accountable for this opinion as they are merely trying to exist within the present, in other words the onus should not be placed upon the individual who is trying to survive in the market. This tension between Till and Marcos de Almeida Lopes can start to be reconciled by separating the architectural labourer from the bosses and theorists who reinforce and enable the exploration of aesthetics as the role of the architect. This is suggested with the emergence of United Voices of the World - Section of Architectural Workers (UVW-SAW). Formed in 2019 it is the first trade union to encompass all the architectural sector and seeks to fight not only against unethical work practises but to make sure architecture has relevance beyond aesthetics. In this way the architect is becoming reacquainted with the processes of construction by first understanding their role within this production. The next section shows how some theorists argue that just because the architect is complicit in the concretising of capitalist accumulation through reuniting labours of construction this does not mean they are merely limited to aesthetic exploration.

Critiquing postmodern autonomy

Understanding the dominant theories in postmodern architectural production is crucial to interpret the present construction situation. As explained, the architect's task within capitalist construction is to re-join the subjugated labour of the construction site. As such, the dominant theory is that the architect's task is aesthetics, however this is not the only theory, and critiques to postmodern autonomy argue for a reconnection of architecture and the processes of production. Contier (2016) explains that Ferro's

design studio banned arguments of aesthetics in their work. This was as a response to a search for easily deployable architectural solutions for local builders in Brazil, who most often didn't use architects. In his theory however, Ferro (2016) does have thoughts on the aesthetic if only as a way to explain his practice's anti-aesthetic stance. Ferro (ibid) argues that the removal of ornament from buildings was an effort to minimise the collective power of the onsite labourers by minimising their required skill. Aesthetics then is reduced from the free effort of non-subordinate labour in production to "*the superficial aesthetics of consumption, which feeds the fetishism of the object (forgetting its production)*" (Ferro, ibid: 101). Aesthetics become nothing more than a way to sell the consumption of a building. This is in contrast with Loos (2012) who claims that aesthetics, through specifically ornament, is a waste of labour power and that a reduction in ornamentation would result in a pay rise for the worker who would work less time but would be paid the same for it. Ferro and Loos agree when Loos argues that pleasure of ornament should not be about aesthetic for the consumer but that which pleases the producer (Rykwert, 2012). However Ferro (ibid:102) does not make the distinction between two types of ornament, stating that "*our architecture of capital is incompatible with the very concept of art, and so follows, I repeat, our phobia of ornament – the song of free labour*". Here Ferro challenges the contemporary interpretation of autonomy by arguing that explorations in true aesthetics are impossible because aesthetics within capitalist construction are used to fetishise the building commodity.

For Dovey (2002:290) the idea that image production can be seen as radical is absurd, any image may be appropriated by "*dominant aesthetic codes*" and "*emptied of subversive power*" – and by postmodern autonomy's own argument architecture, as a field of cultural production, is subservient to the dominant power structures. As such Dovey claims that the producers of images who aim to be subversive by using them as a form of resistance must be aware that "*the field is structured to appropriate semantic inversions or radical images and to use them to reinforce social distinction*". As such Dovey makes the claim (294) that architecture influences, and is influenced by, external forces more than any other field of art; this he refers to as the complicitous silence of architecture, the idea that as architecture permits and inhibits certain activities it continually reinforces the everyday life of capitalism and thereby makes it less questionable. This silent complicity means that this interpretation of autonomy – in this sense to be free from involvement in the capitalist project - is a misnomer and that even the most "*radical products*" simply serve to provide more images for capitalist appropriation.

Aureli (with Tattara 2009; 2012) tries to reclaim the meaning of autonomy from postmodern interpretation and practise of autonomy. Architecture cannot retreat into aesthetics because "*architecture - understood as a body of knowledge, as a discipline -cannot be idealised or withdrawn into an exclusive space freed from political and economic constraints*" (2012:24), his rhetoric is not to forego theory in favour of action but to reclaim it through a re-examination of the original autonomy movements (Aureli, 2008) and updating it for the present (Aureli, 2012) and a reproblematisation of the political within architecture (Aureli, 2014).

Aureli (2012:24) states that whilst production is still the foundation stone of capitalist society, aspects of production that "*were outside the economy, such as imagination, affects and information, have become primary means of production*"; moreover production is always dependent upon cooperation - echoing Lefebvre's (1991:27) argument that

"(Social) space is a (social) product". As such, architecture can never be reduced to a figurehead; nor can it be understood as a solitary object, and yet that is how it appears in present society meaning that the distribution of wealth derived from architecture is extremely uneven and directed towards those figureheads without consideration for the cooperative efforts that went into making the space a reality (2012). This agrees with Ferro's argument of the subordination of labour within construction. Aureli argues this is the way capital erodes what is held in common in architecture (namely knowledge) through the profession itself (2012).

This deadlock of the profession frames his dialectic of the political within architecture (Aureli, 2014). On the one hand the profession cannot be political as it is built around an ideology of consensus between actors and the division of labour means the figure heads receive the unequal share - akin to the factory owner (Aureli, 2014). Yet on the other hand the form always is political as it implies a subject and allows mode of life - through a spatial condition; therefore any space is political and politics is spatial. Yet although the profession is a-political and form is political, form is currently used to reinforce the current order to create the consensus to avoid the conflict; in this way politics becomes the police - the control (Aureli, 2014). Applying this theory to the current context, Aureli (2013) demonstrates how the contemporary resurgence of the modernist mantra less is more is appropriated to justify austerity (in the face of the exuberance of the previous decades), noting that the privatisation of services and the provision of less provides more revenue for the capitalist. In this moment of less, Aureli (2013) argues that creativity is heightened which justifies the surge of social architecture (as Stickells, 2011 and Kaminer, 2016 do through political upheavals) that is emerging, but Aureli & Tattara (2009:39) critique this (as do Kaminer, 2016 and Brenner, 2017), stating "*theorists of the city have consciously or unconsciously adopted the neoliberalist's mantra of self-organisation and permanent flexibility, contributing in this way to the prevailing ideology of free markets*".

Aureli (2013) calls for a recapturing of less, not to be understood as more (accumulation), to be understood as enough, through a radical reform of habits, a retreat from power structures, and the creation of a new political subject - akin to the original autonomists. This idea appears too idealistic however, in order to emancipate from capital one must have enough capital to do so.

Aureli & Tattara's work includes speculative architecture such as Stop City (see Aureli & Tattara, 2009) which combines critique and reflection of contemporary urbanisation. Stop City creates a reflection of society in which the veil that creates the illusion of the contemporary city as "*a site of value-free congestion, leisure, spectacle, and consumption*" (47) is uncovered to reveal the true purpose - the exploitation of labour not just through work but also culture and reproduction, therefore the architecture is not spectacle but homogeneous blocks. This is juxtaposed with the notion that the city stops - from the moment it is built it is complete - this serves a direct critique to capitalist urbanisation that is based upon endless accumulation. Whilst this work reveals the nature of the city it does not produce a new political subject, Aureli & Tattara do not produce form but they produce image, they are deploying theory yet this is inaccessible to the people whose labour is exploited and this is rarely acknowledged. Through highlighting the present condition, Aurelli is critiquing the capitalist relations of construction on a theoretical level.

On the other hand there are those who do away with theory entirely to focus on

attempting to improve the lives of people in the immediacy. Spatial agency - is the interpretation that the role of the architect is a facilitator in the democratic production of citizen space (Awan et al, 2013). Proponents of this believe that the architect's role should be to positively transform people's lives through collaboration and understanding the contextual relationship that space has to socio-economic and political forces (Awan et al, 2013); as such they see their position as facilitators and activists within citizen's groups that materialise the societal aspirations of the group through architecture (Petrescu, 2007).

They argue that too much priority has been placed on the postmodern autonomy of architecture - which focuses on the aspects of architecture that can be controlled by architects, whilst there has been neglect to the more contingent construction process; and that this has been to the detriment of the profession (Till, 2009; Stickells, 2011). In response the spatial agents take a radical departure from autonomy, choosing instead to celebrate the unpredictable aspects of design which will then allow the treatment spaces as points in a web of ever evolving socio-political networks and engaging in the processes of construction (Awan et al, 2013). As such they view their role as negotiators working at the in-between through a deep understanding of power structures and contextual relations and having the power to facilitate social production without being all powerful (Awan et al, 2013; Schneider, 2017).

Some argue that through spatial agency's core tenet of bettering public life they are causing the government's further retreat from its social responsibilities leading to a reduction of public funding (Kaminer, 2016; Brenner, 2017). Petrescu & Trogal (2017) however see that the current situation marks itself as being one of reproduction, rather than just production; therefore they are not using their projects to drop economic responsibility on citizens because the government has already relinquished that responsibility. Instead they are using their projects to question, and claim ownership over, power.

Although their position away from postmodern autonomy is clear, what is less clear is how they critique neoliberal urbanism and their efforts to realise the alternative future they call for through their work, especially when it rarely reaches actors outside of the project (Stickells, 2011; Brenner, *ibid*). Through a rejection of theory in favour of action and allowing the spatial conditions to define the architecture (Till, 2009) these groups may be immediately improving their collaborator's lives, but in order to make an emancipatory appropriation of space Lefebvre (1991) argues that there needs to be a transformation of social reproduction.

Gibson (2017) acknowledges that the form of architecture not only influences the society it interacts with but is also influenced by it in this way it offers some resolution between Aureli's interpretation of autonomy and Spatial Agency's anti-theory. She brings the idea of the dialectic to the relationship between form and society through breaking down the products of architecture to a vast network of interdependent economies, whilst simultaneously playing this off with the idea that architecture is used to allow and deny certain types of economic activity. As such these two ideas share a tension. Gibson infers that in order for a progressive architecture to provide an emancipatory spatial change there needs to be an analysis and break down of the networks that make up a space and a switch towards diverse economies to be used as spatial drivers (akin to Petrescu, 2007). The tension arises when Gibson identifies that running parallel is the fact that the built environment is the biggest challenge that community economies face

as it inhibits its activities, and therefore spatial production needs to be understood as enabling the growth of community economies (akin to Aureli & Tattara, 2009). Gibson holds these two ideas in a dialectic relationship, the tool for social reproduction is contained within what a society does and the spaces that allow these activities to take place. Both Aureli's interpretation of autonomy and spatial agency came to prominence as critiques of present architectural production following the 2008 crash (Stickells, 2011; Kaminer, 2016). These are some of the critiques of contemporary capitalist construction emerging from within the architectural profession. They have focussed primarily on the critique of architecture as an exploration of aesthetics, arguing it should further explore the actual processes of construction, however there are other critiques from outside the sector that explore how construction may be understood from a position unhindered by regulatory and theoretical frameworks.

Non-subordinate production

Outside of the formal contemporary construction sector numerous groups are attempting to engage in labour that is not subject to the subordination created within contemporary construction's division of labour. Some of the examples of this are in the self-build movement. There has been a resurgence of self-build housing movements post financial crisis in Western Europe (Benson & Hamiduddin, 2017) that have been stimulated by the socio-political conditions of place (Mullins & Moore, 2018). Contrary to past scholars on the topic (see Ward, 1976) however, the revolutionary potential of the self-provision of housing is downplayed in current literature (see Benson & Hamiduddin, *ibid*) and this may be due to self-build being understood as a non-political issue demonstrated through policy support from the Conservative Party in the UK (Mullins, 2018; Field in Benson & Hamiduddin, *ibid*) and because self-build in the UK is primarily made up of individual houses for wealthy people (Benson & Hamiduddin, *ibid*). Self-build here does not refer to luxury housing performed by subordinated labour but self-produced housing where labour is undertaken by the users (Duncan & Rowe, 1993). With the type of self-build that might be featured on *Grand Designs* the main focus is on the aesthetics and the experience of the space, however as Benson & Hamiduddin (*ibid*: 2) state when talking about non-subordinated self-build - "*the value of these projects lies in the sense of pride and achievement at being able to create, thus in the practices rather than in the aesthetics of a project*". As the dwellers become more involved in the production the focus shifts from the consumption aesthetics to the benefits of production.

Speaking on the Ecovillage movement, where people would remove themselves as much as possible from wider society and build communes with green principles, East (2017) notes that the manifestation of self-build was both seen as a-political, as they were likened to the socialist utopias that fantasised about pre-capitalist society, and as a hotbed of alternative construction ideas. One such example is Torri Superiore, which was "*retrofitted over a period of 25 years in a comprehensive process of collective self-build utilising natural materials and appropriate technologies... The community adopted lime plaster walls and washes, non-tropical wood for windows and doors, insulating cork and locally made terracotta floors*" (East, *ibid*:95). In the ecovillage movements, materials were often recycled and reused, alongside being a less wasteful option, these materials

would often cost less and new materials had to have low environmental impact. East's (ibid) study starts to question the legitimacy of ecovillages as political movements that seek to undermine contemporary construction.

Land is also a key issue in self-build - "*self-build as a low-cost solution accessible to the most disadvantaged has been systematically undermined by land reform, the introduction of land use and planning regulation, bureaucracy and legislation*" (Benson & Hamiduddin, ibid:6); these factors help to explain not only the lack of self-build from non-wealthy individuals but also may suggest further the lack of research of self-build as a radical alternative to contemporary housing production arrangements. Instead most research on radical and reformist efforts within housing focus around its consumption - from CLT's to tenant's unions to social and cooperative housing (see Hodkinson, 2012; Bowie, 2017; Heeswijk, 2017).

Brugman (2017) gives an example of how community finance and relationships with local authorities can help to overcome issues such as land. For poor housing in the global South, communities may come together to provide finance for the self-provision of housing; in Vinh, Vietnam, Brugman (ibid) witnessed that because the community had an existing positive relationship with the mayor they were able to easily negotiate the local regulations that allow building to take place. Akin to East's (ibid) ecovillage precedent, the residents of Vinh engaged in alternative strategies to reduce the cost of construction including buying materials in bulk as opposed to everyone buying individually, recycling materials, and sharing foundations. Brugman's (ibid) example suggests that there is rigorous process that needs to be followed in terms of securing the right to build within contemporary construction, and so having relationships with actors within the sector helps to secure the right.

The low budget of these projects mean that the houses often have to be built cheaply. Low Impact Developments (LIDs), as researched by Pickerill & Maxey (2009) often use local or waste materials to push a holistic and sustainable mode of housing delivery that critiques profit driven methods. Many of the self-build movements engage also in the decommodification of housing consumption. LIDs residents try to ensure their developments are permanently affordable through schemes such as Community Land Trusts (Pickerill & Maxey, ibid). Living in a LID can also blur the line between production and consumption as there are tasks that need to be undertaken to keep the LID in good condition. Unlike Brugman's (ibid) example of Vinh, LIDs are often created illegally and seek legitimacy afterwards as Pickerill & Maxey (ibid:1530) state "*restrictive planning laws have meant that LIDs have tended to involve people moving onto land without planning permission and seeking to gain retrospective permission once they have become established or discovered*". There have also been concerns about how LIDs move away from the ecovillage movement of projects such as those explored by East (ibid) by being isolated developments, often not exploring communal potential (Duncan in Pickerill & Maxey, ibid) however ecovillages themselves have been critiqued for their detachment from wider society (see East, ibid).

There is a historical basis for research into self-build housing; in this thesis it is crucial for understanding REACH's emergence. In 1964 Rudofsky critiqued architecture for its ignorance regarding structures produced without architects. Turner (2017:13, originally 1976) stated "*good housing, like plentiful food, is more common where it is locally produced through network structures and decentralising technologies*". He argues that

through production a recapturing of the use value of housing can take place. Ward argued back in 1976 that housing has become a passive consumption for the user. Only through moving back to active involvement, Ward argued, would man be liberated from the present housing situation. Both Ward (ibid) and Turner (ibid) agree with Ferro (ibid) in his critique of subordinated labour. By providing control to the dweller within housing, active production, where the labour is not subordinated, has the potential to emerge and break down the capitalist ability of accumulation within the construction sector. Bossuyt et al (2018) note that self-building starts to break down the established model for construction because there are less areas for profit to be extracted.

This section and the previous sections have explored the contemporary construction sector both in terms of consumption and production, alongside movements that seek to either reform or undermine it. This section in particular has shown the ways in which decommodification starts to enter the discourse of housing production. Be this through using waste materials for construction, such as eco-villages may use, to using community finance to simultaneously critique who has the right and the capital to build, as with Vinh, to undermining planning laws that limit the possibilities of low cost self-build, as with LIDs. Each of these examples reveals ways of using decommodification within construction, as a way to build either out of necessity or to critique existing housing construction arrangements. However despite decommodification clearly being present within the actions of the projects it is an unspoken part of this discourse; neither the researchers nor their subjects talk about it. This thesis aims to bring this unspoken decommodification, that appears as a feature of many housing projects that aim to critique standard housing practices, to the fore. In order to understand the ways in which REACH deploys decommodification, both out of necessity to lower costs and to critique the contemporary construction sector, the term itself must be analysed within the scope of political economy. Decommodification within the construction sector is thus crucial to be able to read the actions of REACH.

2.3 Decommodification

Up until now the focus of this literature review chapter has been on the context of study, the UK housing sector and countermovements against it. This focus has been necessary in order to understand the context in which REACH operates and to create the contextual grounding with which to present the primary argument of the thesis - that decommodification emerges from observable practices. This section therefore explores understandings of decommodification to provide the theoretical tool to reflect upon REACH's practices within the UK housing sector.

Decommodification is a contested term. Some argue that decommodification is measurable in the relationship of use to exchange values in individual economic actions, with a lack of exchange value indicating a totally decommodified action (see La Grange & Pretorius, 2005), others see decommodification as a process that lessens the market in everyday life (see Vail, 2010), others see it as an individual's ability to be independent from the market (see Esping-Andersen, 1989), yet others argue that decommodification cannot only account for consumption practices but must also include production (Room, 2000). These theories broadly align to two understandings of decommodification. These are decommodification as action (see La Grange & Pretorius, *ibid*) and decommodification as process (see Vail, *ibid*; Esping-Andersen, *ibid*; Room, *ibid*). This thesis argues that these two definitions share a contradictory unity and can be rationalised but only by observing decommodification as it happens within existing economic relations. This brings up a further contradiction that questions the efficacy of decommodification. Writers on decommodification mostly agree that it should be used as a tool to undermine capitalism by showing alternative possibilities without market involvement (see Esping-Andersen, *ibid*; Vail, *ibid*; Gibson-Graham, 2013; Harvey, 2014; Gerber & Gerber, 2017) yet by witnessing practices that deploy decommodification within the present mode of production, decommodification can be understood as existing within the existing economic ecology; therefore is decommodification part of anti-capitalist action or is it an existing facet of the economy?

Through using decommodification as the object of study, the research attempts to rationalise these contested definitions through observing decommodification within REACH. The questions this section asks then are firstly, how is decommodification rationalised between its definitions as action and process? Secondly, what is the efficacy of decommodification? And finally, by showing how decommodified actions exist within the economy, how does decommodification critique the understanding that the market is the sole vehicle of society's economic transactions? This is the basis of the first subsection, because acknowledging the existence of non-market actions within the economy is necessary in order to observe existing instances of decommodification.

An Economic Ecology

Throughout history different types of economies have existed. In *The Great Transformation*, Polanyi (2001) differentiated capitalism from pre-capitalist societies as

a period where the market held hegemony over society, rather than being merely a facet of it. Both Marx (1972) and Lukacs (1975) refer to pre-capitalist societies as societies without the exploitation of labour through its abstraction, which entails the purchasing of commodities. Within these societies markets existed as a means to exchange between communities however within the communities themselves economic actions would consist of reciprocity - providing for mutual benefit - and redistribution - providing to all through collectivisation (Polanyi, *ibid*). The key point being that different forms of economies exist(ed) that were not reliant on the market form of exchange and the basis of the economy was for community benefit, not individual profit.

It stands to reason therefore that just as the market existed as a form of economic action within pre-capitalist societies, non-profit driven forms of economic actions exist within capitalist societies (Polanyi, *ibid*; Gibson-Graham et al, 2013; Tsing, 2015; Peredo & McLean, 2019).

The acknowledgement of the existence of these other economic actions critiques the notion that the economy is based solely upon the market. Polanyi (*ibid*) explains that even within a market society there still exists aspects of reciprocity and redistribution and that the state, contrary to liberal thought, far from being a hindrance to capitalism facilitated its growth through intervention (Hann & Hart, 2009). Even without state intervention acts of mutuality occur that, whilst not efficient for the market, acknowledge the human in the machine (Gudeman, 2009; Tsing, 2015). For instance a trader may take a lower profit from one buyer on the understanding that he may provide more future business or a tech company may make their products incompatible with other devices to ensure brand loyalty at the cost of freedom of choice for the consumer. The important point is that there are a spectrum of economic actions that occur within society, from acts of gift giving, to stealing, to monopoly control of a market; all of these disprove the notion of an economy based solely on the laws of supply and demand.

As such, rather than viewing economic actions that are not market and profit driven as alternatives, Peredo & McLean (*ibid*) argue that all economic actions should be understood together within an economic ecology. Tsing (*ibid*) uses the existence of non-market economic activity to critique the post-political Marxists belief that the market holds a hegemony over every aspect of life (see Swyngedouw & Wilson, 2015). However this sits awkwardly with historical accounts on political economy; Polanyi (*ibid*), Marx (*ibid*), and Lukacs (*ibid*) all observed, even whilst acknowledging the presence of alternative transactions, the dominance of the market over society. Lukacs (*ibid*) argued that within pre-capitalist societies forms of market exchange, where one party may profit over the other, existed on the peripheries and rebounded back on the communities causing trade to occur within the individual societies allowing it to re-expand outwards to form a dominance of market exchange. Almost continuing Lukacs' (*ibid*) historic argument, Tsing's (*ibid*) concept of salvage accumulation is the theory that capitalism undergoes processes to appropriate goods and services on its periphery that were previously not incorporated to the market. Therefore Tsing (*ibid*) appears to undo her own critique of the post-political Marxists by introducing salvage accumulation. Although economic diversity may occur on the peripheries of capitalism, Tsing argues this diversity is still ultimately brought into market hegemony and so a contradiction emerges where capitalism is a totality of market transactions yet is constantly undergoing processes to appropriate non-market economies, and therefore disproving itself as a totality.

Understanding economic actions as being many varied facets of an economic ecology that are constantly being created and appropriated by economic processes enables an exploration of the definitions of both commodification and decommodification as the processes that enable this creation and reappropriation.

Decommodification as Process

The definition of commodification is accepted as the process by which goods and services become commensurable as commodities and exchanged for in the market (La Grange & Pretorius, 2005; Marx, 2013; Gerber & Gerber, 2017). For Polanyian economics capitalism emerges when the process of commodification incorporates land, labour, and money. The dominance of the market over society:

"Requires that areas of the natural environment, as well as parts of human life devoted to productive activity and the money used to represent purchasing power, must be transformed into marketable commodities and attached to the price mechanism that allows them to be governed by supply and demand. The result is marketable land, labour and money."

(Peredo & McLean, 2019:3)

Polanyi (2001) defines land, labour, and money as fictitious commodities in that they are not true commodities because they have not been produced, instead they have been appropriated by capital through commodification processes. This aligns with Marx (2013) who saw primitive accumulation, the process by which land was forcibly seized by expelling the population to make a landless proletariat and then allowing the land to be bought and sold for profit. Without land, the proletariat has no way to produce their means of survival and thus becomes dependent on the market to buy their subsistence and in return sell their labour; in this way labour becomes a commodity (Marx, 1972; Lukacs, 1975). This labour is exploited because *"If the worker needs only half a working day in order to live a whole day, then, in order to keep alive as a worker, he needs to work only half a day. The second half of the labour day is forced labour; surplus-labour"* (Marx, *ibid*:249). In this way the capitalist is making money by forcing the worker to perform surplus labour and thereby surplus profit when the commodities made by the workers are sold on the market. This pursuit to maximise profit to gain more money is how money becomes a commodity.

Polanyi (*ibid*) argues that a reaction against the commodification process is observable within society, primarily as a reaction to the fictitious commodities; this is understood by Polanyi as a countermovement that seeks to mitigate the influence of the market over society (Peredo & McLean, *ibid*). Instead of a process which seeks to commodify aspects of society that are outside of the market, it is a process of decommodification which seeks to disentangle society from the market.

The definition of decommodification is more contested than commodification. Vail (2010:310) argues that *"decommodification is conceived as any political, social, or cultural process that reduces the scope and influence of the market in everyday life"*; Gerber & Gerber (*ibid*) agree whilst adding that its ultimate goal is to do away with commodities altogether by no longer considering exchange values and focussing purely

on the use value of the hitherto commodity. Esping-Andersen (1989) however argues that decommodification is not the process of reducing the market but instead the point at which the market is reduced to the degree that a person is no longer reliant upon it in their everyday life, it is "*the emancipation from market dependency*" (82). Viewed in this way, decommodification can be understood as a process that serves as a countermovement against marketisation; yet at the same time decommodification has its place within marketised society:

"The welfare state under Fordism had represented a decommodification of some goods, defined as public services, neoliberalism brought about the privatisation and (re) commodification of once-public goods, as social services are increasingly considered as a commodity to be sold on the market"

(Della Porta, 2015:34)

As such decommodification and commodification share a unity within the economic ecology (Vail, 2010; Harvey, 2015; Gerber & Gerber, 2017) and cannot be defined without the other (Gerber & Gerber, *ibid*). Their unity is in itself a contradiction, for example Decommodified welfare policies, such as free healthcare, provide a high effective demand for commodities as the workers wage is not spent on healthcare however it also means that there is less surplus value for the capitalist to accumulate through better wages; conversely capitalism could be configured to "*maximise the conditions for the production of surplus value, and so threaten the capacity to realise surplus value in the market*" (Harvey, 2015:81). In other words capitalism can either maximise decommodified services and increase wages in order to keep effective demand strong whilst minimising the surplus value that can be extracted from commodities or minimise the decommodified services in order to maximise surplus labour whilst minimising how much people can buy due to lower wages. This supports Polanyi's (*ibid*) theory that a society consisting solely of market economics cannot exist because there must always be decommodified aspects to offset the destructive forces of capitalism that undermine capitalism itself.

Decommodification as Action

The debates on the definition of decommodification may be synthesised and complicated by exploring the original unit of measurement, the commodity. Commodities are goods and services that consist of use values (their specific uses) and an exchange value (how a commodity relates to another commodity in trade) and are produced by workers in order to gain money which can then be spent on other commodities (Marx, 2013; Harvey, 2015). This production is abstract as the workers have no use for the direct products of their labour; they only understand it as a source of income to purchase other commodities (Marx, *ibid*).

La Grange & Pretorius (2005:2474) start from the position of the commodity, they claim that goods and services may not be just commodified or decommodified but instead sit on a continuum. The extremes of their continuum may be explained by considering an item only for its uses, without having to exchange anything in order to receive it (for example the state provision of services) to represent decommodification "*while at the*

other end, it is wholly commodified—i.e. wholly produced and consumed in the market". By analysing a singular item and how it is acquired they can be understood as looking at economic actions, as opposed to economic processes which may include a series of actions. Their definition agrees with Esping-Anderson (1989) that there exists wholly decommodified processes whilst reconciling this viewpoint with Vail (2010) and Gerber & Gerber (2017) by stating that certain systems may be considered as more or less commodified. This view is supported by Polanyi (2001) who argues that the market has always played a part in non-commodified economies and non-market actions occur even in the most market driven economy. Following their beliefs many different aspects feed into whether something may be considered as decommodified. For example, how was a house produced? Were materials freely given? How was labour sourced? Is the house given freely as a right or is it bought? How was permission granted for the construction? All these questions may spawn other questions that may move the house to be understood as more or less commodified. Gibson-Graham (2013:99) explore the supply chains of commodities to reveal how abstraction from producer to consumer obscures the unethical acts of enclosure and exploitation. Moving from Marx's work, which argued for the destruction of the commodity through the disappearance of exchange value and the proliferation of use values (Gerber & Gerber, 2017), Gibson-Graham (2013:111), rather than focussing on the commodity itself, explores the ways in which different types of economic actions may be considered as more or less commodified by dividing them into three categories:

1. The market.
2. Alternative market - including fair trade, alternative currency, barter, direct trade, reciprocal exchange, etc.
3. Non market - including stealing, state allocations, gift giving, household networks, etc.

These categories expand upon La Grange & Pretorius' (2005) commodification continuum. The categories are by no means the only three points between decommodification and commodification and intricacies exist within the alternative market category. For instance fair trade sits towards the commodified side as the workers are still being exploited by capitalists, but alternative currencies such as time banking, whilst still relying on exchange, have fixed prices (e.g. 1 hour's cleaning = 1 hour's guitar lessons) meaning it is a zero sum game with no one individual gaining profit over others - so that would sit towards the decommodification end. This is a departure from Polanyi's (ibid) historic stance, for him the market represents any form of profit over another individual through monetary exchange and so fair trade and barter would fall under that category, this may be understood as production for personal gain (Gregory, 2009). Polanyi's other two categories may be understood as production for use: reciprocity – provision for mutual benefit, and redistribution – providing to all through collectivisation. Although he did include another category, house holding, Polanyi removed this from later work (Servet, 2009).

Seeing decommodification on a continuum helps to decode its deployment within the current system as a method to offset some of its contradictions (Gerber & Gerber, 2017). Harvey (2015) uses the example of the welfare state to demonstrate how by providing workers with certain goods and services for free the state could keep effective commodity demand strong in the market. Even within these systems commodified

transactions occur, for instance with private healthcare contracts and PFI's within the NHS – it cannot be said that one system or even one action is decommodified because what about the action that came before (i.e. the commodified action of building a hospital by private contracts is mystified behind the veil of free healthcare delivery), as such, this form of delivery could not be understood as totally a part of Polanyi's redistribution category but transactions within it may be. This also demonstrates that commodification/decommodification does not explicitly occur from top down/bottom up respectively. More recent research focuses on grassroots movements who are using decommodification as a tactic out of necessity to the removal of the top down decommodified welfare system justified through austerity measures (see Dalakoglou, 2017). But previous research (see in particular Esping-Andersen 1989) has focussed on decommodification coming from a top down system through the welfare state.

By analysing economic actions as sitting on a continuum that may be more or less (de) commodified, the definition of decommodification is complicated. It cannot be just understood as a countermovement against commodification and it has to be understood in relation to the economic (trans)actions that occur around it. Furthermore, if decommodification can be understood as both action and process within the existing economic ecology then when can it be understood as undermining that economy?

Decommodification as Progressive Transition

On the one hand it may appear that all decommodification, by moving away from the market, serves to undermine capitalism; there is a general consensus that efforts towards decommodifying the economy should be a central effort of undermining capitalism (see Esping-Andersen, 1989; Vail, 2010; Gibson-Graham, 2013; Harvey, 2015; Gerber & Gerber, 2017) as it limits the scope of the market. Yet by viewing decommodification as the countermovement within the economy to stop capitalism from collapsing under its own contradictions it appears that decommodification should only be understood as reformist.

Although Gibson-Graham (2006) acknowledges that the reconfiguration of the economy is the specific aim of many movements this does not mean that all those who practice processes of decommodification have it as a specific aim. This can be revealed by analysing previous cases from the literature review. For example, East (2017) witnessed practices of salvaging free materials, instead of purchasing them on the market, as a way to create ecovillages, and Brugman (2017) witnessed community financing to build housing, as opposed to taking mortgages with banks. In both these examples decommodification isn't a way to reconfigure the economy in totality but a way to provide housing when funds are not available for market transactions. Decommodified transactions are not only played out by those who are locked out of market transactions however; for instance a construction firm may donate a cycle shelter to a community centre. For the construction firm this is just a way of boosting their corporate social responsibility, they can have a picture with the shelter, and the costs are offset by their profits from market transactions, however for the community centre it provides a spatial fix that encourages more people to participate in their decommodified economy by providing secure storage for their transportation.

A common thread that connects many writers on decommodification is their calls for a progressive transition towards a socialised economy (see Esping-Andersen, 1989; Vail, 2010; Gerber & Gerber, 2017) as opposed to the revolutionary Marxist perspective (Room, 2000). Polanyi sought to reveal "*the possible development of an economy based on solidarity*" (Servet, 2009:90). This fits within the notion of decommodification as a countermovement to combat increasing marketization. Vail (2010) believes that by collectivising the dispersed practitioners of decommodification under one banner an emancipatory movement would be able to emerge. He argues that decommodification should be used to reveal the contradictions of the market through creating alternatives to it and creates a set of tactics that can be listed under protection (of existing decommodified spaces, such as the national parks), reform (of market systems to move closer towards decommodification, such as removing links in the production process between producer and consumer), and expansion (of decommodified systems into previously commodified areas, such as local exchange trading systems that continue trade but remove the profit motive). Vail argues that it is not trading that decommodification is against, but rather the injustice inherent in the capitalist market through the abstraction of the worker's labour and the profit motive, therefore his argument of reform is to introduce decommodifying elements within the commodified economy and to build widespread momentum.

Decommodification and Equivalence

Vail's (ibid) idea of joining different groups together under the banner of decommodification is similar to Laclau's (2018) theory of equivalence. Laclau (ibid:73) argues that if disparate demands around social issues are left unsatisfied then there "*is an accumulation of unfulfilled demands and an increasing inability of the institutional system to absorb them in a differential way (each in isolation from the others), and an equivalential relation is established between them*". This equivalence is established through them all being unfulfilled demands that are all in opposition to the power structure denying the demand (Laclau, ibid; Howarth, 2016). Through these disparate demands coming together as popular demands, with equivalence, they establish a broad group together against the power system denying the demands. Laclau calls the coalition of this broad group 'the people' and uses it as a way to show how seemingly disparate identities can come together (Howarth, ibid). Devenney (2016:305) explains that in Laclau's theory the unity of the people "*requires both a common antagonism against an enemy, and an ideal empty enough to unify the differences, for example, solidarity or justice*". As already explored, Vail (2010) claims that decommodification can serve as the ideal that disparate groups can rally around.

Laclau (ibid) uses this theory as a criticism of Marxism, arguing that Marxism takes for granted that there is already a preexisting class consciousness and it cannot explain populism in Latin America (Devenney, 2016). This forms a direct critique of the Marxist focus on the working class as the emancipatory identity because Laclau argues many disparate identities can come together in struggle (Perello, 2016).

The actions of both the SPD in Germany and the Bolshevik party serve to dispute the claim that Marxists assume that the working class already has consciousness. A key purpose of both of these political parties was building this consciousness and, in the case

of the SPD in particular, it was built through the merging together of many disparate interest groups that echoes Laclau's theory on equivalence.

The SPD "*kept itself apart from society... completing the social containment of its members by organizational [sic] means*" (Nettl, 1965:66). These organisational means responded to the unfulfilled demands that were not met by capitalism, these included adult education, youth and children's commissions, the women's movement, and social groups. This shows that, whilst the working class was seen as the primary agent in class struggle, there wasn't an a priori assumption that working class solidarity existed and instead there was an awareness that this solidarity had to be built through fulfilling these disparate demands. As such the work of the SPD did not necessarily start from a focus on class but these different demands created an equivalence to form class consciousness which contested capitalism. Lenin (2008) also explains that these disparate demands were held by a multitude of identities:

"The German working class is, so to speak, split up among a number of ideologies. A section of the workers is organised in Catholic and monarchist trade unions; another section is organised in the Hirsch-Duncker[33] unions, founded by the bourgeois worshippers of English trade-unionism; the third is organised in Social-Democratic trade unions."

Laclau's theory requires disparate demands that are unmet by a power structure and so come together under an empty signifier; in the Marxist case, class consciousness.

In *What Is To Be Done*, Lenin (ibid) shows how these identities form trade unionism and cooperativism. He argues the issue with these spontaneous movements however is that they stagnate and reconstitute capitalist relations; this is why he separates the economic project from the political project, using the economic project to bring the working class together under the banners of trade unionism, cooperativism, etc, and then under the political project to actually contest capitalist relations of production.

As such, Lenin (2008) and Luxemburg (1986) differ from Laclau (ibid), arguing that these disparate economic demands cannot form a political movement on their own. Luxemburg (1986) warns against the upholding of the equivalence demands as the end goal in themselves. Both she and Lenin (ibid) argue that without the party these demands stagnate into the reconstitution of capitalism as the disparate identities need the party to see what the common signifier that binds them together is. For Luxemburg (ibid) the value of these demands, and the SPD's response to them, in the struggle beyond capitalism is an educational one. The SPD's economic responses to demands unfulfilled by capitalism served to not only provide unmet social needs and provide equivalence between these previously disparate demands, and so unify the multiple identities under the banner of the proletariat, but to also guide the proletariat in preparation for the taking of power (Luxemburg, 1986). For the SPD (prior to the capitulation to revisionism)¹ and the Bolshevik party, the economic project served as identifying these demands. The political struggle cemented these demands as being unfulfilled by capitalism and argued they could only be overcome through revolution.

Equivalence can deepen debates on decommodification so that its efficacy should not be viewed as binary. Understanding the similarities between Laclau's disparate

1. See Luxemburg (1986) and Luxemburg (1915).

demands becoming united through equivalence and the Marxist economic project whilst simultaneously understanding the split between the economic project and the political project is useful for understanding how disparate demands can serve as an educational tool whilst understanding their impotence in isolation. In other words, the economic project serves to unify and educate people about their status but should not be seen as an end goal in itself. Furthermore the social projects, or economic project, of the SPD suggests how through the unification created by equivalence codes alternative values. The way that the SPD operated almost as a state within a state through fulfilling the disparate demands of different identities and funding them through party membership (Nettl, *ibid*) means they provided an alternative, more decommodified way of providing the social needs for the people. This alternative required a different set of practices and relations, from economic, in the form of amalgamated party fees, to social, in the form of membership, and to political, in the form of overcoming capitalism, that served to differentiate the alternative provided by the SPD from the norm. In this way equivalence is not only about how disparate groups come together but it is also about how alternatives have to be put in place to allow these equivalencies to function. Equivalence however is also a useful term in Marxist economics.

Laclau critiques not only Marxist revolutionary theories but also political economy (Tunderman, 2021). Tunderman (*ibid*) however argues that Laclau's theory of equivalence can be useful in understanding value. As, within the capitalist economy, the value of a commodity can only be expressed in relation to other commodities due to the inherently social nature of production then, Tunderman (*ibid*:140) argues that:

"Since commodities only express their "identity" as equivalent values in the relations to other commodities, it is possible to say that their identity only emerges through the articulation of differential relations."

Just as demands become equivalencies in Laclau's (*ibid*) theory against a common enemy, commodities become equivalent in the market. Laclau however argues the equivalent relationship of value does not encapsulate the full extent of equivalence as it is only focussed on a positive equivalence between exchange and use value (Tunderman, *ibid*). Tunderman (*ibid*) disagrees, explaining that the empty signifier, the demand that becomes encapsulated to form equivalence amongst the chain, mirrors Marx's general equivalent, which is a single commodity that is set aside from the rest to allow equivalence to take place in all commodities - money.

"Money, as an empty signifier, thus expresses the universality of a chain of commodities that are equivalent, as abstract labor, and different, as concrete labor. This suggests that the formalistic structure of Marx's value theory anticipates Laclau's logics of difference, equivalence, and the empty signifier."

Tunderman (*ibid*:145)

Thus equivalence becomes a useful way of describing the relationship between commodities.

There is further synthesis between the Marxist general equivalent and Laclauian chain of equivalence in the procedures that are inscribed through equivalence. Equivalence

grounds a set of normative practices for example, in materialist history, the growth of money as the universal medium of exchange. When demands are brought together in a laclauian chain of equivalence new parameters are inscribed that bring together disparate identities together as 'the people'. Equivalence foregrounds the creation of an alternative. Bringing this back to Vail's (2010) theory of uniting disparate movements under decommodification, equivalence scripts alternative economic forms that are distinct to the use of monetary exchange and are without the influence of profit.

The Efficacy of Decommodification

Considering that decommodification is already existing within the market economy as a method to overcome contradictions it is unclear to see how Vail's idea of banding disparate movements would allow a transition towards a socialised economy. An alternative perspective is provided by Tsing (2015:65) who critiques the notion that these alternative economic transactions may be understood as post-capitalist as they are "*never fully shielded from capitalism*" calling them "*premature*". The word premature however implies that she believes there is potential within these economies and she believes that there is space for a politics to attack the appropriation of these economies by capital. This further supports the theory that decommodification must be understood within an economic ecology because otherwise all decommodification appears as a method to attack the market, when instead it is often a part of the workings of the market.

Tsing's (ibid) use of the word premature also echoes Marx's comments on the co-operative movement who argued that they show a different way of organising society:

"The value of these great social experiments [producer co-operatives] cannot be over-rated. By deed, instead of by argument, they have shown that production on a large scale, and in accord with the behest of modern science, may be carried on without the existence of a class of masters employing a class of hands; that to bear fruit, the means of labour need not be monopolised as a means of dominion over, and of extortion against, the labouring man himself; and that, like slave labour, like serf labour, hired labour is but a transitory and inferior form, destined to disappear before associated labour plying its toil with a willing hand, a ready mind, and a joyous heart."

(Marx in Jossa, 2005)

For Marx, the usefulness of co-operatives is to show an alternative way of organising society without labour being exploited by capitalists. Whilst reification in the present makes capitalism appear as a natural mode of production, exploring other ways of organising society doesn't overcome the present moment but shows that alternatives do exist and that capitalism isn't natural.

Room (2000) uses Marx's analysis of labour to critique the emancipatory potential of Esping-Andersen's analysis of the welfare state and to split decommodification between production and consumption. Labour is the only creator of value and as such becomes a commodity in its own right (Polanyi, 2001); the worker is abstracted from their labour as it is their only commodity to trade on the market for other commodities; as such the worker is tied to the capitalist system as they cannot subsist without the selling of

their labour (Room, *ibid*; Marx, 2013). Marx *"looked forward to a humanised society in which individuals would be able through work to develop and manifest their skills"* (Room, *ibid*:337); Room argues that a decommodification agenda cannot solely rely on the worker's independence from the market (i.e. living on government handouts), but must also encompass the worker's reconnection with their labour. In response to Esping-Andersen, Room is writing in the context of the welfare state. However By reading Esping-Andersen's statement (that decommodification is the ability to subsist independent from the market) within the current context, where the welfare state is under increasing pressure from austerity measures, it can be seen as increasingly difficult to subsist on just government handouts and so market independence must include some form of use value creation. In this present situation of austerity , Esping-Andersen's (1989:210) claim that decommodification *"is an important, if not central, goal behind the process of working-class power mobilization"* holds more sway as a synthesis between Esping-Andersen and Room. Decommodification then should be understood within the economic ecology and beyond the moment of exchange. As such, researchers should be mindful of contextual specificities as guidance for the deployment of decommodification, but what of its efficacy?

The efficacy of decommodification can be understood through a return to Marx. Marx (1936) continually warns against working class movements becoming only for the immediate issues whilst ignoring the overall goal of overcoming capitalism. He recognises however that it is these immediate issues that bring workers together, speaking on unions and combinations he states that *"the maintenance of wages, this common interest which they have against their boss, unites them in a common thought of resistance"*. However, moving beyond the immediate issues to present an attack on capitalism is rarely seen. Lukacs (1975) also warns against capitulation to these immediate issues, arguing that this traps Marxists within the theory of the bourgeoisie. As Marx (in Lukacs, *ibid*) states:

"The working class ought not to exaggerate to themselves the ultimate consequences of these struggles. They ought not to forget that they are fighting with effects, but not with the causes of those effects. . . , that they are applying palliatives, not curing the malady. They ought, therefore, not to be exclusively absorbed in these unavoidable guerilla fights . . . instead of simultaneously trying to cure it, instead of using their organised forces as a lever for the final emancipation of the working class, that is to say, the ultimate abolition of the wages system"

Lukacs (*ibid*) argues this in part occurs due to seeing production and consumption as separate entities without understanding it as a whole of bourgeois production. Within the housing countermovement the obvious example of this is CLTs. Thompson (2015:1026) states that CLTs undermine *"neoliberal financialisation of land by blocking the rights of individuals to profit on their share of equity"* by providing affordable housing; the goal of them are not to overcome capitalism but to decommodify the consumption of housing and in doing so ignoring the overall goal of emancipation. Viewing decommodification through a Marxist lens reveals that it is ultimately incorporated into the existing economic ecology. This is not to say that decommodification should be abandoned as a tactic, as Marx (in Jossa, *ibid*) recognises with co-operatives, demonstrating other ways of organising society has value in proving that society without the wage system can exist; furthermore principles of decommodification can serve as moving towards a movement beyond capitalism, just as Marx (1936) saw union in the potential of union activism

moving from actions against the ruling class towards actions of emancipation.

To analyse decommodification this thesis acknowledges that there must be a distinction between decommodified production and consumption whilst ultimately understanding them in the totality of bourgeois production. Consumption implies only a reproduction of existing values, as can be seen through decommodified state services, and it is only through production that different values can be created, through ideas such as co-operative movements. This is not to say that co-operatives and other decommodifying movements can achieve a reform of society; both Marx and Lukacs warn against this, with Marx (in Jossa, *ibid*) suggesting that they point towards an alternative form of society that is obscured within the reified present. Decommodified practices can manifest glimpses of this alternative as it is scripted through the equivalence required for alternative decommodified economics. This equivalence emerges to strengthen a decouplement from established associations. Vail (2010) argues disparate instances of decommodification can form equivalence and through doing so reinforce alternative economic practices.

There must also be a distinction between decommodified actions and decommodified processes. A decommodified action can be understood as any single action within the economic ecology that doesn't follow market logics, from redistribution to reciprocity; these sit upon the continuum of decommodification as introduced by La Grange & Pretorius (2005). A decommodified process is a series of economic actions that aim at the reproduction of decommodification through acting as a countermovement to commodification, as introduced by Polanyi (2001). Furthermore decommodification can be practiced without it being a specific goal of those practicing it.

The definitions provided by this framework allows for an analysis of existing economic processes and actions. Take for example the Cameron Government's Big Society policy – its three key points being the devolution of power, the expansion of the voluntary sector, and the community taking on a bigger role in service provision (Cameron, 2012). The big society was used to justify austerity measures without giving proper funding to the programme (Cooney, 2017), it was also used to replace public services. Using this framework the big society can be understood as using decommodified actions, such as expanding the voluntary sector to manage state owned libraries. However the Big Society did not undertake a decommodified process because the aim wasn't as a countermovement to decommodify sectors of the market but instead a process to reduce funding from government funded, often already decommodified, sectors.

By complicating the definition of decommodification a framework emerges that can be used to analyse REACH through their practices of alternative equivalence:

1. Alternative equivalence is a non-equivalent reciprocal exchange between two agents therefore -
2. Alternative equivalence is dependent upon the motivations of the agents in the reciprocal exchange this is because -
3. Alternative equivalence is linked to value as such -
4. Alternative equivalence is related back to a wider economic ecology, therefore -
5. Alternative equivalence works within, even as it attempts to decouple from, formal equivalent based practices

6. As such, alternative equivalence is a decommodified practice.

Decommodification is an observable and contradictory practice. Appearing as both action, within a wider economy, and process, seeking to lessen market influence. As a tactic in anti-capitalist struggles it is limited, often offsetting the contradictions created by capitalism as opposed to overcoming structural problems. The value of decommodification is the way it demonstrates, by deed, the existence of an alternative, thus breaking the illusion of a reified economy. It also becomes a way for participants to learn about economic relations.

This framework accounts for decommodification emerging within the current economic ecology whilst also acknowledging its efficacy and that decommodification is not a stated goal of REACH. This has been supported through an analysis of the housing sector, with a particular focus on the UK, to situate REACH's emergence within, and against, a context of housing financialisation that extends not only to consumption but also to production and thereby should be understood as a totality in order to understand UK housing. The need to analyse and explore REACH's actually existing practices of decommodification as suggested by this theoretical framework supports a unique methodological strategy that requires a grounded; critical engagement whilst also necessitating a stepping back, and reflection, on the theories of decommodification that were witnessed.

Furthermore, the framework primarily relates to specific subsections of the thesis, although different points are prevalent throughout. Point 1 (Alternative equivalence is a non-equivalent reciprocal exchange between two agents) is explored in section 5.1, Alternative Equivalence, point 2 in 5.2 and 5.3, point 3 in 6.1, point 4 in 6.2, 6.3, and 7.1, point 5 in 7.2 and 7.3, finally point 6 is an amalgamation of these arguments and as such is throughout the thesis.

3. *Design Action Research.*

3.1 Why REACH?

This chapter illuminates the inner workings of the thesis. It is centred around the question: why REACH? Within this question unfolds not only the methodological strategy, but also the data collection process, my positionality towards REACH and myself, and structures of validation.

My interest in REACH started from a critique of the literature on housing financialisation and research into the countermovement against this financialisation. Housing is a key part of capitalist accumulation with the 2008 crisis being focussed around housing and Harvey (2014) predicting that the next crisis will include renting as a key contradiction. Whilst existing literatures have keen insights into the consumption and distribution of housing they rarely include the ways in which housing is produced, both from a perspective of housing financialisation and the countermovement against it. I believe this avenue needed exploring because as Marx (1972) argues, critiquing only the consumption and distribution processes serves to naturalise the production process leaving it to never be questioned. The key factor of capitalism is that its crises are based around overaccumulation (Marx, *ibid*). This means there is enough housing, or enough means to build enough housing, for everyone however due to current methods of consumption and distribution not everyone has a house and this may explain why there is such a focus within housing activism on housing consumption and distribution. This is why REACH, who engage in the production of housing appealed to me and justifies the themes of the literature review which focussed on both housing production and its consumption. REACH's goal is to be a solution to the housing crisis; This is where I find its limitations. Although this goal is admirable in helping many struggling people, reforming one sector of the economy does not limit widespread exploitation. As such, this PhD isn't about an ideological alignment with REACH, instead it is about understanding REACH's practice in order to reflect back onto wider construction practices and understand the nature of political economy through the analysis of decommodification. As such although REACH does have a relative uniqueness, by engaging with housing production from a grassroots position, an argument could be made that the uniqueness of the case isn't critical because the primary output is exploring the definition of decommodification within the existing economic ecology.

The exploration of decommodification emerged from Adorno's (2017) part and whole dialectical method. By exploring specific cases within capitalism, information about its pervasive nature is revealed. For this research, the specific case of REACH Homes, and my engagement to enable further spatial interventions, revealed issues of land commodification in Sheffield and allowed a clearer understanding of the definition of decommodification; this introduces the research problem:

The purpose of this study was to critically explore decommodification in the context of alternative construction practices. The study focussed on REACH Homes, who emerged in reaction to the commodification of housing. Through the engagement and improvement of REACH's alternative construction practices, decommodification was revealed to provide a greater understanding of contemporary capitalism. Alternative construction practices revealed not only how they themselves were incorporated into the economy, but also provided insights into the formal practices they were providing an alternative to. Decommodification emerged for REACH at the moments when their construction practices faced the most pressure from commodification; these domains were land, materials, and the construction site. From these fields, the thesis claims that decommodification should be understood as contradictory, it can act as a process or an action, it can lessen the effects of commodification whilst being within a capitalist present, and it emerges as a reaction to commodification without necessarily being a conscious reaction.

To address the research problem, I developed a unique methodology - tentatively named Design Action Research. This methodology considers the joint, action outputs performed with REACH whilst allowing a separation for the analysis and reflection of decommodification as witnessed through the joint outputs. It also enables the deployment of architectural based methods to assist REACH in achieving their goals. This became an integral part of the project because it allowed me to become an enabling force within REACH, actions such as applying for planning permission, undertaking building design sequences, and navigating building regulations were all things REACH had not done before. This enabling role reflects the image of the architect that Spatial Agency puts forward as a negotiator and facilitator in the democratic production of space (Awan et al, 2013).

The research question suggests how defining decommodification as a reaction to commodification necessitates a combination of both action and theory based methodologies. The deployment of the word "improve" within the research problem necessitates a participatory action research (PAR) approach, however the word "reveal" implies a building of theory that suggests a case study approach through REACH Homes. Furthermore, the notion of intervening within construction practices allowed me to utilise my architectural knowledge as a tool for understanding REACH's process; therefore research by design (RbD) became another methodology to explore. As such a review of these methodologies became crucial in order to establish an appropriate methodological strategy. In particular as the output from the research question is based upon the theory of decommodification as witnessed through engagement with REACH there were limitations to all of the methodologies. Whilst both RbD and PAR allow me to be an engaged member within REACH the outputs of these methodologies are most often around the engagement itself and not generating wider theory from the engagement. At the same time, although a case study methodology allows theory building and testing it expects a detachment of the researcher from the researched. Furthermore, whilst RbD allows me to undertake architectural process in participation it can be so focussed on the process of design that it is detached from the wider context in which the design is produced. The first section of this chapter deals with rationalising and assessing these three methodologies to re-respond to the research problem and question. Of critical importance here is the analysis of the work's validity. By deploying a unique

methodology that borrows work from three established methodologies the procedures for validation need to be clearly stated.

As participatory methods were deployed it is key to outline my position alongside REACH's. This is critical considering that a hierarchy is already established because whilst the research design was partially up for negotiation it had been largely decided prior to the fieldwork (as is necessary due to the structure of the PhD course). Why REACH was selected in the first place and what other cases were considered should also be asked, this introduces a review of the research process. Because REACH was selected after the first iteration of research design there were pre-fieldwork modifications to the research design; these must be explored in order to justify the methods used. Furthermore, how REACH were accessed, the ethics, and the consent of our relationship must also be explored. The final section of this chapter reviews the data collection process itself. It provides a brief chronology of events and uses this to introduce the cycles of participation.

Despite the nature of writing to be inherently ordered to the degree of appearing chronological this is not the reality of the research design. It was an intertwined process, testing one aspect put tensions on the others and required revisions. For example, the evolution of the research problem challenged the understanding of the methodology and yet simultaneously the methodology justifies the research problem. As such although it is ordered here for legibility with a review of the methodology coming first, this is not a chronological account into the messy process of research design.

3.2 Contextual Methodology

Research by Design

Architectural academics have moved away from questioning whether design is a type of research; instead they are justifying it as such (Megahed, 2017). This process is still in its early inception; this may justify why there is no one accepted definition of research by design (RbD) (Megahed, *ibid*). Hauberg (2011) argues that all 'good' design arises from some background research and that RbD is about flipping this relationship. Hauberg (2011; 2014) also argues that the design process has many similarities with research. Both designers and researchers look for new material outcomes or knowledge but work with different tools - most often drawings as opposed to writing. However they argue that RbD is different from other research processes:

"The research process starts with a research question, passes through a methodological reasoning and then arrives at a new, true or possible answer or solution. Research by design suggests a practise somewhat in the opposite direction, where research may arise from design - from the proposal, model or experiment to the generalisation and rationalisation by consciously extracting rules about the object of the research process" (52)

Here Hauberg appears to be unaware of action research, see the following section, which goes through a similar process where an action is undertaken and reflected upon as the research process. Hauberg continues the analysis of architectural research:

"Research in architectural history, technology etc. Normally works comfortably inside the humanities way of thinking with aesthetic practice an object for scientific study and not an equal agent in the production of knowledge. But this thinking tends to sever the production of knowledge from the architectural process and from the influence of a dynamic material" (Hauberg, 2011:48)

Here Hauberg argues that RbD emerges as a critique of deploying more traditional research methods within architecture. They argue that this separates the actual practices of architecture from the research where RbD argues it should be the driver, a research with, not on, architectural practices. This is a necessity, argues Hauberg (*ibid*; 2014), because architecture is a material practice that is constantly producing.

This leads Hauberg (2011; 2014) to the conclusion that RbD is when the design process becomes integral in the generation of new knowledges. Pais (2014) offers a more precise definition, arguing that RbD is the study of the everyday actions of architects, using their own tools and methods of design in order to generate and test new findings through reflective cycles.

Lawson is critical of the architectural interpretation of design research, they argue it is a way for UK academic architects to meet government research guidelines by using the phrase design research. Furthermore Lawson critiques the RbD validation method

of peer review, arguing architecture is creating a bubble for itself because, they state, how are other researchers to judge a piece of design as research without any design knowledge. For Lawson, design research is about the research of the design process and not undertaking research through design methods. Megahed (ibid) however argues that it is precisely because design knowledge can only be easily understood by designers that it needs to be translated into a more accessible language. Because of the integral method of design Hauberg (2011; 2014) argues that RbD has a long history within the architectural profession without being given a name. By creating theories and manifestos from their own design works, Hauberg argues that architectural practitioners from Palladio to Archigram should be considered as part of the RbD tradition. Hauberg (2014) argues that although Le Corbusier’s work was not intentionally meant to be understood as research, his constant working through making and reflecting on that making as a means of designing new programmes for architecture should be understood as a form of RbD. This suggests that RbD uses generative design as an iterative methodological process. Advocates argue this iterative process is necessary because *“certain aspects of design, chiefly the designer’s tacit knowledge and decision-making process, are not accessible using more traditional research methods”* (Montague, ibid:39). This critiques traditional research studies that examine architectural practices by arguing that the tacit knowledge and decision making process of the designer are unknowable without undertaking the role of designer as researcher. This supports Lucas’ (2016) claim that RbD argues the boundaries between research and practice should be blurred; that the production of architecture should not only fulfil its material requirements but also contribute to the discipline. As diagrammed in 3.2.1, RbD deploys architectural skills in order to undertake cycles of action and reflection that reveal insights into the design

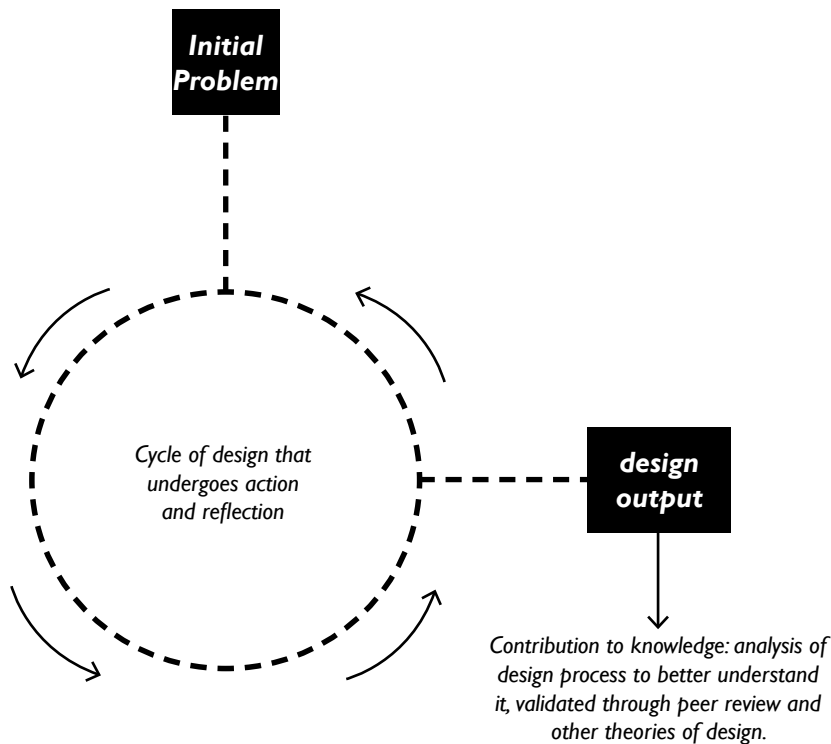


Figure 3.2.1 - Research by Design

process whilst creating material transformations.

* * *

The reflective practitioner: how professionals think in action by Schon forms a cornerstone in RbD's methodology (Hauberg, 2014; Lucas, 2016; Montague, 2014). The text argues *"for a model of practice whereby the practitioner is constantly critiquing their own actions, reflecting upon actions as they are taken and changing as appropriate"* (Lucas, 2016:43). Design research follows this by undertaking a reflective approach in order to generate new knowledges on the understanding of architectural practices (Hauberg, 2014). *"The design process is made explicit by the researcher/designer and he/she then reflects retrospectively on information in relation to the original theoretical context"* (Montague, *ibid*:40). Aitchison (2016) argues that this is the iterative process of design itself.

A validation strategy therefore appears similar to the reflective cycles of action research (see the following section) a design is created, reflected upon, improved, and created again. The issue with this is that action research uses the improvement of the design as the research output whereas RbD argues that it is the design process that should be primarily considered. As explained by Pais (2014), the output of RbD isn't proving theory or improving practice but understanding approaches to problems. The issue of design research validity is also explored by Kazerani (2014), who notes it is questioned both by the profession for its contribution to practice and by the scientific community for its validation method yet they do not provide any clear answers out of this methodological quandary. Hauberg (2011:51) argues that *"Research by design is validated through peer review by panels of experts who collectively cover the range of disciplinary competencies addressed by the work"*, but where does this take place? Is it a physical panel like a viva, or is it once the work has been published and criticised? How does this validation method overcome Lawson's criticism that RbD is too insular? The strategies for validating RbD appear premature however there are indications of their emergence.

* * *

The primary limitation of using RbD as the only methodology within this research is its insular nature. Although the validation process, as laid out by Hauberg (2011), involves the peer reviewing of work, there is little within the RbD literature that explores the wider context outside of the architect/researcher's method of producing. For example, the context in which architects produce (most often in a capitalist wage labour relationship), why they produce (most often in order to generate value for the landowner), and how their products affect those around them (most often to exclude citizens from certain environments). Understanding these contexts can provide greater insight into how and why architects/researchers produce and the methods they employ. This is suggested by Lucas' (2016) who argues that the built environment is inherently political but mainly to the extent that it engages with existing frameworks from planning law and regulation to aesthetic styles, the politics of architecture may also start to ask who it is for. Lawson (2015) indicates the political limitation of design research whilst reviewing 'Design Research in Architecture: An Overview' by Murray, stating that it has emerged in a post-modern and post-critical world. This is rebuffed by Megahed (2017) who argues the researcher is a participant-observer, inseparable from the field and undertaking

almost auto-biographical work. As opposed to methodologies such as PAR, Megahed (ibid) argues that RbD can explore more than the actions and processes themselves, exploring also contextual frameworks:

"Rather than placing the emphasis only on the productive outcome, such experimental design processes can examine the inputs and contextual framework in which design takes place"

This raises further questions about validation strategies within RbD; as such RbD appears more valid as an autobiographical; introspective approach towards design iterations and processes. If this research was going to undertake only a RbD methodology, the research question may be "what design processes are undertaken in the design of housing in not-for-profit development?". Cycles of testing ways to design these houses could be undertaken to be reflected upon, altered and then tried again to see if certain strategies could emerge as more successful in acquiring land. This would not address a critical part of the work - why is not-for-profit development being used? A participatory action research method could start to ask this question because it does not rely on this autobiographical approach and can engage with the political aspect on a critical level.

Participatory Action Research

The aim of action research (AR) and participatory action research (PAR) is to discover limitations in current practices in order to improve future actions through an intervention (McTaggart, 1997; Gaffney, 2008; Waterman, 2014). In this sense of improving it is a process of change (Tripp, 2005). The methodology starts from an initial idea being identified; this leads to a reconnaissance phase, to identify previous research in similar areas. The research itself follows cycles of planning, acting, observing, and reflecting before a final output is produced (Waterman, ibid) - Gaffney (ibid) however interprets the whole process as a cycle, indicating that there are no specific phases but that they blur together.

The definitions of PAR and AR are contested ones, at times used interchangeably (see index of McTaggart, 1997), this thesis is not about providing a definition of them however it is pertinent to state how they are understood in this work to state why the methodology contains elements of PAR. McTaggart (1997:39) defines PAR as "*motivated by a question to improve and understand the world by changing it and learning how to improve it from the effects of the changes made*"; this fits definitions of action research (see Tripp, 2005; Waterman, 2014) however the difference in AR and PAR arises is scholars seeing co-production and participation in AR as optional (see Tripp, 2005; Chatterton et al, 2010; Waterman, 2014; Mitlin, 2018) contrasted with the general consensus that PAR is inherently co-produced and participatory (see Fals-Borda, 1987; McTaggart, 1997). Waterman's notion of a definitive start and end works for this project due to the limited fieldwork timeframe that the PhD offers. It also limits elements of co-production in the research to the intervention (the stages of planning, action, observation, and reflection) itself, whereas Gaffney implies that the whole project including the research design should be co-produced. Gaffney's model would be difficult to undertake in a PhD setting where standard protocols dictate that before fieldwork is undertaken there has to be

an ethical clearance predicated by the research design and methodology. A totally co-produced project also creates issues in time as Mitlin (2018) explains they can take upwards of ten years to undertake.

The definition of participation itself becomes a point of contention with Chatterton et al (2010:251) defining it as joint knowledge production with participants in the research, but McTaggart (1997:28) takes this further stating "*Authentic participation in research means sharing in the way research is conceptualised, practiced, and brought to bear on the life-world. It means ownership, that is, responsible agency in the production of knowledge and improvement of practice*" - this statement attempts to break down the implicit hierarchies of research by understanding the whole process of production as participatory. Further to this Fals-Borda (1987) sees a key aim of PAR is to provide a feeling of agency within participants in order for them to understand their class position and strive at emancipation through the collective; co-produced intervention; this presents a political angle into co-production. Beebejuan et al (2011:5) trace co-production back to Freire's search for "*counter-hegemonic approaches to knowledge construction in oppressed communities to challenge the dominance of majority or more powerful interests and perspectives*" to Beebejuan et al, co-production symbolises a challenge to existing hierarchies of knowledge between researchers and their objects through the production of an intervention that will be of use to all participants. Filipe et al (2017) acknowledge co-production's academic roots in social justice, but provide a looser definition based around the collation of knowledge from different backgrounds to create new knowledges. Chatterton et al (2010:264) problematises the notion of co-production by questioning how it can be utilised in practice "*sometimes this will be just listening and shadowing, at other times it will be engaging, stimulating, or acting*" - to Chatterton et al co-production is fundamentally about giving a voice to those without. For Beebejuan et al (2011) this voice needs to be wary of giving bias of one view over another and should not be understood as a transfer from an actor in-the-know to a perceived lay person. Although definitions of co-production are relatively loose, the breakdown of traditional hierarchies in knowledge production and the creation of a useful outcome for participants is a commonality (Filipe et al, 2017). Co-production's aim, to break down traditional hierarchies, lends itself to research that changes existing social conditions of participants (Beebejuan et al, 2011). PAR then can be understood as a methodology containing elements of co-production where the process involves implementing and observing the change that becomes the output of the research. Translating this into a PhD methodology, McIntyre (in Herr & Andersen, 2014:100) argues that the co-produced research designs often proposed within PAR are difficult to fit within the framework of the dissertation as university approval is often required prior to fieldwork. As such McIntyre (ibid) argues that a PAR project as a dissertation is appropriate providing it follows "*the underlying tenets of PAR: (1) an emphasis on the lived experiences of human beings, (2) the subjectivity and activist stance of the researcher, and (3) an emphasis on social change.*"

* * *

The activist sphere that is blurred throughout PAR's inception, undertaking, and analysis presents itself in the validation strategy also. The two research outputs of PAR are creating agency of the actors involved in the research, and improving their practices.

In this sense the tools for determining validity are similar to the validation strategies of RbD. Mctaggart (1998;213) argues that the improvement of people’s lives and practices are their own validation method, they state *"It is no longer sufficient to think about validity simply in terms of the defensibility of causal claims or of knowledge claims as if these stood aside from the methods, politics and context of their production"*. Herr & Andersen (2014) agree as do Emerald and Martin (2013) whilst reinstating the criticality of the methodological practice of PAR. This is where research participants plan their next steps, act upon this, observe how these changes occur, and then reflect upon them in order to inform the next course of action, see diagram 3.2.2. This continuous cycle of stages is argued as providing the greatest change for the participants of the research; instituting this methodological practice therefore becomes the way to generate validity within PAR. As such, writing about the change instigated through PAR, McTaggart (ibid: 232) states *"Participatory action research is not valid unless it meets criteria of defensibility, educative value, and political efficacy and moral appropriateness"*.

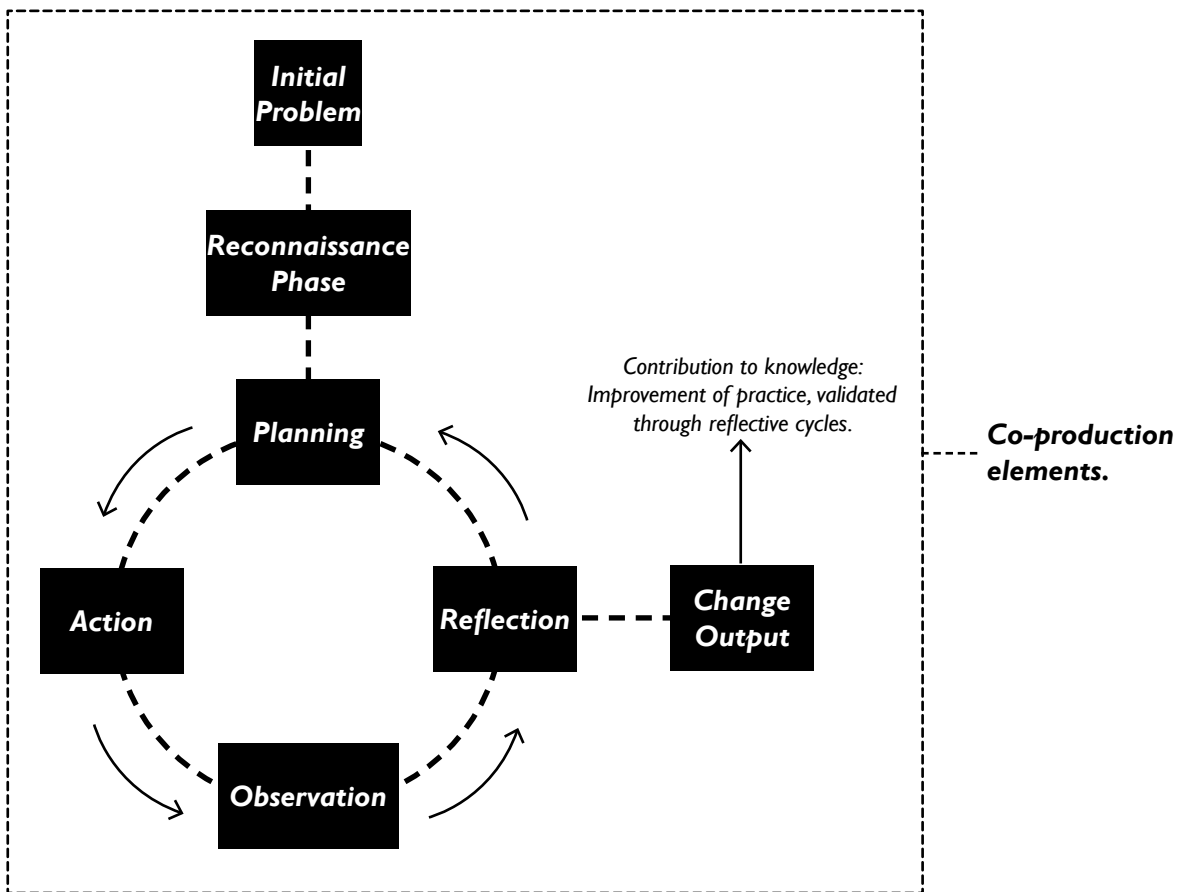


Figure 3,2,2 - Participatory Action Research

* * *

PAR methodology complements RbD by adding a political activist lens to the deployment of architectural methods. The limitation of this methodology is its difficulty to advance knowledge beyond the specific change that is analysed. The output of the research is the positive change instigated by the research participants and the validity of the change is its ability to defend, educate, and its political efficacy. If this research was following

an orthodox PAR methodology the research question may be “how can REACH Homes acquire land for their not-for-profit construction?”, as at the start of the research REACH had only their prototype and were looking for land to expand. The cycles of collective action would be testing ways to acquire land whilst discarding unsuccessful ways and reflecting at each stage in order to improve the practice; this would also constitute the contribution to knowledge. Through becoming an active participant in REACH’s practices, the actual decision making processes and tacit knowledges can be revealed; this is how Montague (2014) argues that being the active participant within RbD reveals knowledge that is unobtainable by more hands-off research methods.

By focussing on the actions of the research participants as the research output the ability of PAR methodology to build theory is limited and many PAR advocates would argue is not the goal of the methodology. This also leads to issues of transferability because if the only output is the improvement of a specific group of peoples lives, then is it possible for the output to be tested beyond the immediate setting? To complement both PAR and RbD this research will incorporate elements of case study methodology to allow the analysis of decommodification within activist research.

Case study Research

Case study research is an intensive approach to the research of one or several specific instances that allow the study of a wider phenomenon (Swanborn, 2010). Through observation, it is the reality that is being drawn out through the phenomenon (Taylor & Søndergaard, 2017).

“The word ‘case’ originates from the Latin ‘casus’ (cadere = to fall); it simply means ‘event’, ‘situation’ or ‘condition’”
(Swanborn, *ibid*:2)

Viewing REACH as a case allows me to work on the phenomenon of decommodification. Swanborn (*ibid*) contrasts the intensive approach of case study research with an extensive approach where a large number of phenomenon instances are analysed together and conclusions are drawn from them.

In contrast to both PAR and RbD, who’s research allows very specific questions, the intensive study of case study research being applied to phenomena allows the answering of transferable research questions through the building of theory. Taylor & Søndergaard (2017) argue that the analysis of case-based research data should be ongoing throughout the project. The primary analysis of case study research is abductive reasoning *“a non-linear process of thinking that goes back and forth between general theory and specific data or phenomena”* (Taylor & Søndergaard, *ibid*:112).

The primary uses of case study research are the building of theory, the testing of theory, and the contribution to practice *“where the objective is to contribute to the knowledge of one or more specified practitioners”* (Dul & Hak, 2008:31). Whilst practice-oriented case study research is similar to the outputs of RbD and PAR it is also starkly different because case study research isn’t manipulated by the researcher (Dul & Hak, *ibid*); therefore the contribution to the practice improvement does not come from the researchers involvement, but rather their observation. Although Dul & Hak argue case study

research shouldn't be manipulated by the researcher, Simons (ibid) does acknowledge the embeddedness of the researcher, arguing that they need to be constantly self-reflective and aware of subjectivity, even within the case selection process.

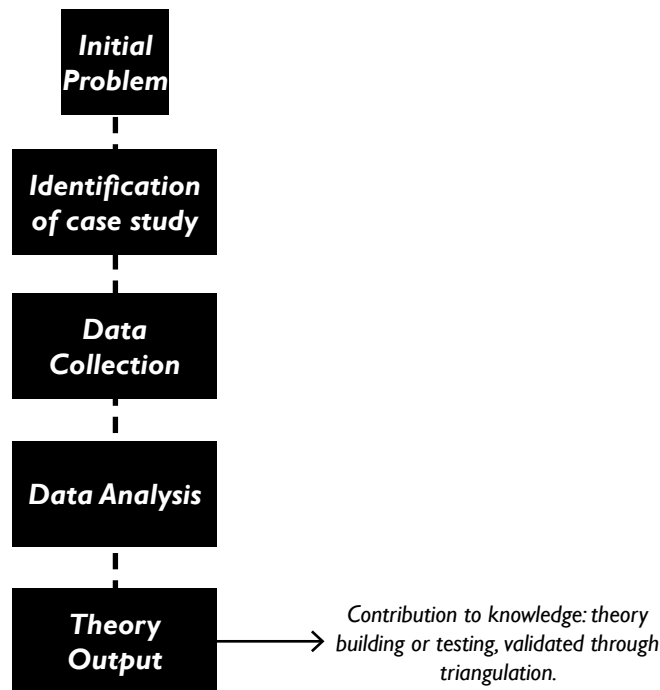


Figure 3.2.3 - Single Case Study Methodology

The selection process for cases is varied and contested. Swanborn (ibid) argues that whilst more unique cases may be more interesting the analysis of more common cases can reveal and support general trends. This is sharply contrasted with Simons (2008) who argues that *"the primary purpose for undertaking a case study is to explore the particularity, the uniqueness, of the single case"*. Simons doesn't acknowledge here that case study research could be made of multiple cases, arguing that they should only be used as a reference to demonstrate that the individual case is unique.

One way in which the literature could be expanded is by including the issue of access within the selection of the case(s). The case may be perfect for the research but if access cannot be obtained then it cannot be used; it is also dependent on the amount of knowledge that can be gleaned. For example, when I first made contact with REACH I was unsure if they would want me to use them as a case; as such I made contact with several potential cases. One, Sheffield Community Land Trust (SCLT), were happy with me joining their group but they didn't produce enough to be of research merit. This is severely limiting for the case study methodology of Simons (ibid) because if a 'unique' case cannot be accessed then the whole research design falls apart and so this lends weight to Swanborn's (ibid) argument that the case itself is secondary to the knowledge that can be created¹. The lack of acknowledgment towards the agency of the cases, both in terms of access and activity, within the literature introduces the limitation of case study research.

1. The selection of REACH is returned to later in this chapter.

* * *

The limitation of case study research is that because it is so focussed on the phenomenon provided by the case that it forgets the case itself. Here, Swanborn (ibid) contradicts themselves. They simultaneously argue that case study research is the analysis of a phenomena through one or a number of cases whilst also arguing that AR should use a case study approach. As explored in the previous section AR attempts to improve the situation and practices for research participants; whereas within case study research Swanborn (ibid:8) argues:

"The researcher is interested in the general phenomenon, and not in the more or less accidental case, or 'instance', in which the phenomenon manifests itself."

Therefore although AR may focus on specific groups of people which could be referred to as cases, as per Swanborn's definition, it cannot be understood as case study research. This lack of acknowledgment towards the research merit of the case itself is the limitation of case study research.

* * *

Simons argues that the two key methods of validation for case study research are triangulation and respondent validation. Triangulation involves the cross checking of truth claims from multiple sources to strengthen said claims. This can be combined with respondent validation, which is the practice of "*checking the accuracy, adequacy and fairness of observations, representations and interpretations of experience with those who they concern*" (131). This respondent validation shares a similarity to the reflective stage of PAR, the difference being that within PAR the views of the participants and the researcher are reflected on as a driver for future action whereas in case study research the validation of the researcher's views is measured against the participants.

If this research was using purely case study methodology it might ask the research question "what can the case study of REACH Homes reveal about not-for-profit construction?". I would observe and collect field notes about REACH's activities and the output would be similar to the actual research question. The difference is an ethical one. By only observing I may be able to undertake a contribution to practice case study but I would not be able to directly deploy my methods in contributing to that practice as would be possible through PAR and RbD. Furthermore this research would be primarily extractive, with little ability to contribute back and further the cause of the specific case study because a case study's focus shouldn't be on the case, but the phenomenon demonstrated by it.

Analysing Decommodification

Returning to the research problem, each of the three methodologies had limitations in addressing it; to reiterate the problem:

The purpose of this study was to critically explore decommodification in the context

of alternative construction practices. The study focussed on REACH Homes, who emerged in reaction to the commodification of housing. Through the engagement and improvement of REACH's alternative construction practices, decommodification was revealed to provide a greater understanding of contemporary capitalism. Alternative construction practices revealed not only how they themselves were incorporated into the economy, but also provided insights into the formal practices they were providing an alternative to. Decommodification emerged for REACH at the moments when their construction practices faced the most pressure from commodification; these domains were land, materials, and the construction site. From these fields, the thesis claims that decommodification should be understood as contradictory, it can act as a process or an action, it can lessen the effects of commodification whilst being within a capitalist present, and it emerges as a reaction to commodification without necessarily being a conscious reaction.

The methodology used in this thesis is a combination of all three of these methodologies; it is necessary to understand the research question. Whilst this is a unique methodology, and I would argue most research designs require a unique methodology because as we saw in the previous section the definitions of methodologies are contested, it builds upon the existing; analysed literatures to address the unique nature of the research. In the literature review decommodification acting as a countermovement clearly has an activist element as a way of attacking the expansion of commodification and this supports an action methodology in order to understand it; yet at the same time the definition of decommodification is contested and needs to be critically analysed by stepping back from the action element.

The primary methodology of the research was PAR, the research consisted of cycles of research that focussed on improving REACH's processes of construction through change. The cycles of planning, acting, observing, and reflecting undertaken with REACH Homes revolved around the meetings we had. We would have a chat and plan what needed to be done, agreed upon how it would be done, and then performed this, observed how it went and then in the next meeting would reflect on it. PAR provides a political aspect to RbD's change-based methodology. By being a decision maker within REACH, not only can changes be made that support their critique of contemporary construction but a wealth of materials have been revealed, and created, that may not have been provided to a researcher working as an ethnographer because REACH may not have deemed it important enough to provide. This has been the benefit of using a primarily co-production methodology. It enabled me to identify, alongside creating, the priority and importance of documents in the change process meaning less time was required sorting and giving hierarchy to them. The limitation of solely using this methodology was twofold. Firstly, unlike PAR, the change itself wasn't the output of the research; there was another step that analysed the decommodification occurring from the engagement/change. Secondly, decommodification was not a stated goal of REACH; the purpose of the PhD was not to educate REACH on decommodification; as such it was not something we discussed because we were so focussed on the construction practices.

This was supplemented by RbD which allowed me to focus more on the architectural working process within the decommodified practices of REACH. RbD allowed me to apply my existing experience within architecture to improve REACH's construction practices and using design as method reveals "*certain aspects of design, chiefly the designer's*

tacit knowledge and decision-making process, are not accessible using more traditional research methods” (Montague, ibid:39).

Case study analysis allowed me to take a step back from the direct link to REACH that design and political actions have to consider how the case of REACH reflects back onto the construction industry more widely through the decommodification witnessed in land, materials, and the construction site. This is not possible through either PAR or RbD because the output of the research has to be an analysis of the change and the processes that facilitated it. Stepping back from this immediate change-based process was something that I undertook with REACH informally, and then alone in my analysis, we would sit around the pub or on a drive talking about why projects like REACH were necessary for the state of the UK construction industry and I analysed these conversations and our actions to allow the decommodification to reveal itself. Most interesting about this was that we were engaging and reflecting on our work, in a similar way to PAR, yet we were demonstrating that we could think about and analyse wider theory.

At their extremes the two most established methodologies, PAR and case study, can be very rigid. PAR can insist on focussing on the change of a specific case as the output of

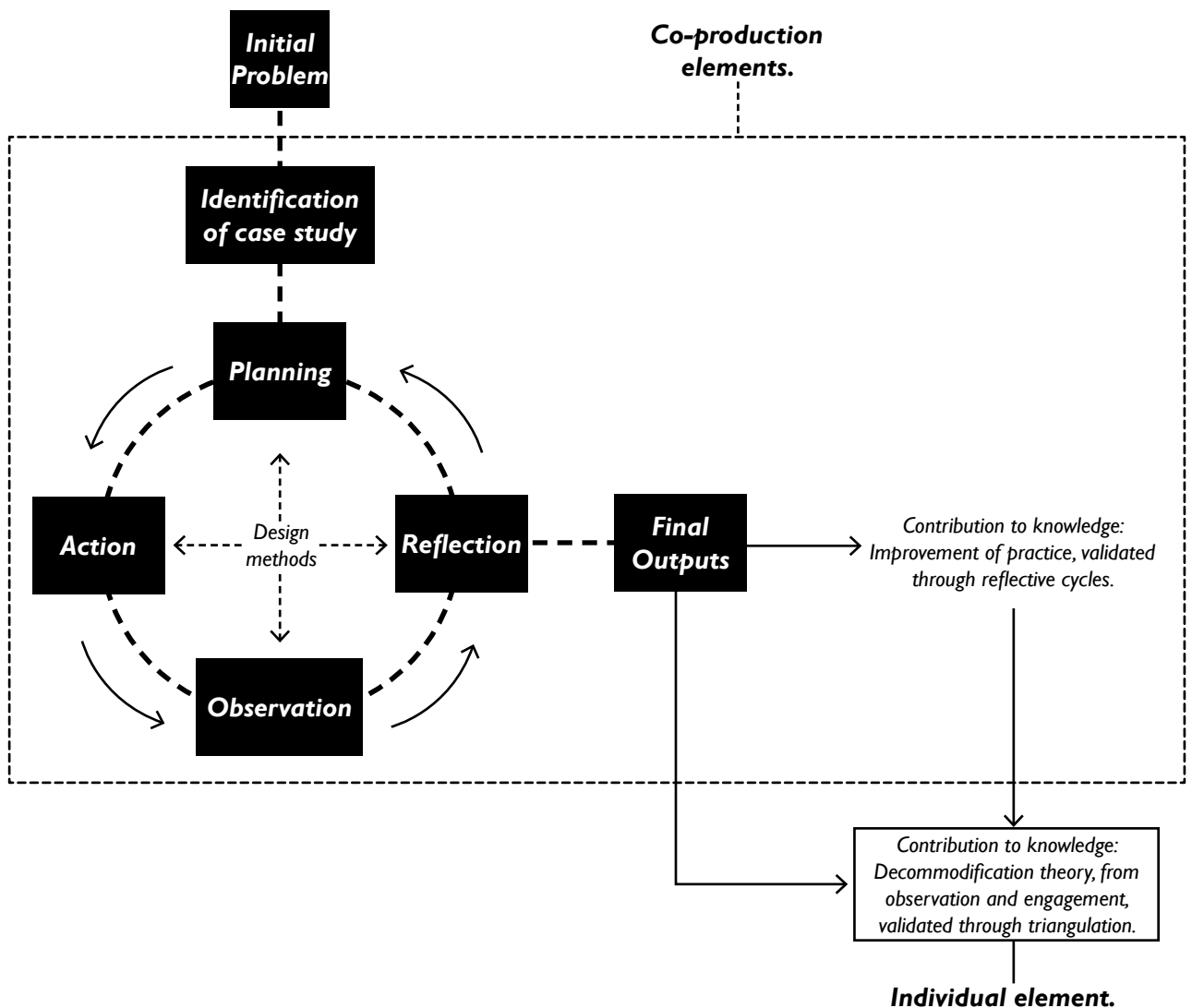


Figure 3.2.4 - analysing decommodification

the research, and case studies can argue that the researcher should be removed from the research to not taint the results. Through analysing the extremes and nuances within them the methodology that emerges for this study argues that a case study researcher can be involved in a project, to create a change and use this to analyse the wider phenomenon or theory that is revealed or caused by said change. Conversely, as long as a change is made to the benefit of the cause, I see no reason as to why PAR has to be focussed on the output of the change when theory can be built or tested from analysing said change.

Although the main methodology this study references is PAR it could be argued that this thesis is in no position to authentically or ethically claim that it takes its primary methodology from PAR because to do so would be disingenuous to the actors involved in this research who up until the moment of fieldwork had no access to, or voice in, the research design. At which point REACH may influence the research design but bias' will have already been imparted simply by giving them access to the document (which Tripp, 2005:10 argues must be done as in order for any kind of ethical participation "*No researcher or other participant ever engages in an activity that disadvantages another participant without their knowledge and consent*"). Secondly it cannot make a convincing claim that it will enlighten the movements involved to an alternative way of understanding society in order to defend their collective interests because there is a possibility that they are already aware of their class position by the ideological nature of the case's existence. After the previous debates highlighted the limitations of PAR, this appears as another. I argue that concessions must be made when undertaking a PAR methodology within a PhD format that requires administrative ethical consent before any interaction with the field can begin. This is also argued by McIntyre (in Herr & Andersen, 2014:100); their conclusion is that a PAR dissertation should consider lived experiences, the activist stance of the researcher, and an emphasis on social change. I go further than this, arguing that although the research design may be decided to a certain degree prior to the fieldwork it can be modified as a collaborative effort with the research participants. Furthermore, using change-based research inherently requires the deployment of PAR's reflective cycles as modes of validation.

Validation

The unique nature of this methodology means that demonstrating the strategy of validation is key for the work to have legitimacy. In order to understand the validation method the output of the research must be reiterated. My output is twofold, firstly the output is the positive change to improve practice created with REACH; this follows both RbD and PAR methodologies. Secondly the output that emerges from reflecting on the outputs of the change-based method is the understanding of decommodification that emerges from REACH's construction practices and how they reflect to reveal relations within the contemporary UK construction industry. This follows both RbD and case study methodologies although differs from case study by using the change that was co-produced with the research participants as the driver of the outputs and differs from RbD by involving others in the process of creating the change.

The inherently temporal; chronological aspect of PAR's reflective cycles that I undertook

with REACH for the first part of this validation. Akin to PAR and RbD strategies, monitoring the change that occurs in REACH can only be understood through reflecting on the actions that we took collectively. Within this the meetings that we took allowed us to reflect on the success of the changes and plan for our next steps. These meetings became a validation strategy for PAR as we could reflect upon the successes of our changes and plan the next steps.

Sometimes these meetings were internal and sometimes external. For instance when we were applying for planning permission for a site we would meet and plan our actions, perform them, and come back together with an internal meeting to see the successes and limitations of our actions, we would then alter our ideas after reflecting on them and then submit them to the planning portal who would act as an external validation to decide if the application was successful or not. The use of external professionals as a validation strategy in the methodology is most similar to RbD. As Hauberg (2011) argues, RbD should be validated through presenting the work to peers who are external to the project with knowledge of design. In this way when we had meetings with professional actors external to the research process, including planners, consultants, and clients, we were validating the changes made within our work through RbD methodology.

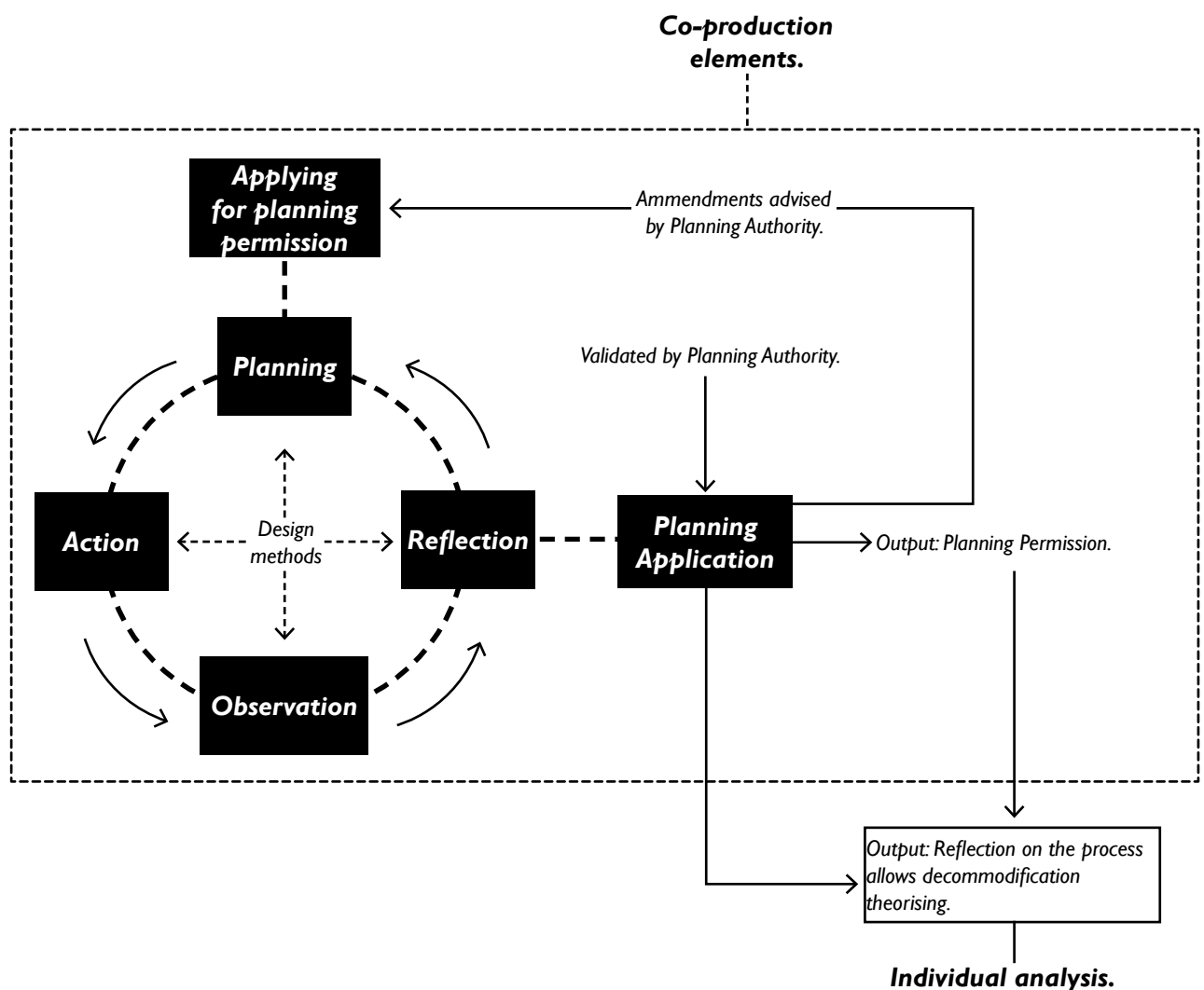


Figure 3.2.5 - Diagramming the meeting method to show the process of obtaining planning permission

Engaging with external actors and then re-reflecting upon this at our internal meetings started to validate both theory and change. If we were successful in our actions to improve REACH then our changes were validated, and by analysing the changes we were able to test and generate theories about the workings of contemporary construction that could then be validated through our actions and triangulated by external sources. For example REACH and I could be discussing a critique of the planning permission process, an internal validation process where we could critique each other's experiences and our positionality based on the experiences. We may then experience this through applying for planning permission, and then I could triangulate this through other sources' experience of the phenomenon, thus deploying external validation. This did not always work out because REACH may not have raised the critique beforehand, however by experiencing these issues I could still then triangulate them with external validation, for example from other theorists of decommodification.

Due to my personal and sustained involvement within the methodology, another key part of validation is understanding my position and subjectivity.

Positionality

Positionality is a key factor in defining action research methodology (Herr & Anderson, 2005). Herr & Anderson (ibid) understand positionality as a continuum, with outsider research, which is a study on others, at one end and insider research, which is a study of the self, at the other; everything in between is understood as undertaking some participatory element. Just because these categories exist it is important to understand that not every research will fit into them and that some relationships may even change as the work unfolds (Herr & Anderson, ibid). From the categories, this research aligns most closely with 'outsider in collaboration with insiders', Herr & Anderson (ibid) claim this is a typical PAR approach that contributes to the knowledge base and/or improved practice, and organisational change. As an outsider to REACH, I came and presented my work and a basic research design to propose a collaboration which they accepted. This relationship further reflects the difficulty of having a truly equal project, what Herr & Anderson refer to as 'reciprocal collaboration', in which every aspect of the research is performed together - they argue this is rarely suited for the tight time schedule and structure of the PhD.

Within our 'outsider in collaboration with insiders' position we, myself and the members of REACH, had to negotiate our knowledge hierarchies. I didn't want to come from a position of assuming or claiming that I knew more than REACH, this would reinforce a hierarchy over them and undermine the knowledge that they could provide; this would ultimately undermine the whole PhD (Herr & Anderson, ibid). At the same time, it is naive to not recognise the individual strengths of each collaborator. Therefore I attempted to minimise this relationship by clearly explaining who I was - a Sheffield native (a Dee-dah to others from Yorkshire) with a masters in architecture (who had spent time in the industry but found it too exploitative), from an ex-steelworkers & mining family who had done 'oreyt f' themsens' (judged by the fact that I was the second generation to go to higher education). I didn't mention the final part to Jon and Jonathan (the two main people in REACH) at first, it turned out they had similar backgrounds to myself but were one generation older. I then clearly stated that I was

looking to learn both from and with REACH by explaining that the output of the research was to understand construction practices through collaboratively improving REACH's processes. As such we could move from a potential hierarchical position in which I could have positioned myself as a 'saviour' character, sent down from on high to fix REACH's problems, to a collaborative effort where we work together to identify and improve REACH's practice. The framing of the research outcome allowed me to explain that it wouldn't be me improving REACH's processes, leaving them not knowing, but that it would be us. This relationship was critical because it allowed members of REACH to voice their own opinions freely which we fed into the research design as ideas to test and reflect upon, both in terms of process change and theory understanding.

As previously stated, a researcher's positional relationship can change during the research process. The writing up and analysis stage became more about myself as an 'outsider' reflecting on the work performed using the 'outsider in collaboration with insiders' framework. Due to the constant overlap between fieldwork and analysis, this inevitably worked almost as an external reflexive process on REACH's dynamics in which I might suggest something due to having analysed it independently. During the pre-fieldwork phase, the research could not be considered as 'outsider in collaboration with insiders' because my labour was performed without knowledge from the potential research participants. The main reason I chose not to include research participants at this stage, apart from the university's ban on interaction with the field pre-ethical clearance, was because of the wealth of potential cases that I could engage with and choosing a case (or cases) became the primary task once the basic research design and literature was identified.

3.3 Research Review

Selecting the Case

When first identifying potential case studies the criteria I used was loose. All I knew was the cases had to be engaged in some form of decommodified economy that was acting counter to commodified logics in Sheffield. Sheffield was chosen because of my existing links to activists in the field, and because it is my hometown¹. Using this parameter allowed me to collect cases that were attempting to change existing economic inequalities whilst simultaneously critiquing dominant structures. This parameter justified the use of participatory methods, through the cases attempting to change existing economic relations, and satisfied the worldview of exploring economic inequality.

Having existing experience within Sheffield activism, I had to be aware of the potential unconscious bias I had when selecting the cases. After narrowing the potential cases down, I conducted interviews and engaged with them for several months to decide on suitability based on their attempts to create spatial interventions and their relationship to decommodification.

The parameters of the architectural course, supplemented by my existing knowledge,

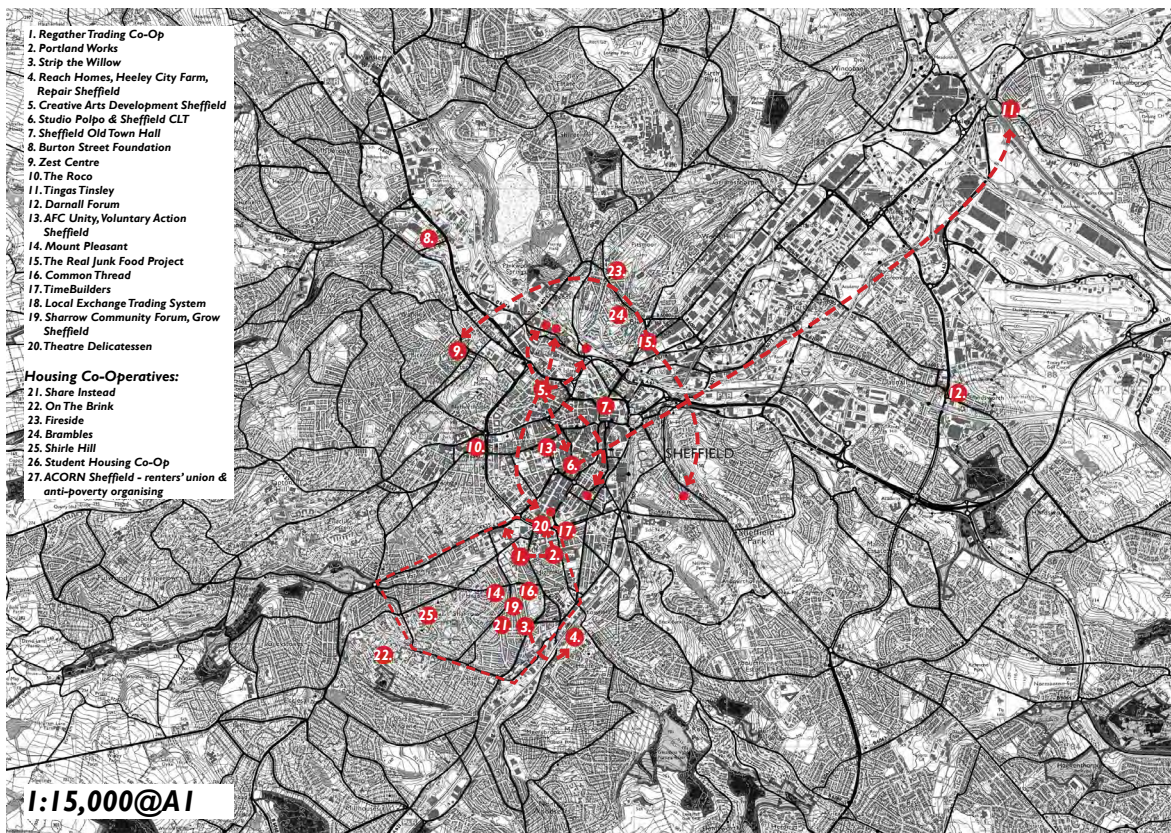


Figure 3.3.1 - Potential Cases

1. This allowed me to maximise time spent collaborating with cases as opposed to establishing contacts, which would have limited an already tight fieldwork timeframe.

informed me that the potential cases should be explicitly occupying material space. This discarded any activists that primarily operated online. Thus, by looking at the map, we can see how the movements vary from the real junk food project, who aim at food autonomy through their pay as you feel shops, to AFC unity, the feminist football club who occupy space to play football and reclaim the urban for women.

I whittled down the list of cases by focussing more explicitly on the production side of decommodified economies. The deployment of my architectural knowledge and experience became crucial in narrowing down the cases. Through utilising elements of PAR methodology I knew I would be involved in changing practices and processes of the cases, however by also using elements of RbD I could impart a design and architectural skill set that may not be available to the cases and would potentially be of greater value than generalised labour. As such, I chose cases that may be interested in using my architectural labour; this left me with Regather, Studio Polpo, and REACH Homes.

One of these choices was Regather. They are aiming to set up an urban agricultural network in Sheffield through the management of council owned land and solidarity to other groups, such as the real junk food project and local farms. The hopes of this are to stimulate local economic autonomy in the deprived area of Sharrow and to allow Sheffield to move away from a gig economy towards more sustainable projects. They converted a small artisan’s cutlery factory into a social centre which provides them a place to contribute to the local economy through the rental of rooms, a brewery, a bar, offices, and the assembly line of their veg boxes. The space provides important infrastructure as a social hub, as support for social enterprise start-ups, and as for the development of community economies.

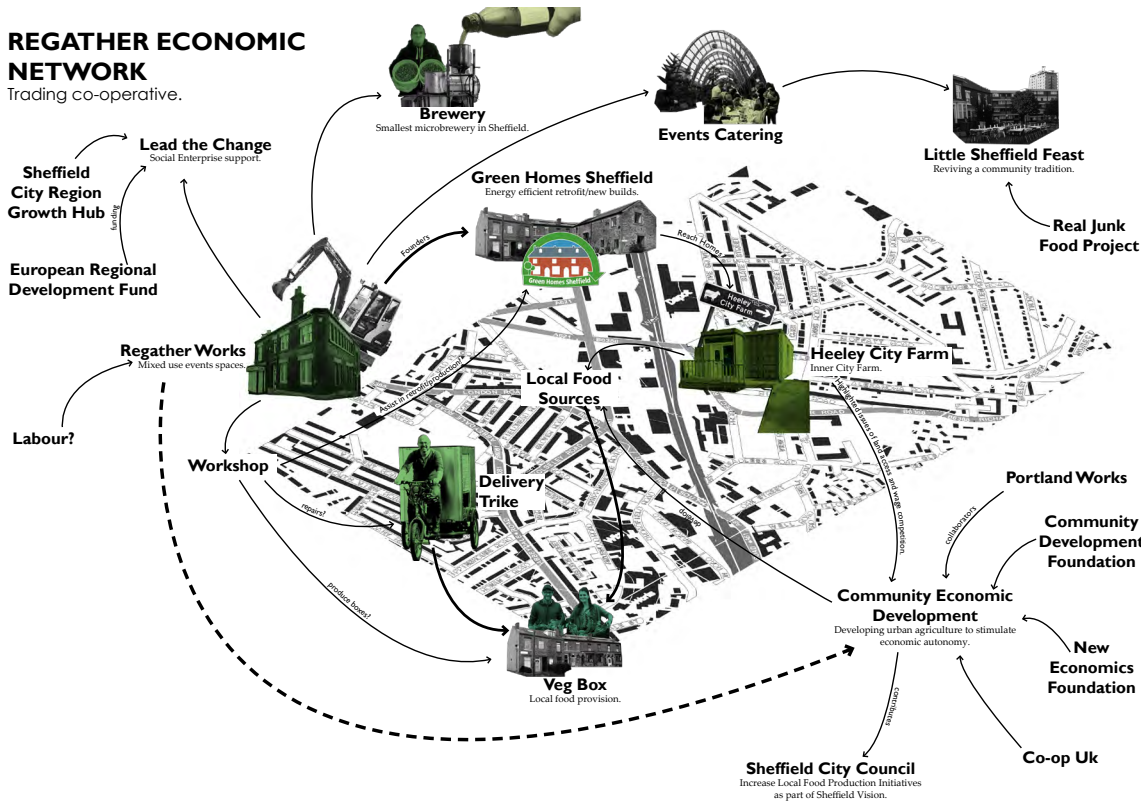


Figure 3.3.2 - Regather Analysis

Another choice was Studio Polpo. They are a social enterprise architectural collective collaborating with several movements. These include acquiring ownership of an unused school which they intend to reappropriate into a community centre. They are currently in the process of setting up the Sheffield community land trust as a method to fight back against speculation in the city and have put forward proposals to save the Laycock building from being redeveloped.

Strip the Willow comprises a cafe and carpentry/artisanal social enterprise in Sheffield. At their site they appear self-contained, however by looking at the networks they connect to a collective vision emerges. From starting with a critique of waste infrastructure they are able to divert and reuse waste from multiple sources towards a productive end. This has allowed them to provide apprenticeships through the creation of furniture from the waste materials. From this they gained enough income and labour supply to start Reach Homes - which provides not-for-profit housing by tapping into the already identified waste and labour streams. The show house for Reach Homes is located at Heeley City Farm, the land was negotiated through both parties agreeing that fighting the commodification of the housing stock was a shared vision. Although Strip the Willow

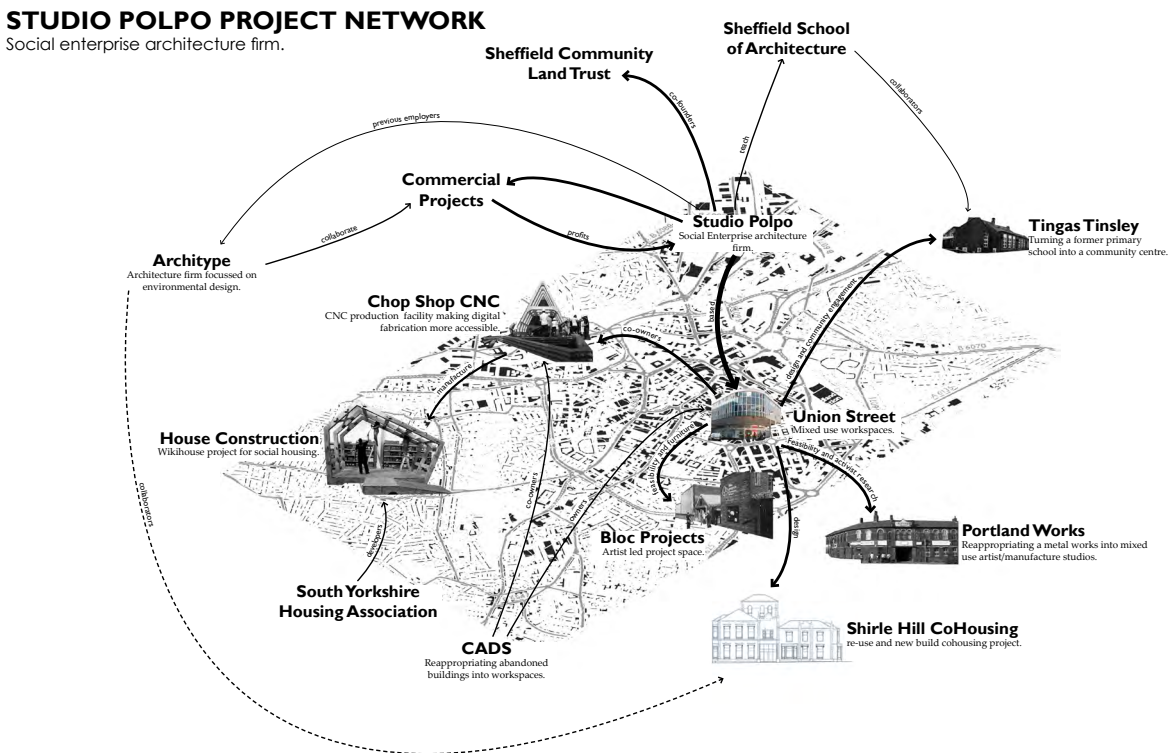


Figure 3.3.3 - Studio Polpo Analysis

appears contained, it can be expanded into networks of actions and actors that critique the delivery of education, waste and housing infrastructures through the manifestation of working alternatives.

The selection of these potential cases meant I had a starting point for deciding on a final case, or cases, to work with.

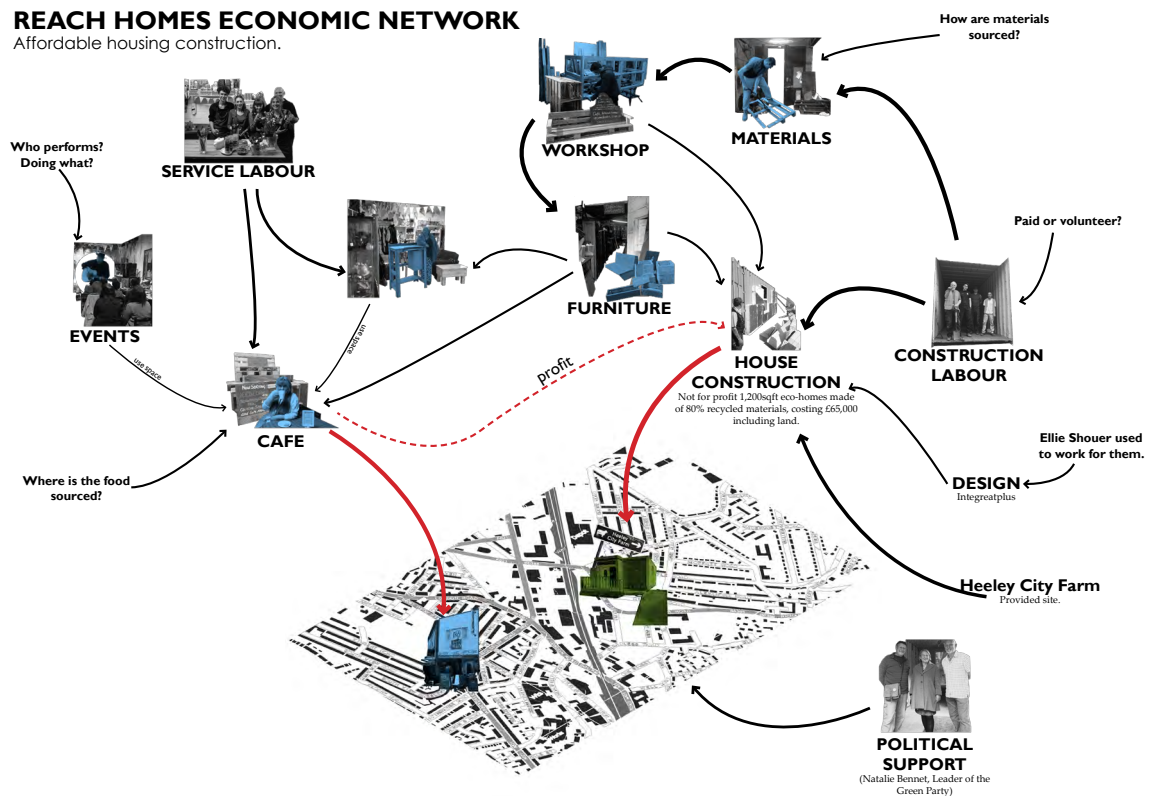


Figure 3.3.4 - Strip the Willow/REACH Homes Analysis

Pre-fieldwork Modifications

The selection process for cases is varied. Whilst some argue that a more unique case is key to understanding the particularity of a situation (see Simons, 2008), others argue that a more standard case allows the researcher to analyse better the phenomenon of research (see Swanborn, 2010). The selection of the case in this research was more practical, it questioned my access and the potential amount of work that could be undertaken. I contacted the three potential cases to identify how related to my own work their plans were¹.

I didn't choose Regather as a case study, not because they weren't happy to be a part of the research, but because they wanted the outcome of the research to tell their story in order to support the growth of similar projects. This initiative was not one that was best suited to my research design which was focussed more on creating change rather than recording history in order to allow others to create change. Furthermore, although they spoke about expanding their food production network, the other two cases had more potential in creating spatial changes as Regather didn't have any immediate plans to build. This left me with Studio Polpo / SCLT and Strip the Willow/ REACH Homes. After an initial meeting with members of Studio Polpo it was decided that my efforts and the focus of the PhD would be better served working with SCLT. The following extract is from Mark of Studio Polpo²:

1. See appendix for an extract on Regather.

2. Full extract in appendix.

"The Sheffield community land trust... is at the moment, working with a group just over the road who've taken on a block... this group have now said "well can we look at ways to buy our block and keep that as a community land trust, so it's always affordable, it keeps a mix of independent houses and businesses."

(06/08/2018)

The potential to work with SCLT appeared to fit all the aspects of the research design and problem that Regather didn't. It emerged from a critique of city centre redevelopment, it had a way for me to get involved through activism in defending the residents who already lived in the block, and it allowed me to deploy architectural knowledge. The statement I found that best summed this up was made by Rupert (06/10/2018) at one of the meetings *"nowadays if you want to be oppositional you have to be propositional"*. Rupert is an artist, member of SCLT, and was a resident of the Laycock block, the site which was earmarked for redevelopment by SCC and which SCLT proposed an alternative, commonly owned, plan for. The issue I found with SCLT was the lack of time most of the members had to put into it. I attended what were initially fortnightly meetings between August and January 2018-2019 but these lengthened out sporadically, and eventually seemed to stop. It seemed to me as though the group had lost steam, after their proposal for Laycock was rejected by the Council they tried several other efforts but they were not propositional. With Laycock, drawings were produced and costings calculated, when they were rejected however they did not appear to fight the Council's rejection, nor did they fight to stop the eviction of the existing tenants in the housing block above the shops of Laycock. Despite my frustrations I was told that if we were to fight the Council on this decision we would simply destroy our relationship with the Council and they would never agree to any future proposals put forward. This is of little benefit to the old residents of Laycock. The last I spoke to Rupert, after being evicted, he was living in his studio space.

This left me with Strip the willow / REACH Homes. I had been engaged with both Strip and REACH since starting fieldwork, having known in passing Jon, the founder, since a talk he gave several years earlier. Our first contact was in August, 2018, by which point I had realised that Strip was at a comfortable size and wasn't looking to expand. As such I took a more active interest with REACH Homes. At first I thought it was stagnant, owing to the fact that little more than their show home had been built, but upon meeting with REACH I discovered that they were having major problems in acquiring land so that whilst from the outside it may appear that not much was happening it was a hive of activity within. This activity of land acquisition fits the research design well. REACH from the offset was a critique of contemporary construction practices, it would allow me to participate in cycles of attempting to claim land for development which could be reflected on and, if land was acquired, I could utilise my architectural skills and reflect upon the processes of production. Simply finalising REACH as the object of research meant that I had to alter the research design; not just because the research question and aims would have to be altered to include REACH but because, as part of my ethics and PAR methodology, REACH had a say in how I collaborated with them. This was negotiated in our first meeting (17/08/18), I established the research:

"What you're talking about is pretty much exactly where I'm aligned with, but specifically for my PhD I'm looking at the actual production side of it. So from a community based

production point, this might not necessarily be actual construction but up to the point of how do you acquire land, how do we get communities involved, where is the knowledge coming from, how are materials sourced. So the reason for this is its comparison to a real construction project... that becomes quite a hierarchical system... I'd be looking effectively to collaborate with you, help you in any way you might need, take notes, understand how you do these sorts of things, how you collaborate with different people, but doing that through an active role so I'm not draining your time I'm hopefully adding to the project"

I then established my own positionality:

"It's something that I believe in but also at the same time... I mean for me the PhD was a bit of a scapegoat for a couple of years, cos I wanted to do something like what you're doing, something similar, not exactly the same but it just felt so daunting to me, I mean I'd done architecture, I'd worked in the industry for a year and I thought 'stuff that it's not what I wanna do'."

After understanding the project more, Jon readily accepted my proposal to collaborate with REACH:

"So you want to see how we can work together? Lots of different levels obviously I'm doing stuff from strategic house of lords, house of commons launches for NFAB right the way down to gardening and stuff. But a lot of what I'm doing is trying to get the word out on social media, I want this to be a very proletarian, people led solution of people saying 'we love the idea of this, we can actually build our way out of poverty and do it ourselves'... so where are you at the moment what suits you, what can I do for you, or what can we do together?"

Here we are negotiating the research design. I am trying to offer my time so that I can work with REACH to develop research, whilst Jon is working out how he can best deploy my labour to benefit REACH. These two outputs are effectively the same thing. I wanted to be of the most use to REACH not just because it aligned with my values but also because being the most helpful to REACH was one of the objectives of the research - by creating a measurable change and this change also allowed me to have theory based outputs on the construction industry. However, although I have explained these two goals as separate, for the sake of introducing the concept, they are really one and the same because my ethical stance becomes the output of the research. This entanglement is why I can say that PAR is the primary research methodology. However I also wanted to make it clear that I would utilise my architectural knowledge; thereby justifying the RbD element of the methodology:

Sam: well to be honest I think the best thing that you could do is to have a think, about where I could be best resourced for yourself, I've got apart from being a standard volunteer I have got a bit of architectural knowledge and a bit of things with planning and all these sorts of things and a little bit of construction knowledge - although probably not as much as you considering I haven't built a house!

Jon: I wouldn't claim to be any kind of expert, I probably couldn't even remember how to do it again!

Whilst the notion of deploying my architectural knowledge was easily understood, Jon still had a hard time understanding the entwined nature of my research and my ethics:

Jon: So this is going to benefit you for your PhD as well as being a personally satisfying thing to do?

Sam: Yes, well that's why I had to do it for my PhD. I wouldn't be able to do it if I didn't enjoy it.

From here we were able to establish that my first aspect of engagement would be through updating REACH's website - due to prior experience of the software. Jon explained that the state of the website was poor and that updating it was key to impressing potential backers, donors, volunteers, and clients. The ultimate goal of this task was to help in REACH's search for acquiring land.

The changes to the research design were extensive. From the start I had three potential case studies that were narrowed to just one based on the amount and types of activity within the groups. Regather was not selected due to the lack of potential to use RbD methodology and Sheffield CLT was not selected because of the infrequency of their work. This left Strip the Willow who were, similarly to Regather, not looking at undertaking design-based work however their sister project, REACH Homes, proved to have enough design-based work to be a case. This inevitably required a change in the research methodology. From a potential 3 cases I had moved to 1, this allowed a shift in the focus from a participatory case study research methodology, where case study would be the main method, to a PAR project with elements of theory and design methods woven into it. My first interaction with REACH was critical. I didn't know that their biggest issue, and what I would spend most of my time doing, was undertaking processes to acquire land. Whilst this didn't affect the structure of the methodology, it influenced the research question and dictated my participation by being the practice that REACH wanted to improve. To record and change this practice several methods were employed.

3.4 The Data Collection Process

Method

All of my methods are derived from my direct participation with REACH. This participation involved not only deploying architectural design skills but also negotiating and presenting with different actors in meetings, writing funding bids, and manual labour. On top of the artefacts that were created during this time - from drawings to emails to applications - vigorous field notes were taken. There were also a number of interviews that I conducted. Most of these were for the purposes of understanding REACH more and they became less and less as I became more embedded within REACH. These methods are what made the methodology operable and the way they were undertaken supported the positionality. All participants were given information sheets to sign, some have agreed to the use of their names where others have been anonymised.

There is an understanding that field notes and interviews generally allow for a detachment between researcher and researched, however these became key ways for me to engage with REACH. At times, my field notes became design charrettes; The most obvious instance was during the EBS office construction. I faced difficulty with the other labourers reading the architectural drawings, having not come from construction backgrounds; as such whilst writing my frustrations I ended up testing different ways to present the drawing for the labourers. The most critical drawing was where to attach the two halves of the container - as misaligning this would change the whole design. Whilst I was drawing and writing up notes we ended up working together to propose a solution we would all understand and could move forward with. In this way, although I did use them at times to reflect and simply record what I saw, the field notes became an active part of the design process that everyone could feed into. Although this happened spontaneously, I found it worked well as a way to integrate myself with the build team more, it meant I didn't feel awkward about recording what we were all doing whilst others were doing the strenuous labour because the field notes became a tool not just for the thesis but also for the success of the build.

As for the interviews, they too became less about the researcher asking questions and the researched responding but instead became an active back and forth that grounded the temporality of the project. As such I refer to them not as interviews but as meetings, this is also because that's what myself and REACH referred to them as; they were chances for us to reflect on our previous steps and plan our next actions. This became the key method to enact the reflective and planning stages of PAR. The meetings allowed me to register the evolving feelings of REACH over our time together; furthermore they allowed us to enter into debate with each other, engaging more frank and open discussions and understanding our motivations. The most obvious example of this was with REACH's proposed home ownership model, this debate started when Jon said "*what does it matter if someone buys one of our houses for £200,000?*"

As REACH's aim is to solve the housing crisis through providing not-for-profit housing, it was surprising to me when Jon told me they were not concerned if any of the houses

they produced were sold on for profit after the first occupant. REACH believed their job was to provide immediate housing; therefore once they had produced and provided the housing at the cost of construction their role was complete. Their theory was that by saturating the market with well-produced housing for under 6 digits they would bring the value of housing down nationally. I however disagreed. It would not be unreasonable to suggest that a REACH house, with its eco-credentials and uniqueness, would sell for 3 or 4 times this price if it were sold for profit on the market. My argument was that all of REACH's not-for-profit acts would be appropriated by capital if REACH didn't protect the affordability of their houses past first occupancy. This is because if a resident could buy a house and then either rent it or sell it on the market they would gain a profit many times higher than REACH's cost of production and therefore the houses would, instead of limiting the scope of the market, increase speculation. This would mean rather than REACH combatting the housing crisis they would be simply exacerbating it without gaining the potential profit that could be obtained from speculation. They would ultimately fail in their mission to stop the housing crisis whilst simultaneously failing to be good capitalists! After this discussion in a meeting, Jon's opinion shifted and it became policy that REACH would use protective covenants to limit speculation

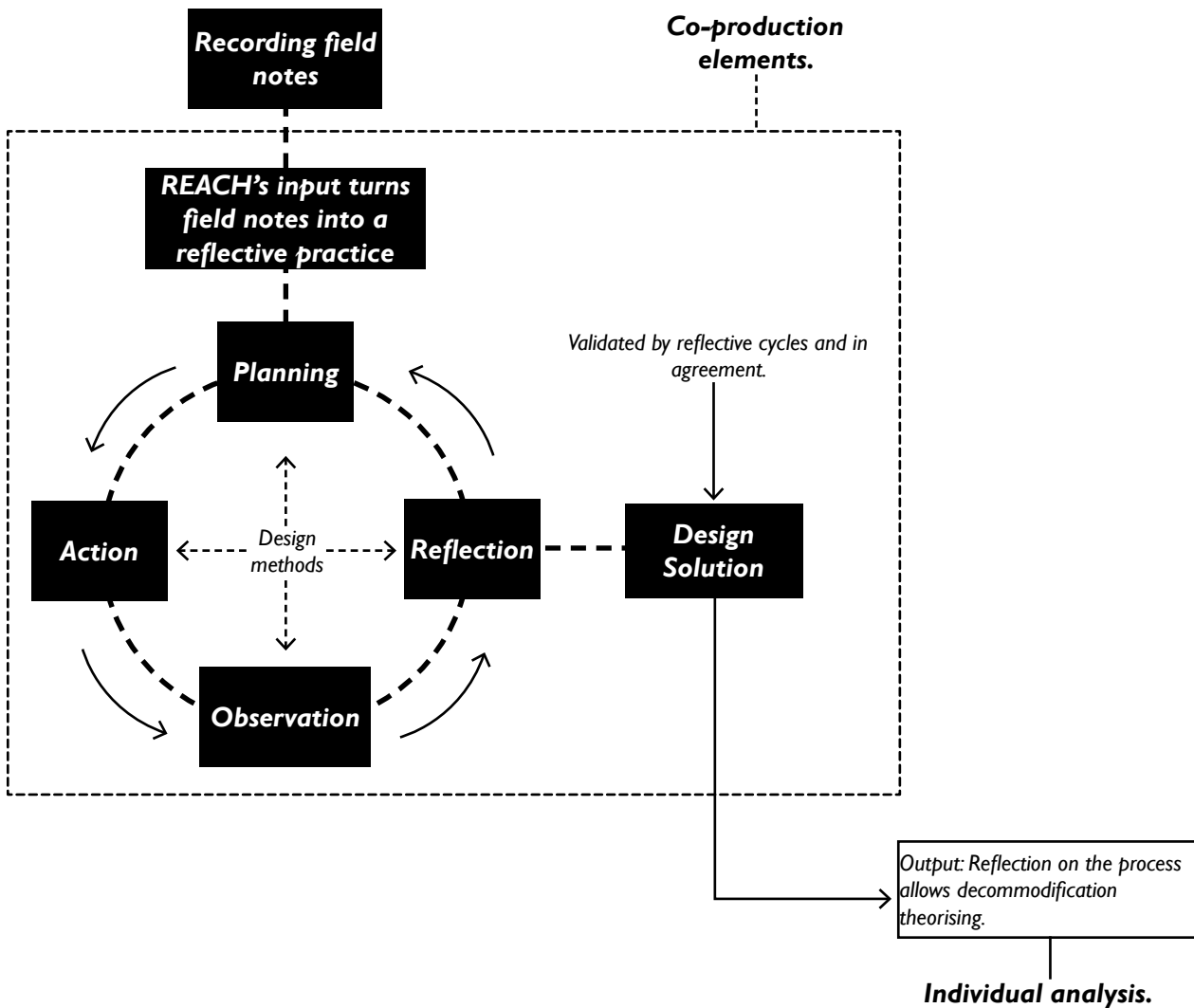


Figure 3.4.1 - Diagramming the field notes method to show how it became a tool for integration as well as research

on their projects. Through this discussion the meeting shifted towards a collaborative project that not only tested and changed the values of REACH but, in doing so, allowed a conceptualisation of decommodification that had to encompass both production and consumption to limit its appropriation by capital.

The meetings and, on occasion, the field notes provided break points where we could all step back and reflect before we moved forward. In this way they fit within PAR's reflective cycles and differ from more traditional deployments of these methods where they are separate from the researched, and this further entrenches the engaged positionality of the research.

The design process was split between two phases of concept and drawing. Drawing was primarily done alone and emerged from the concept stage. The conceptualisation most often emerged from meetings or field notes in which we would discuss what we each wanted and split off into tasks. For example Jon might go and attempt to source certain materials that we specified and I would draw the building. We would then meet again and changes may have to be made if misunderstandings occurred, opinions changed, or materials could not be sourced. In this way the design process followed the reflective cycles of RbD apart from the fact that it engaged other aspects of the process, such as material procurement, whereas RbD tends to focus on the architectural design labour.

I inputted all of the data into a spreadsheet and coded it onto NVivo. This allowed me to analyse the data by inputting themes and see the similarities and connections that were made. As already stated in the methodology this analysis stage differed from PAR because it was done alone without any coproduction. This is because within REACH I had already undertaken coproduced analysis when we were undertaking reflective cycles and deciding on REACH's next steps at the meetings. This analysis stage was about critically exploring decommodification within the fieldwork and so represented a separate stage from the collaboration with REACH. The analysis of decommodification mostly went through external validation methods where it was tested against existing theories and observations.

From the analysis stage, clear themes emerged that formed the empirical chapters. Land acquisition, and the permission to develop on land, clearly emerged from the initial engagements with REACH as a theme for the research. Land was the resource REACH was most starved for and so they had tried various methods in acquiring it without the ability to simply purchase. As such, land became an anchoring point for a host of alternative construction practices and land acquisition became the first theme. Material deployment emerged again from the various decommodified ways REACH acquired materials. From skip diving to mutual agreement to donation, REACH's various practices represented a key part of their work. It also offers a different view on alternative construction practices because unlike land, the decommodified acquisition of materials is relatively simple. This reflects back onto understanding land as an asset for speculation. The final theme was originally going to be labour relations. This would allow me to explore REACH's worker relationship and connect it to formal relations. I found two limitations to using labour. Firstly it would require a more extensive literature review into labour relations, this was an issue because the literature review was already quite large. Secondly it didn't cover the whole host of actions and reasoning behind these actions. The construction site became the final theme; this represents the space where the disparate materials, land, and labour are brought together in production. Furthermore, the construction site allows

Collection

I was intensely engaged with REACH from August 2018 till September 2019. During this time I averaged 4 days of contact time with REACH, in which I was either with REACH attending meetings or building, or I was working remotely by writing funding bids, updating the website, designing the EBS office building, etc. All of the participants were asked to sign a form which provided consent for the use of their names and the recording and analysing of the data they provided to me. There were two main aims that framed my time with REACH. The first was the attempt to acquire land; this was the main focus from August 2018 till the start of January 2019. After January REACH entered negotiations with the Ecology Building Society (EBS) and were contracted to build them a small office space on their existing grounds in Silsden, outside of Bradford; the design and construction of this space took precedence over the search for land

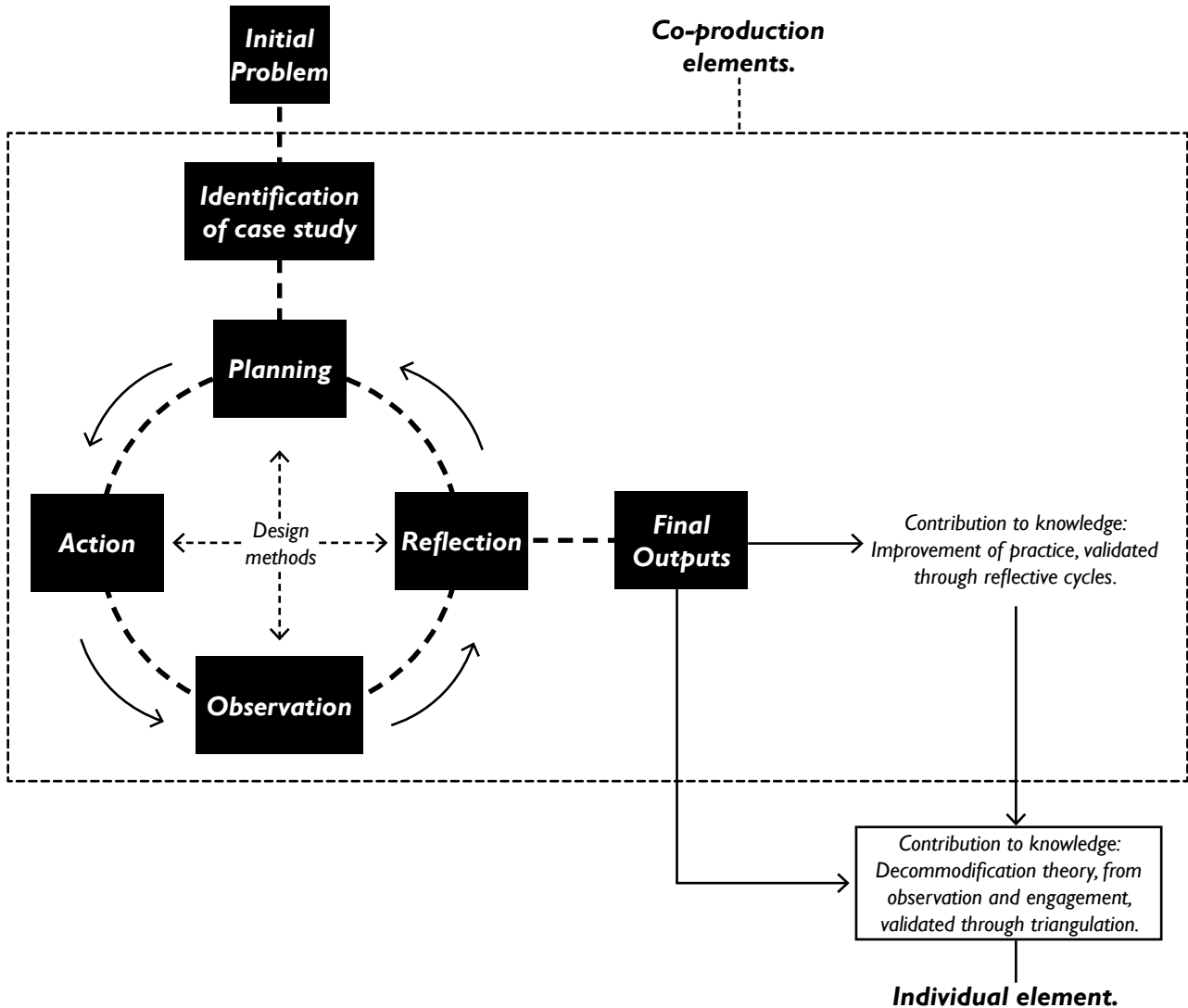


Figure 3.4.3- analysing validation strategies

although the latter still took place to a lesser extent, the aim of acquiring land having been achieved with the EBS project.

Within these overall aims were numerous reflective cycles each with their own miniature aims that whilst were always complimentary to the overall aim they were not necessarily fully related to each other. These aims did not always easily chronologically follow on from each other, at different points there was overlap depending on opportunities and difficulties that arose in the research. This represented another breakaway from traditional PAR because whereas PAR would represent a constant flow of planning, acting, observing, and reflecting, which would precede another cycle of the same, this methodology was more responsive to what REACH required which sometimes caused overlap. This was simultaneously less and more obvious during the construction of the EBS office. Whilst we were under a rigid structure of designing, applying for permission to build, and then building, this also jumped so that at times a new material being available for construction would affect the design and require a revision.

Through trying to acquire land I was involved in several independent, but ultimately intertwining, projects; these were website and newsletter design, factory site analysis, funding applications, Friends of the Valley, Castlebeck, and talks with Sheffield City Region. Whilst most of these were not directly successful in the overall aim of acquiring land, things were learnt and practices were improved. For example, through the Castlebeck and Friends of the Valley projects REACH understood the unwillingness of SCC to participate in their project and so REACH went above them to the Sheffield City Region as a next step; furthermore it suggested the way in which the Council understands its land. On the other hand the website had a direct impact on REACH acquiring land, the EBS were impressed with REACH's professional looking website and this was a factor in giving them the office job.

When REACH acquired the EBS project I was reassigned to that task almost full time, and this was when the intensity of the research engagement increased. The first stage involved the initial design which was subject to revisions based on client desires and the availability of materials and the capability of the labourers. The next phase was acquiring planning permission which involved navigating Byzantine institutions, preparing and hosting meetings, and producing planning documents. This enabled the final stage of construction.

It needs reiterating that although there was a rough chronological order to the cycles, what needs to be understood is that the tasks are separate from the cycles. For instance the task of design overlapped many cycles of PAR. There wasn't a design cycle, after which we could move onto construction, instead there were separate cycles as decided by our meetings. For instance halfway through the project the cladding material that we thought was going to be delivered for free suddenly acquired a cost that was no longer affordable. This required a revision in design, that was not merely limited to the aesthetic as a new hanging structure was required, and this meant a reapplication to planning permission and a change to construction logic.

Whilst here I am noting my main tasks there were many others going on in the background that I performed either to a lesser extent or not at all; these included acquiring materials, finding and negotiating a build site, and sorting contracts. The influence these had on the outputs of the fieldwork are revealed through the empirical chapters.

3.5 Conclusion

This chapter is the engine room of the thesis. It has provided a full understanding of the methodology through exploring the literature of RbD, PAR, and case study research. What emerged was an amalgamation of the three with PAR being the most used, in terms of validation, reflective cycles, and ethical engagement. This is followed by case study research, from which REACH was selected and theory can be drawn from it. Finally RbD provided a method framework for incorporating architectural design into research. These three methodologies come together to form what could tentatively be termed 'design action research', as a methodology that enabled me to respond to the research problem:

The purpose of this study was to critically explore decommodification in the context of alternative construction practices. The study focussed on REACH Homes, who emerged in reaction to the commodification of housing. Through the engagement and improvement of REACH's alternative construction practices, decommodification was revealed to provide a greater understanding of contemporary capitalism. Alternative construction practices revealed not only how they themselves were incorporated into the economy, but also provided insights into the formal practices they were providing an alternative to. Decommodification emerged for REACH at the moments when their construction practices faced the most pressure from commodification; these domains were land, materials, and the construction site. From these fields, the thesis claims that decommodification should be understood as contradictory, it can act as a process or an action, it can lessen the effects of commodification whilst being within a capitalist present, and it emerges as a reaction to commodification without necessarily being a conscious reaction.

The selection of REACH as a case presented the limitations in case study research, my selection wasn't contingent on the debate of unique vs standard within the literature but was instead based upon the more practical factors of access and suitability. The collection of data borrowed heavily from PAR methodology. Field notes were taken to record my participation and compliment the documents, pictures, and recordings that were acquired. My participation consisted of PAR cycles of planning, acting, observing, and reflecting that changed through the course of the project and unlike how most traditional PAR methodologies are explained was more dependent upon external forces - for instance the biggest change happened when REACH were contracted to build the office for the EBS; this was something that wasn't an obvious outcome of our PAR cycles.

4. *Sheffield Activism.*

Where The literature review provided a wider contextual and theoretical grounding that there is an issue of commodification within housing, The purpose of this chapter is to provide a contextual backdrop, set the scene, both in terms of where REACH operates and of REACH itself. In doing so the chapter reflects back into the literature review in order to introduce and justify the themes of the empirical chapters - Land, Materials, and Construction Site. Through these themes contemporary understandings of decommodification can be analysed but it is only through this chapter that REACH's actions can begin to make sense, operating as they are in their own specificities. As such, This chapter provides a contextual overview of housing in Sheffield to situate the emergence of REACH Homes. It does this by exploring present housing conditions; this necessitates a brief history of housing politics in Sheffield including policies and struggles. Secondly it formally introduces REACH Homes. It describes REACH's emergence, position, and projects to date; through this the themes of the empirical chapters become justified and can be explored further. The themes of land, materials, and construction site emerged primarily from how differently a REACH operated from normative practice, mostly out of a lack of capital, and through this difference decommodification was able to be witnessed and theorised.

4.1 Sheffield

The timeline diagram on the following page, figure 4.1.1, was produced by the researcher to demonstrate the changing activist movements in Sheffield. It is a contextualisation of a series of sources (Pollard & Holmes, 1976; Lowe, 1986; Howard, 1995; Shapely, 2006; Price, 2011; Slack, 2018). As can be seen, housing activism in Sheffield is a relatively new phenomenon, emerging as a response to changes in council housing and relating to local party politics. In Sheffield the dominance of Labour in the Council since 1926 led to a continued programme of municipal socialism (Blunkett & Green, 1983; Seyd, 1990; Price, *ibid*), reinvesting the Council's income back into the citizens:

"For over 50 years Labour councillors were engaged in council housing and slum-clearance programmes, in expanding educational opportunities, in establishing the city's own direct labour force, in stimulating the local arts and libraries and in protecting the local environment."

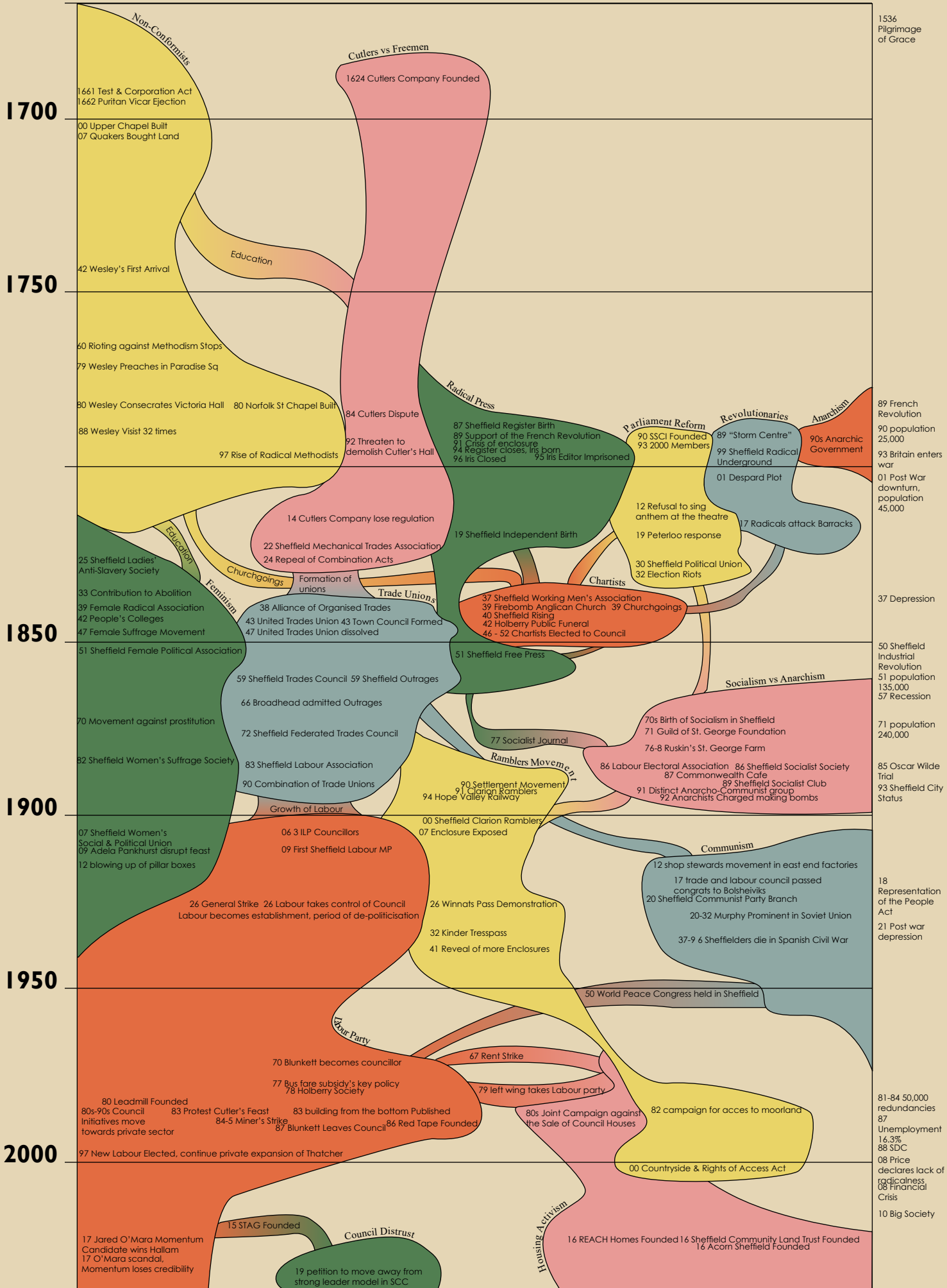
(Seyd, *ibid*:336)

Within Sheffield, housing became a key, yet often unspoken, policy. Seyd (*ibid*) explains that as of 1990 half of all citizens of Sheffield were council house tenants, and Howard (1995) states that in 1981 Sheffield City Council (SCC) owned 45% of housing in Sheffield. As such, contentions within Sheffield's housing have historically revolved around Council housing as a tool to hold various levels of the state to account. Pre-right to buy policy, residents fought against local government to stop rising rents, and post-policy, Sheffield City Council fought against the selling of their assets.

Historicising this, Seyd (*ibid*) cites the Labour Council's plan to raise council housing rent as a deciding factor of the Conservatives becoming the ruling party between 1968-1969. Lowe (1986) explains that the proposed policy of rising rent led to a series of tenants associations and the rent strike of 1967-68; Councillors tried to dissuade the strikers by warning the movement had ties to communism (Anon, 1967). The strike didn't emerge straight away and action prior to the strike included a proposal to pay the original rent plus a shilling as a concession with the Council (Adeney, 1967). Although the movement and the strike made marginal gains they ultimately failed to resist changes to the rent structure (Lowe, *ibid*). The fallout of the rent policy caused a shift in the local Labour party (Shapely, *ibid*), the more left wing councillors who were previously threatened with expulsion due to support of the tenants' movement took power (Howard, *ibid*). David Blunkett came to power as leader of SCC, promising active support for the movement and proclaiming support for municipal socialism (Lowe, *ibid*). The period of Blunkett as leader of the Council, 1980-1987, is defined as the most left wing Council in Sheffield's history (Price, *ibid*). This next phase of housing activism in Sheffield focussed on tenant participation and resistance to the Right to Buy policy through working with the now radicalised Labour Council as opposed to against them:

"The idea of a 'local socialism' (Boddy and Fudge, 1984), based on links between the Labour Party, public sector trade unions, and community organisations and movements, marks an important development in urban politics in this country."

ACTIVIST TIMELINE, SHEFFIELD



Lowe (ibid:115)

Lowe (ibid) claims the associations that survived after the 1967-68 rent strike did so by reforming their activism into welfare advocacy combined with social events. Tenant participation explored consultation policies (Shapeley, ibid), and even more localised issues such as supporting relocated Hyde Park residents to be put on the same estates as their neighbours (Pepinster, 1989). The alliance between the Council and the tenants' movement in Sheffield was most noticeable in the campaign against the Right to Buy policy:

"The Joint Campaign against the Sale of Council Houses ran for nearly two years in the early 1980s and has been partly instrumental in limiting sales of public housing in Sheffield."

(Lowe, ibid: 108).

Holden (2016) argues that the sale of council houses had a dual motive, firstly to create more homeowners and secondly to reduce the income of Local Councils that were rebelling against the government. SCC didn't stop the sale of its houses, but discouraged it through bureaucracy (Howard, ibid). This provoked action from the central government to intervene (Holden, ibid). The expansion of the policy weakened not only SCC's funding but also the power of the tenants' movement in Sheffield.

The destruction of the movement's power base, the lack of income coming from rents to the Council, and the lack of sources suggest the weakening of housing activism in Sheffield following the 1980's. Price (ibid) notes that there had been a lack of radical activity up to the time of publishing their book in 2011. At a national level, Hodkinson (2009:101) notes that *"between 1979 and 1994, total public expenditure on housing decreased in real terms by 60 per cent, its share of public expenditure falling from 7.3 per cent to 2 per cent"*; this led to council house construction falling from 74,835 to 290 between 1980 and 1997. As was explored in the literature review, chapter 2, the continuing privatisation of housing led to it being increasingly understood as a speculative asset; this became a crucial factor in the housing crisis and market crash of 2008.

Brenner et al (2012) argue that a present day urban crisis of commodification is manifested at the local urban scale, emerging from a global consensus of homeownership and uneven geographical developments, whereby spaces in one location attract more capital and tax spending; thereby create a void of spending in other regions through their centralisation of wealth (Brenner et al, 2012; Brenner & Theodore, 2002). Therefore just as an area attracts investment, pushing out embedded communities who can no longer afford to live there, it creates a cumulative effect that produces localised bubbles of speculation and inevitably denies investment to the areas already bereft of capital.

It appears as though Sheffield's housing issue today is primarily one of access to council and social housing. Dorling (2015) states that Sheffield has the longest social housing waiting list of any local authority in England and that the lack of a Sheffield boom in house prices is due to too few buyers, not exorbitant costs. The State of Sheffield (SoS)

1. These were introduced in the methodology chapter.

report (2018:59) identifies the changes to economic and housing policy in the past 30 years has damaged the notion of "*common goals and social identity*" in the city. In this way, Sheffield represents one of the areas that lacks spending, particularly in comparison to surrounding cities such as Leeds and Manchester, although this is rapidly changing and more investment is coming to the city, as can be seen in the Heart of the City regeneration project. Understanding Sheffield through this urbanisation perspective, as outlined by Brenner, the lack of social housing no longer appears as the issue, but instead a symptom of uneven geographical development.

From this context, several groups have started to emerge that take action against the present housing situation, yet Sheffield is not a hotbed of housing activism. Acorn, a national tenants union, has a strong presence in the city; they undertake direct action to defend the rights of renters nationwide. In a city like Sheffield, where according to Dorling (ibid) there are too few buyers and a long social housing waiting list, it makes sense that actions such as defending vulnerable renters have supported the growth of Acorn. Another group is Sheffield Community Land Trust (SCLT)¹. They are a part of the international network of CLTs and were founded to defend the eviction of a member from their council owned home that was up for redevelopment in the City's regeneration scheme. Despite this they are still looking for a project which they can develop. This context serves to show that despite a more radical past, emerging primarily from the mining and manufacturing industries, Sheffield does not stand out in the present for its activism.

4.2 REACH Homes



Figure 4.2.1 REACH Homes Prototype and Jon's home.

Within the Sheffield context, REACH appears to emerge without reference, however by looking at the personal situation of REACH's founder, Jon, a different picture emerges. What follows is a vignette of a story Jon told me, combined with other information I collated:

It is 2015. Jon, a retired police officer of 30 years, is sitting at the kitchen table with his partner assessing a model LEGO home, of their own design. They had been looking to move but couldn't afford anything on the housing market when, watching an episode of *Grand Designs* on shipping containers, Jon decided to build his own.

"I costed this idea up with containers and was like 'that's less than 'undred grand [£] for a 3,500 square foot house with atriums and a garage for Barry's Ferrari' he was 12 at the time, he still wants a Ferrari, he knows it's got to be an electric one though."

Realising his exclusion from the housing market was not isolated, Jon used the principles of this first project, the prototype, as a method to critique traditional modes of production and residence. The prototype is made up of 84% waste and recycled materials, and the land it sits on is paid for through the excess energy generated by the prototype's solar panels. Thus REACH Homes was born. Operating out of Jon's house-cum-prototype, REACH grounds its work through everyday praxis. The Housing market and austerity

policies are why REACH started; not out of an idealistic critique but because Jon, a retired police officer of 30 years, couldn't afford a mortgage on his pension.

In the vignette Jon reveals that his main motivation for starting REACH was how his own exclusion from the housing market made him realise the scale of the issue. If he, as a retired police officer, couldn't afford a mortgage on his pension then others must be in similar situations. This story is at once immediately personal yet also connects to wider issues of spiralling house prices that were explored in the literature review. This realisation of the inequality inherent within contemporary housing consumption is what drives REACH; their aim is to provide an alternative to the pitfalls of for-profit housing through providing a not-for-profit solution that is truly affordable. They claim this true affordability is achieved through REACH's critique of market methods in housing, an offsite modular construction, and using primarily waste materials. REACH estimates that, not including the price of land, it can provide a one bedroom house for £35,000 and a two bedroom for £65,000. In other words, their method of providing an alternative to housing consumption is through providing an alternative to housing production.

REACH's combined tenets of sustainability, primarily through constructing with waste, and not-for-profit further critiques the construction sector's focus on environmental efficiency at the point of dwelling as opposed to environmental efficiency at the point of production. This explains REACH acronym - Recycled, Environmental, Affordable, Container Housing. These words together explain REACH's method: through producing with primarily recycled and reclaimed materials they aim to create low environmental impact buildings that are affordable - due to the acquisition of waste materials being primarily through decommodified transactions. Jon laid out his final vision for REACH:

"I want to see REACH as a household name; the premier builder of affordable eco-homes, with 14 factories around the country producing 7000 beautiful homes a year. The £50m profit we'll be generating will be used to tackle homelessness, retrofitting and re-offending and we'll have set the standard for use of renewables in all new buildings."

Within Jon's vision are questions of scalability, funding, and suitability of the construction method among others; REACH is a long way from this vision. REACH has grown steadily alongside Jon's other business - Strip the Willow, a wood and furniture recycling and

Figure 4.2.2 Jon, left, with visiting dignitaries.



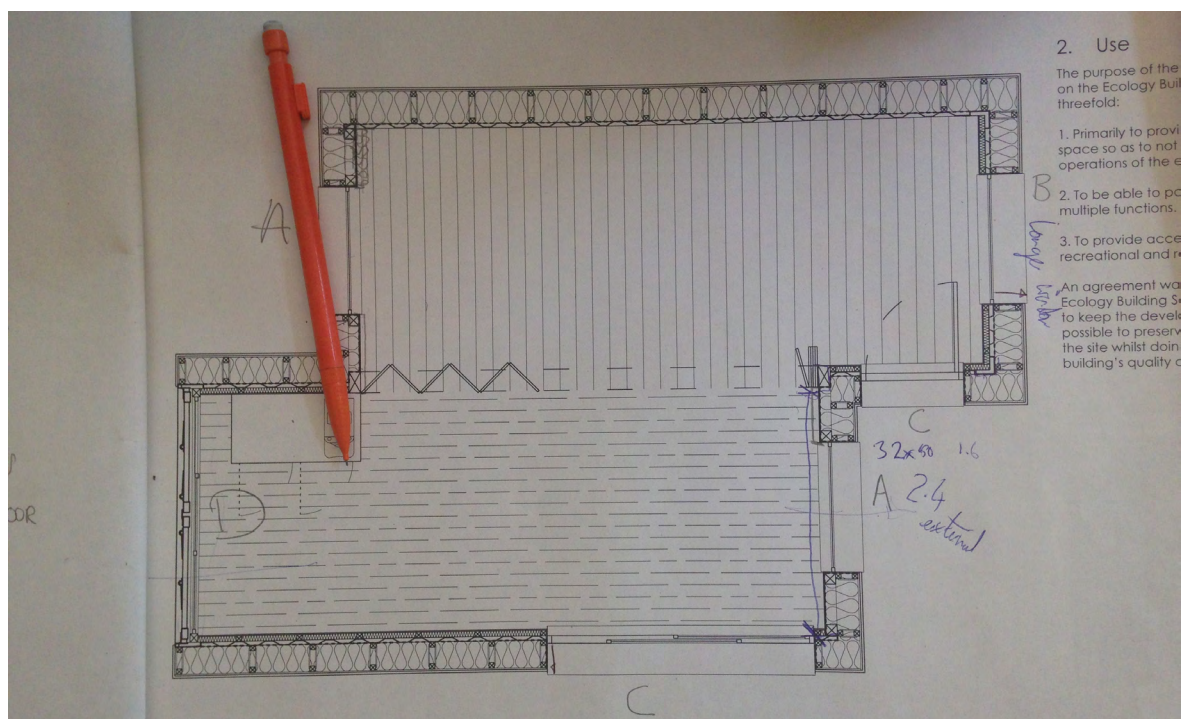
upcycling workshop that has also housed a cafe in the past. Both Strip and REACH are social enterprises, meaning that any operating surplus has to be reinvested for social purposes. Since REACH's completion of the prototype in 2016, it has been trying to get a number of projects off the ground and many of these have fallen through. Council's have changed their minds, pieces of land have been used as speculative assets for land banking, and funding allocations have been contingent on land REACH doesn't have, making Jon's vision seem distant. Apart from the prototype, REACH has currently completed one building, an office for the Ecology Building Society (EBS) and this encountered significant delays due in part to REACH's construction method clashing with the construction sector and the inexperience of REACH's members in operating within the construction sector.

REACH doesn't have any formal membership scheme. It is currently made up of unpaid directors, volunteers, and staff who are irregularly hired for jobs.

Organisation

REACH is a Community interest company (CIC) centred around a board of, currently unpaid, directors. Initially there were four directors, one left after internal disagreements. Another, the financial director left part way through my fieldwork due to other commitments and worries about the potential financial relationship issues between REACH and Strip the Willow. There is now Jon, a retired police officer who is both Strip the Willow's and REACH's founder, and Jonathan, an ex-civil servant who was made redundant after holding many different positions at all branches and levels of government. Having no previous knowledge of business models REACH was not set up with ideas such as flat structures, one member one vote, etc that usually accompany businesses with more

Figure 4.2.3 Sketching over construction drawings.



ethical leanings (such as co-operatives, CLTs, and community benefit societies). The volunteers are a mix of people who came to REACH from a multitude of backgrounds, from university projects, to long term unemployment, to ideological alignment, and to professionals who REACH had connections with. To supplement the unpaid volunteers and directors REACH also employs staff for their build projects. These staff are mostly brought over from Strip and as such have experience in upcycling and some have experience in construction labour. These staff were employed because they did not have a financial safety net to perform unpaid labour and the construction work required a regular workforce that would be more reliable than volunteers. As such, although REACH has principled foundations, the contributors aren't necessarily ideologically driven and they are brought together through circumstance, more a motley crew than an ideological vanguard. REACH also engages externally with other companies, contracting externally for the installation of electrics, insulation, solar panels etc. There are also professional companies who support REACH through their specialist labour pro-bono; this includes an architecture firm who have designed and costed REACH's proposals, a business management company who are aiding REACH in becoming financially viable, and a construction consulting company who were invaluable during the production of the EBS office.

Projects

Whilst REACH's collaborators got involved due to personal standpoints, experiences, and issues, the projects that I witnessed REACH undertake in Sheffield faced issues that were more municipally bound. The two main projects I engaged with in Sheffield were Castlebeck and Hemsworth.

Castlebeck is a site owned by the Council on the Manor estate in Sheffield. REACH approached the council in a meeting, seeking a partnership to deliver a small project of 10 - 12 not-for-profit eco-homes, and were advised to look at Castlebeck, a council owned site on the Manor described by REACH as "derelict" (Transcribed from field notes).

Figure 4.2.4 Model for Hemsworth proposal.



REACH's application was denied on the grounds of a lack of detail and a belief by SCC that there was already enough low cost housing on the Manor. REACH criticised this response by stating there wasn't enough low cost housing in Sheffield as a whole and it was revealed that Jon's connection to Sheffield Tree Action Group (STAG) was another reason REACH's application was denied. It was speculated that the Council's rejection was also based on the chance to use land as a sellable asset due to its lack of income. Hemsworth is a site in the Gleadless Valley estate, owned by the Council, and a site of a demolished school. Parts of Gleadless are in *"the 10% most deprived neighbourhoods in the country"* (URBED & Sheffield City Council, 2018) and the estate is littered with empty housing. The Friends of the Valley (FoV) community group and students from the university want to work with REACH to develop a derelict council owned site, Hemsworth. The primary school on Hemsworth was demolished in 2005 after it was designated for redevelopment into extra care housing by the council in 2002; apart from the solitary goal post which is used as a football pitch, it has been derelict ever since. The proposal was 50 to 60 houses with integrated community facilities, a laundrette, library, shops, and community centre (Transcribed from field notes 16/10/18). The Hemsworth application was denied because SCC claimed the site was going to become a care home in a meeting FoV and REACH had. To date, The site stands empty. Both Gleadless and Hemsworth have issues that are grounded in municipal politics. These span from Sheffield's Council use of land, to a lack of funding, to a lack of council housing.

Although it was completed by the time I worked with REACH, the prototype is also a major project because it proved their concept could work technologically. The prototype sits on Heeley City Farm, a short way out of the city centre, and is key not just because it is a proof of concept but also because it acts as REACH's base of operations and, for a time, Jon's home. As well as retrospectively revealing the issues around processes of construction, the prototype reveals issues that are faced during occupancy and how they relate to the construction type and how this differs from contemporary alternatives. Outside of Sheffield, REACH was contracted by the Ecology Building Society. The EBS are a building society in Silsden, West Yorkshire. This project's brief was a standalone meeting room on the site of the EBS office. As the EBS already owned the land there was no resistance to development like the other two projects; as such this project allows for a detailed examination of REACH's construction method and how this fits within conventional standards of construction. The project faced several difficulties with unreliable material providers, offsite construction, and planning permission. As an office building, the project became a proof of construction method as opposed to a proof of financial and housing distribution model.

From my involvement in these projects there were times when REACH radically differed from normative practices of construction. Most of the time the reasoning behind this was a lack of capital, but this was also backed up by REACH's ideological stance against the present modes of housing construction and distribution. From Jon's first issue of not being able to afford a house there was a realisation that others must be in similar situations. From here REACH attempted to produce their own housing to provide a different model, but this was held up by their lack of money which meant they couldn't simply buy the land or the materials. As such there was a constant back and forth of REACH members saying *"if we had the money we could build houses differently"* and *"we don't have the money so we need to build houses differently"*. This serves to

reinforce the fact that decommodification in production isn't a stated goal of REACH and they would be happy to engage in commodified production if it meant they could build houses for those in need.

With Castlebeck and Hemsworth the stopping point for both of the projects was REACH's inability to access land. If they had the money they would purchase land to build housing. REACH's solution to access land was to work with the Council to provide housing in exchange for the land. In both Castlebeck and Hemsworth this fell through. This is why the Prototype is important, as it is an example of REACH acquiring land without the exchange of money, and it is why land becomes one of the empirical themes of the thesis. The use and acquisition of materials in the prototype also engaged in non-normative construction practices and became the second theme of the thesis. REACH's non-normative construction practice is through their attempts to maximise the use of waste materials in their construction. This has a dual purpose, firstly an ecological goal in which REACH's construction practice critiques the amount of waste produced by the construction industry and secondly as a free, or cheaper, way of acquiring materials. These two purposes are at times put into tension when a waste material may be understood as not environmentally friendly or an environmentally friendly material was acquired through a commodified transaction. The sourcing and way the materials had to be manipulated to be used in REACH's construction method differs from contemporary material practices and as such this became a key theme of the work. This theme was also crucial in the EBS office construction. In the prototype, I was only told how materials were sourced from waste. In the EBS project, I was witness to not just how they were sourced, but the difficulties in sourcing them, the tension created through the perception of constructing with waste, and the questioning of the word 'waste' within REACH's practice. The deployment of the materials through the labour of the workers forms the final empirical theme of the thesis - the construction site. Primarily revealed through the EBS project, this chapter explores the practices involved in the manipulation of land, materials, and labour into a building. This differs from contemporary construction practices in ways from site hierarchy, to knowledge distribution and relations to contractors, to site roles, to material practices on site. This again revolves around REACH's lack of money not only to pay all members of the build team, but also how REACH innovated on site to minimise the use of waste materials, and to minimise the use of external contractors.

Due to REACH's construction practices having to be altered from contemporary construction out of a lack of money, decommodified processes are undertaken in order to allow REACH's practice to continue whilst simultaneously serving to critique commodified processes within contemporary construction. In this sense REACH is simultaneously acting within and against contemporary construction; as such, some of the best cases within the thesis that allow understandings of decommodification are at the points where decommodification and commodification come into tension with each other. These include REACH wanting to provide housing because Sheffield has a long social housing waiting list but Sheffield Council need to sell the land to build houses on in order to fund their social projects. Another example is Billy offering to work at REACH for free because if he carried on receiving a wage it would affect his social credit benefits. These examples serve to show decommodification not as an abstract theory but as an observable reality.

These three themes, land, materials, and construction site, have already been explored in the literature review. Land was introduced through its use as a vehicle for housing speculation, and how activism against this has included movements such as community land trusts, that aim to fight against land speculation. This was contextualised through the works of Benson & Hamiduddin (2017), Peredo & McClean (2019), and others. Chappell & Dunn (2017) introduced contemporary construction's relation to materials as a case of ordering what was specified by the architect and required by the planning authority to meet aesthetic requirements. This is contrasted by East (2017) who explored the use of materials in the ecovillage movement and Pickerill & Maxey (2009) who looked at the proliferation of waste and recycled materials to critique the material cultures within contemporary construction - in a similar way to how REACH acts. Löwstedt (2015) introduces the construction site as a hierarchical, chaotic space, and Ferro (2016) explains how the construction site becomes critical to maintain profit within construction by reuniting disjointed labour. This is contrasted by Bossuyt et al (2018), who note that self-building starts to break down the established model for construction because there are less areas for profit to be extracted; yet doesn't explore this further on the construction site. The following empirical chapters build upon these debates and from them allow a reflection on the definition of decommodification as it emerges from their alternative construction practices.

5. Land.

The ordering of the three empirical chapters, of land, materials, and construction site, corresponds roughly chronologically to REACH's method of construction. First REACH attempts to acquire land and the permission to build upon it, then they source the materials, and finally they undertake the construction process. This is not a perfect mapping of REACH's practice because there is inevitably overlap. This is best explained by the chronology of the EBS project as it encompassed all of these stages. Firstly REACH were in contact with EBS to see if they would financially support REACH in a housing project. EBS declined but wanted an external office building in their grounds and contracted REACH to build it. REACH then sought materials and a construction site on which to build, as the project was to be offsite construction. REACH already had some materials, including scaffold boards, in their store and as such this preceded the acquisition of the land. Once materials were secured REACH could put together a planning permission proposal that would give them the permission to build on the land. Whilst they were waiting for this permission to come through they started construction; this was at risk as there was no guarantee they would be given the permission to build. During the construction there was an issue with sourcing the cladding and roofing material; this meant that REACH not only had to source new materials but seek new permissions to develop the land with the new aesthetic. Therefore, through the empirical chapter order, a deeper understanding of REACH's construction practices is also built up step by step.

The ordering of the empirical chapters is roughly chronological not just in a sense of when the tasks are performed in the construction method but also in the sense of when the projects happened in the fieldwork. The early stages of fieldwork were focussed on land acquisition with the Castlebeck and Hemsworth projects; because the EBS already owned the land for their meeting building, the focus of land in the fieldwork was superseded by the sourcing of materials and the practices of labour on the construction site.

In order to understand alternative construction practices, of acquiring both ownership and permission to develop on land, this chapter is split into three sections. The first section explores the practice of alternative equivalence, this practice is critical within REACH to engage with the land acquisition whilst lacking the money to do so traditionally. Alternative equivalence is the way REACH attempts to acquire land although it is not always successful; an analysis into the practice reveals that the types of actors, and their motivations, that REACH engage with in alternative equivalence defines this success. The second section critically analyses these successes and failings. From the failings of alternative equivalence to acquire land it became clear that the motivations of the other actors were often tied up in formal procedures; furthermore, even when REACH had land to develop on formal procedures became a barrier and so permission had to be acquired in order to develop. As such the last section focuses on how REACH navigated the legal formalities and languages in order to acquire and develop on land. In particular this section shows how these legalities became a primary barrier in REACH's alternative equivalence of land.

This chapter shows the alternative construction practices REACH deployed to acquire and

gain permission to develop on land. This introduces a key alternative construction practice used by REACH, alternative equivalence, and shows how the motivations of participants are crucial in determining its success. Through this it reveals the embeddedness of financialisation within formal construction and finally allows a reflection on the efficacy of decommodification practices as emancipatory. The chapter suggests that whilst engagement with decommodification practices is a way for REACH to become educated with capital land practices, it ultimately does not challenge these practices.

5.1 Alternative Equivalence

Within formal construction, construction finance is the primary way in which developers can buy land. Money is borrowed from financial institutions and the lender's investment is predicated on the building turning a profit (Merna et al, 2010). Groups who attempt to construct without profit are locked out of this transaction, as they can offer no financial return on investment, and as such have few ways to acquire land. One way in which these groups can circumvent this conundrum is through alternative equivalence. The following is an example.

Heeley City Farm

The prototype sits on Heeley City Farm (HCF) - a not-for-profit that houses the south Yorkshire energy centre - an initiative that looks at localised green energy production. Rather than REACH paying for their tenureship of the land in money REACH connects their solar panels, which provide on average 55KWH per week (fieldnotes), into the farm; and any surplus energy that is generated goes to power the South Yorkshire Energy Centre. This tenureship model has been well received as the prototype uses only 10% of the energy of a traditional house, meaning not only has it not required a fuel bill since construction but has also produced a considerable energy surplus that is harnessed by the energy centre (fieldnotes). Whilst this energy generated by REACH means the farm



Figure 5.1.1 Interior of the prototype at Heeley City Farm.

pays a reduced rate to the national grid, the process itself is successful because of the social ties between REACH and the farm. Many of the farm's aims align with REACH's including "*creating energy efficient housing... community driven response to recycling, environmental management*" (Field notes). As such the process of exchanging land for energy between REACH and Heeley City Farm synthesises their collective aims whilst also starting to materialise solutions to them.

Alternative Equivalence

Alternative equivalence is the name I give to REACH's economic action where they gained land, materials, labour, etc in exchange for energy, waste removal, references, etc. It is a type of Polanyian (2001) reciprocity, where parties give and take as needed, but is distinct because the exchange is often agreed upon in advance. This may appear to be barter however barter is predicated upon a negotiation where both sides try to get the best deal for themselves and a set amount is agreed upon (see Graeber, 2014), for example 3lbs of fish for 4 loaves of bread, alternative equivalence however doesn't have this. The Heeley City Farm example made clear how alternative equivalence is different from barter, REACH did not provide, for example, 3 megawatt hours per day for every metre squared of land.

The term comes from Laclauian and Marxist traditions. In Laclauian terms, a chain of equivalence is the way disparate demands come together under an empty signifier against a power structure (Laclau, 2008). In Marx, the universal equivalent, money, is the commodity that allows other commodities to be measured against each other in the market (Tunderman, 2021). In this way the universal equivalent is similar to the empty signifier. Alternative equivalence is the way in which REACH acquires resources and, as such, not only is it a way for REACH to operate in the construction sector without money, there does not need to be a universal equivalent or an empty signifier for alternative equivalence because REACH will always be one of the parties engaged in one side of the transaction. For instance Heeley City Farm does not need to interact with a cladding manufacturer in order to make REACH's micro economy function, hence the word alternative. Where REACH does find a chain of equivalence is through their series of alternative equivalencies that all fit under the banner of decommodification. By replacing monetary exchange as the exclusive means of obtaining land, materials, etc, REACH creates alternative practices to continually reproduce decommodification. REACH's alternative equivalence then not only fits within the Marxist economic sense of being alternative to the universal equivalent, but also in the Laclauian sense of decoupling from established associations to show that an alternative is possible to the reified present.

The thesis uses the term equivalence as something equal but not countable, as opposed to equivalent which is equal and countable. REACH replaces Marx's universal equivalent, money, with alternative equivalence. Land for energy aren't measured but are equal for REACH and HCF. Picturing an alternative equivalence action in isolation on a spectrum between commodification and decommodification it can be seen to sit closer to the decommodified end. There is still an exchange between two parties however this exchange is non-quantifiable and there isn't an intent to profit over the other party.

Alternative equivalence features throughout the empirical chapters, deployed here it is an alternative construction practice that means land can be acquired for something else other than money. In this way I understand alternative equivalence as a type of decommodified action, in that it provides a way to exchange land without financial capital playing a dominant role - which as explored in the literature review it otherwise is. REACH used alternative equivalence three times in attempts to acquire land; the following subsection explores the other two.

Castlebeck & Hemsworth

For REACH the problem and the solution are simple, namely Sheffield has one of the longest waiting lists for social housing in the country (Dorling, 2014), the Council has land and REACH has the capacity to build housing cheaply. Negotiations with the Council to acquire land became a principle tactic for REACH during my time with them, this manifested in two project proposals, Hemsworth and Castlebeck. Both of these were unsuccessful in that Sheffield City Council (SCC) did not give REACH, or the groups they collaborated with, permission to build on the land. However The success of the practice is not as important here as its deployment. This alternative construction practice, of entering into a deal with the Council for land as opposed to purchasing it, emerged out of a necessity where REACH couldn't acquire capital to purchase land because they would not provide a return on investment. This subsection provides an introduction to these projects which in turn introduces the analysis of alternative equivalence as an alternative construction practice. This then supports an exploration into why REACH failed to get the Council land and why they were successful at Heeley.

"It's a brisk December morning a week before Christmas, 2018, I'm taking a winding stroll up from the station in an anxious but predominantly positive mood. As both Jon and Jonathan had reassured me at our meeting yesterday, and on numerous occasions prior, "why would they cancel on us 4 times if they were just gonna tell us no?". Unfortunately



Figure 5.1.2 Model for Hemsworth proposal.

my positivity doesn't hold as the pair enter into our cafe rendezvous. Jon is sullen, with Jonathan rambling reassurances to him; I soon learn that a sympathetic insider from a senior position in the council had contacted Jon to warn us that the council didn't want us to develop the Castlebeck site. We arrive at the town hall early and are asked to wait beyond the agreed upon time. We are eventually led from the grand lobby and make our way by many stairs and corridors, each diminishing in grandeur and maintenance, to a once stately meeting room that has since been covered with yellow paint."

(Field notes, 18/12/18)

The negotiations for Castlebeck had started 9 months previous when REACH approached the council in a meeting, seeking a partnership to deliver a small nine to twelve project of affordable eco-homes, and were advised to look at Castlebeck, a council owned site on the Manor described by REACH as derelict (field notes). Castlebeck was a crucial opportunity for REACH, this would be their first post-prototype project and the first working with external partners. Since this initial meeting, REACH had produced a proposal for the council and was waiting for a response that kept getting pushed back for unexplained reasons. Undeterred REACH kept pushing, the aspiration was to build a relationship with the council by demonstrating how community-led, not-for-profit housing could be used as a solution to the housing crisis. This was not to be. REACH's insider tip-off was confirmed true in the meeting.

The Hemsworth project requires more context as it involved a more complex relationship with REACH acting as potential builders for a local interest group who wanted to develop the site as a way to take ownership of the local area. Their alternative equivalence emerged from a feeling of being forgotten by the Council and wanting to take power into their own hands through construction.

"As I step through the double-door fire escape of the John O'Gaunt pub I'm hit with the acrid aroma of furniture steeped in fag smoke. The smell immediately takes me back to pre-ban days, of Sunday dinners at The Miner's Arms with my grandad. That smell can only exist in one place now - a white; working class council estate forgotten by the city and locked in time. That place is Gleadless.

Driving up to the pub Jon tells me about the Hemsworth project, but I am distracted by the atmosphere of the estate. Gleadless is, or was, a modernist's wet dream. Tower blocks emerge from the dramatic steep sided landscape, intersected by winding roads and separated by wide patches of green. A couple embrace on the central stairwell of a decaying tower block. Two gangs of police roam the streets, knocking on doors..."

(Field notes, 16/10/18)

These first impression field notes of Gleadless, the estate that houses the Hemsworth site, serve as an important contextualisation of the area. The sense of economic deprivation appears to have given way to crime. This scene of economic deprivation is correlated by both conversations I had with residents - *"Nothing gets done round 'ere"* (Field notes, 14/11/18) and SCC themselves *"Parts of Gleadless Valley fall into the 10% most deprived neighbourhoods in the country"* (Sheffield City Council's Gleadless Valley Masterplan, 2018). This perception of being forgotten or abandoned by the Council, is a recurring theme I noticed during my time on the Hemsworth project, *"It's all boarded up"* one member explains, *"there's no facilities, kids are 'anging round in shops it's*

not antisocial behaviour they just dont 'ave anywhere else t' go, there's no lights on' streets..." (Field notes, 14/11/18). This context became a driver for the proposal:

"The Friends of the Valley (FoV) community group and students from the university want to work with REACH to develop a derelict council owned site, Hemsworth. The primary school on Hemsworth was demolished in 2005 after it was designated for redevelopment into extra care housing by the council in 2002; apart from the solitary goal post which is used as a football pitch, it has been derelict ever since and as such became the prime location for FOV. The proposal was 50 to 60 houses with integrated community facilities, a laundrette, library, shops, and community centre"

(Field notes, 16/10/18)

Over the two months REACH spent on the Hemsworth project I had numerous conversations with members of FoV and attended two formal meetings, one with Councillors. Most of the data collected is in field note form, however I did take some pictures where possible.

Once inside the John O'Gaunt, being careful not to trip over toys from the playgroup, we make our way over to the table at the far end and make our greetings. We're told this meeting is just so we are all on the same page before the meeting with the councillors and to voice a few doubts. Shep starts off, he's the owner of the pub and the leading voice in FoV. He's a burly, down to earth bloke sporting a leather waistcoat; I soon realise the American style chopper outside is his. FoV's biggest concerns are with the Council itself, in September 2018 the Council had appointed URBED to run community engagement sessions at Shep's pub and create a masterplan. In the eyes of FoV this was a tokenistic gesture of engagement because although the council said they value the community's input they are against FoV actually making any spatial changes. FoV believe this is out of condescension, that the councillors think everyone round here is unemployed but they say the councillors never come round, so how would they know? Doubts are also raised about the council's plans, apparently they are trying to treat Gleadless as if it were Hillsborough but that doesn't work, I'm told, because Hillsborough is a town in its own right, Gleadless is an estate with a lack of services. A level of contempt for the Council is established in this meeting, and after our drive through the estate to get here, it's easy to see why. There's a funding issue, we're told, either enough isn't being spent or it's being spent in the wrong places and because of the status of Gleadless as a sink estate the residents aren't listened to.

Transcribed from field notes 16/10/18.

Another member suggests that the feeling of being forgotten, manifested through a lack of investment, is inciting racial tensions:

"We learnt from' Pakistanis and that's why you see all' racism shit starting as you see shit [investment] in other areas but nothing comes into here"

(Field notes, 14/11/18)

The member is accusing the council of inflaming racial tensions because white people are seeing investment going into more ethnically diverse areas, whilst their estate suffers, and point at skin colour, as opposed to effective community organising, to explain the investment disparity. Therefore the member complains that it is time to take power into their own hands before the area gets worse:

"fuckin' Labour party, done fuck all and I'm a Labour man, you're fuckin' rubbish, we've got 3 councillors round 'ere they need shootin'... I'm in' co-op, he's in' co-op, she's in' co-op... we're learnin' how to be politically engaged..."

(Field notes, 14/11/18)

The feeling of being forgotten, of a lack of investment in the area, of Gleadless being seen as a sink estate is what pushed FoV in their proposal. In Shep's own words the reason they wanted to develop the Hemsworth site was because, *"am fed up of telling kids' to stop thur' aspirations, Gleadless' got nowt"* (Field notes 14/11/18).

The proposal FoV had for Hemsworth came crashing down at the meeting with Councillors on the 14th of November. Originally set to be in the Town Hall, it was pushed back and changed venue to the John O'Gaunt. We were told that next year the council wants to start building an older persons housing scheme for 80 people. To FoV this was just another blow in a string of perceived failures to provide for them.

This exploration of the context is critical to understand not only the emergence of the projects, Hemsworth in particular as Castlebeck was a site the Council advised REACH to look at, but also to analyse the reasons these alternative equivalencies were unsuccessful.

5.2 Agents in Alternative Equivalences

This section uncovers how the actors, and their motivations, involved in alternative equivalence are crucial to understanding its success or failing. The construction practice of negotiation between REACH and HCF is the same as REACH's negotiation with the Council (at both Castlebeck and Hemsworth); both propose an alternative form of exchange, land for housing or land for energy, that emerged out of a lack of ability for REACH to buy the land. They are both an alternative equivalence. What primarily differs is the position of each actor. As a charity that started in defence of local communities against big development, HCF is against the use of land as an asset (fieldnotes). Furthermore, unlike the Council, Heeley City Farm can't use their land as an investment as they don't own it. The farm land was secured from the Council in the 1980's through a "*community's fight against a proposed bypass that would split the neighbourhood*" (Fieldnotes); the land is leased, as opposed to owned, by the farm; as such there are periods of renegotiation of the tenureship between HCF and the Council (fieldnotes). The differences in the decisions of HCF and the Council to provide REACH the land indicates that the success of REACH's practices of negotiation between actors in the attempts to acquire land is predicated upon mutual benefit, ideological alignment, and trust. As this section shows, the Council wouldn't give REACH the land because there was no benefit to providing REACH the land when it could be used as an asset for sale. In this scenario, irrespective of whether the Council and REACH both wanted to fix the issue of the lack of social housing in Sheffield the potential benefit of providing a few houses didn't mitigate the potential risk and loss of income that the Council had by giving the land to REACH. Conversely, HCF did provide the land to REACH. Their goals were aligned with REACH and they wanted to see REACH succeed as a way to provide low-cost housing (fieldnotes). They had no desire or means to sell the land for profit, and the exchange of providing a small plot of land for a single unit (the prototype) was seen as an acceptable exchange for excess energy.

Picking up the Hemsworth proposal.

The announcement of the older people's residence was a breaking point for the residents in FoV, I heard one resident mention "*the site has been derelict for 14 years. Why does the council suddenly decide to change that now?*" It was seen as an excuse.

Transcribed from field notes 14/11/18

The Hemsworth site received planning permission for an extracare development in 2002, and again in 2006, but this was dependent on drawings that had not been submitted. Both those applications have since lapsed and as such it would take over a year before any development could happen. As such, the Council's claim that FoV couldn't build on the site because the Council were going to develop it appeared false to the group.

A councillor provided another reason for the denial of the FoV proposal, they were worried that the communal spaces would be underused,

Shep quickly retorted however, *"you're not listening to our knowledge, we know what we need and we can provide it, we need a community centre not a pub or church, some people feel awkward and won't go in"* Transcribed from field notes, 14/11/18.

The meeting became heated, it was clear an impasse had been reached with neither side willing to concede (Field notes, 14/11/18).

I stood in the cold November air, waiting for my bus. It was past 10pm and I was nervous. Although it was only a short walk down from the John O' Gaunt, and I could still see it, that didn't make the atmosphere any more pleasant. Several street lights were out, men were skulking in the shadows, and it was silent - no cars, no talking, nothing but the wind. I tried to reflect on the night but my anxiety kept pulling me back to the moment; I couldn't help but remember the article I'd read about Tesco refusing to deliver to the estate on account of drivers being attacked and robbed. Eventually I got on the bus; my moment of anxiety was either overblown or an everyday reality for residents. From what they had told me, I believed the latter. Transcribed from field notes 14/11/18.

The Hemsworth case provides an in-depth analysis for the motivation behind why local residents wanted to build and in their attempt reinforces their pre-existing beliefs about the Council. Above all the feelings the resident-members of FoV expressed was one of being forgotten and ignored. The meeting with the Councillors reinforced this belief. That meeting was in November 2018 and still nothing has been done, the site stands empty. I later found out that Shep died in 2019, a memorial rockabilly party was held at the John O' Gaunt. The Council didn't respond to my request to meet with them to understand their perspective. Whilst no interview means it is not possible to verify FoV's claims the Council has not developed Hemsworth into an extracare scheme and no new planning permissions have been submitted; this indicates that either the extracare project was stalled or it was used as an excuse by SCC to deny FoV the right to develop. All of this feeds back into the initial reason FoV wanted to develop Hemsworth, they felt forgotten. From this feeling they wanted to shape their estate in the way they saw fit, by building 50 to 60 houses with integrated community facilities, a laundrette, library, shops, and community centre. They couldn't acquire construction finance in the traditional way for the project as they weren't looking to make a profit; as such they sought the land, or at least the permission to build on the land, from SCC. FoV believed it was the Council's duty to provide services and they felt like it was not performing its task, *"fuckin' Labour party, done fuck all"* (14/11/18), and so this appeared as a reasonable exchange to FoV. This proposal became the alternative construction practice of alternative equivalence, instead of an outright purchasing, of the land. In the meeting SCC initially refused FoV's offer, citing their proposal for an extracare scheme, and so FoV attempted to negotiate asking for *"meanwhile use for 3 to 5 years to build a temporary community centre that can be moved"* (14/11/18).

Alternative Equivalence and External Pressures

Shep claimed he understood the reasoning behind the council's decision to not move forward with FoV - *"that [older persons housing] won't provide money, doesn't provide jobs, just money fer' council."*

Transcribed from field notes, 14/11/18.

FoV believed this was a Council attempt to generate money for itself whilst ignoring the needs of existing residents.

Similarly, REACH thought the same of the Castlebeck site. Their response to the Council's rejection, in their newsletter, was openly hostile:

"[The council] made it clear that our new and innovative offer is not compatible with the existing drive to gentrify the S2 area with executive homes well out of the price range of local people and to exacerbate the problems which have led to a [council housing] waiting list of 33,000 people in Sheffield while 6,500 properties stand empty and thousands cannot afford the affordable housing on offer from traditional developers."

(Newsletter, 20/12/18)

This emerged in particular from the email sent by the Council in response to the meeting:

"The Council does not feel that this site is the best location for your proposal given the proposed mix. The site is located in an area of low cost, low value and therefore there are a range of affordable and low cost housing options in this area which people can access. The Council is keen to promote more mixed communities and therefore it is felt that this site is better suited to more traditional housing... A list of sites which the Council has available have already been sent to REACH, however most of these are in areas where there is considerable affordable housing. The Council needs to consider where non-traditional housing may be appropriate as part of the housing offer and identifying potential sites will form part of the work being undertaken on the policy/strategy."

(Email, 19/12/18)

The definition of "mixed" meaning mixed income can easily be discerned from the next statement that *"most of these are in areas where there is considerable affordable housing"*. There is a tension here between the Council's vision for the city which is *"more mixed [income] communities"* and the fact that Sheffield has the highest social housing waiting list in the country (Dorling, 2014).

REACH was aware that Sheffield has particular social housing needs with a *"waiting list of 33,000 people"*. As such REACH thought their proposal would be readily accepted by SCC. The newsletter indicates that REACH thought the primary reason for SCC's dismissal of their proposal was *"the existing drive to gentrify the S2 area"*. This emerged directly from the Council's use of the word *"mixed"*; the issue that SCC face is that they simultaneously want to create mixed income communities whilst facing social housing issues and only having land *"where there is considerable affordable housing"* (email, 19/12/18); as such it is not possible to support the growth of social housing if the only developable land is earmarked for luxury development.

As it came up twice, at Hemsworth and Castlebeck, I found it worth exploring if finance was a primary motivation of the Council in their land development policy. Although I reached out to different Council representatives following meetings and exchanges through REACH, I received no reply. Through investigation I found that The selling of assets is an often utilised policy for SCC. In the capital programme budget 2019/20 they intended to raise £17.7 million from the sale of surplus assets in an effort to fund *"buildings, roads and housing and for major repairs to them"*. These sales are a response to austerity, writing in Sheffield Newsroom (2019) SCC states *"The authority has identified another £30 million worth of savings to be made over 2019/20, taking the cumulative total of savings and financial pressures over the last nine years to £460 million"*. These *"£30 million"* savings are being made to offset the council's reduced funding and to sustain services (ibid).

Seeing land as a speculative asset, the Council - judging by the sale of £17.7 million surplus assets - deems it financially acceptable to sell the land in order to raise funds for their social services. Even if the council didn't sell off the land it does not have the capital for transforming its land into the services it requires to uphold its social care duties, indicated by its continuing worries about austerity. In the Manor development framework (SCC, 2017), the council also identifies a need to work with the private sector in order to *"promote private sector investment" in order to "fund wider improvement"*. Part of the council's revenue is from rates on businesses and from council tax, which is calculated on the value of housing. In order to maximise their own income to spend further on social services it is prudent for the council to encourage private sector commercial and housing to invest in an area and this has the potential to displace existing residents as they are priced out. In this way it can be understood why REACH would claim they are *"gentrifying"* (Newsletter, 20/12/18) the city.

For Castlebeck specifically, the alternative equivalence did not fit in with the Council's plans for the area; from the Manor Neighbourhood Development Framework (SCC, 2017) the Council states it aims to:

"Secure long term, sustainable improvements, not just short term easy wins. Embrace and promote private sector investment as a means by which to achieve / fund wider intervention and improvement"

As such REACH's aim to promote social housing in the area is at odds with the Council's plan to secure investment through private development and this caused a communication breakdown between the two parties. REACH believed that because the Council only owns land in *"areas where there is considerable affordable housing"* (Email, 19/12/18), the policy to diversify communities is actually a tool for gentrification and producing more income for the Council (newsletter 20/12/18). REACH believes this policy of diversification is a way to raise land value in poorer areas which simultaneously makes the Council's land more valuable and raises the revenue gained in taxes, as council tax is progressively linked to property value. In the newsletter REACH state that *"the existing drive to gentrify the S2 area with executive homes well out of the price range of local people"* indicating that progressive taxation can be a vehicle for displacement as the Council wants to secure the highest rate of income and therefore pushes for *"more mixed communities"* (email, 19/12/18) in deprived areas.

Participants in Alternative Equivalence

SCC's land policy incorporates land being sold as an asset in order to fund other services and balance its budget. The Council aimed to make £17.7 million from the sales of its assets in the 2019/20 budget, so this process is critical in the Council's financial plans. In this sense, both Hemsworth and Castlebeck should be viewed not as "*derelict*", as described by REACH, but as financial assets that have the potential to raise significant capital for SCC. Here logics of land financialisation become not only a barrier to alternative forms of construction, but a necessary way for SCC to raise funds. The Council's deficit means it has little other options than selling off its assets; however this process inevitably fuels more land commodification (Rolnik, 2019) because surrounding land value is connected to each other (Harvey, 2014). In this way the Council becomes complicit in the reproduction of land financialisation. This further exacerbates the problem that Sheffield already has a lack of social housing (Dorling, 2014) because the commodification of land leads to rent increases and makes housing unaffordable for newcomers to the market who lack existing financial assets (Palomera, 2014; Minton, 2017). Thus SCC's method of balancing the books has the potential to exacerbate the housing situation in Sheffield as more people become reliant on a social housing programme that is lacking in housing.

For alternative equivalence, this section indicates that the type of agents that are engaged in the practice are critical for its success. REACH ideologically aligned with HCF and both found a mutually beneficial way to support each other, even if it wasn't necessarily quantified. Conversely, although both REACH and SCC wanted to tackle the housing situation in Sheffield, SCC's response to austerity means they tend to treat their land as financial assets to balance the books. However The other primary reason why the alternative equivalencies failed with SCC was REACH's inability to navigate the codes of formal construction; the next section addresses this.

5.3 Navigating formal procedures of land

As the previous sections have shown, undertaking alternative equivalence as an alternative construction practice requires engaging with formal construction, and an acknowledgement that these practices cannot happen autonomously. This section shows how REACH attempted to engage with the codes, regulatory standards, and languages of formal construction and how they became a barrier in the acquisition of land through alternative equivalence. From this, the section then looks at how these languages also become a barrier in developing land through looking at the permissions required in the Ecology Building Society office project.

Construction Languages and Alternative Equivalence

"The business plan and information submitted to date did not contain sufficient detail for the Council to make a commitment to the proposal at this stage... we need to better understand the business model and funding for this element including set up costs, and lead in times for establishing the factory, cashflow and funding for this element and any conditions associated with funding"

(Email, 19/12/18)

The primary stated reason for denying REACH the chance to develop Castlebeck was the current level of detail for REACH's construction process. REACH knew from the start that they were on the backfoot with pursuing a modular design simply because the leader of the council had grown up in a prefab from the war period, being less than flattering about its habitability (from a conversation with Jonathan, field notes). Still, with modular taking off in the construction sector, REACH did not think this would be an issue for the council. With the scrutiny local authorities were under in the construction sector, intensified post-Grenfell, questions around construction were to be expected, but at this early negotiation stage REACH felt it was over the top.

When given the chance to talk in the meeting Jon made compelling points. REACH had submitted all the Council had asked for and they could've asked for extra in between the four cancelled meetings. Unlike in a situation where the Council could just sell the land and shirk responsibility there was a big risk in accepting REACH's offer, the prototype was the only building completed by REACH and so there were technological and logistical practices that had to be brought into question and couldn't be fully answered by REACH because they didn't have the money to set up these construction practices. The navigating of professional standards was of critical importance to the Council and this starts to suggest that navigating formal codes are critical for alternative practices of land acquisition.

This is not to say that failing to navigate the regulatory requirements are a deciding point for the failure of alternative equivalence. On the Hemsworth project FoV made efforts to ensure their scheme would meet all the professional standards expected of a contemporary construction proposal. Therefore they worked with university students

to produce a fully costed proposal, development document, and model (14/11/18) for Hemsworth:

We explore the table to our right with the proposal document and proposed model. The document is well detailed and contains information on costings, phasing, material sourcing, and fundraising. Shep explains to us that the model is just an example of what could be on the site but when they have shown it to the councillors it was taken as their proposal and a deluge of excuses emerged as to why it wouldn't work, mainly around greenspace.

Transcribed from field notes 16/10/18.

Sequences of Construction and Alternative Equivalence

The final issue REACH faced with acquiring the Castlebeck site was the procedures between the financing they had secured and the Council. At the time of the meeting, REACH had 6 months of funding left. A promise of land development from the Council would release funds of £75,000 from a charity who wanted REACH to construct not-for-profit housing. This created a catch-22. On the one hand the fund was conditional on REACH having a piece of land to work on, on the other the local authority would not allow a transfer of their land without the funding being in REACH's bank account. According to Jon, the charity understood the high cost of land and as such didn't want REACH to spend all the money to secure it (fieldnotes), therefore REACH had to try other ways of acquiring land and so found themselves in this deadlock. Conversely the Council wanted assurances that REACH had funding to set up their construction practices before releasing the land for development. This requirement of assurances is similar to contemporary modes of land acquisition, but the lens is slightly changed. A development firm usually has to convince lenders they can turn a profit before the money is released to purchase the land and finance the construction (Merna et al, 2010). Here REACH had to convince the land provider that they had the finance in place in order to provide them with the land.

This deadlock shows that financial capital scripts the procedures by which construction unfolds. The formalities of construction are grounded in financial restrictions and feasibility. Whilst the previous subsection argued the technical feasibility of REACH's plans, this argument is political. Having funding in place is not a technical requirement to be able to build it is a limitation imposed by the financialisation of construction. As such in order for decommodified attempts at construction to occur there has to be a decoupling from these procedures. This is made even clearer when reflecting back on the HCF land deal, which acted somewhat outside these financial regulations and as such had none of the formal procedures present with the Council deals.

Through supporting REACH's development proposal for the EBS office, I experienced other alternative construction practices. These served to reinforce this questioning of formal procedures of construction and their financialisation.

Financialisation through Alternative Construction Practices

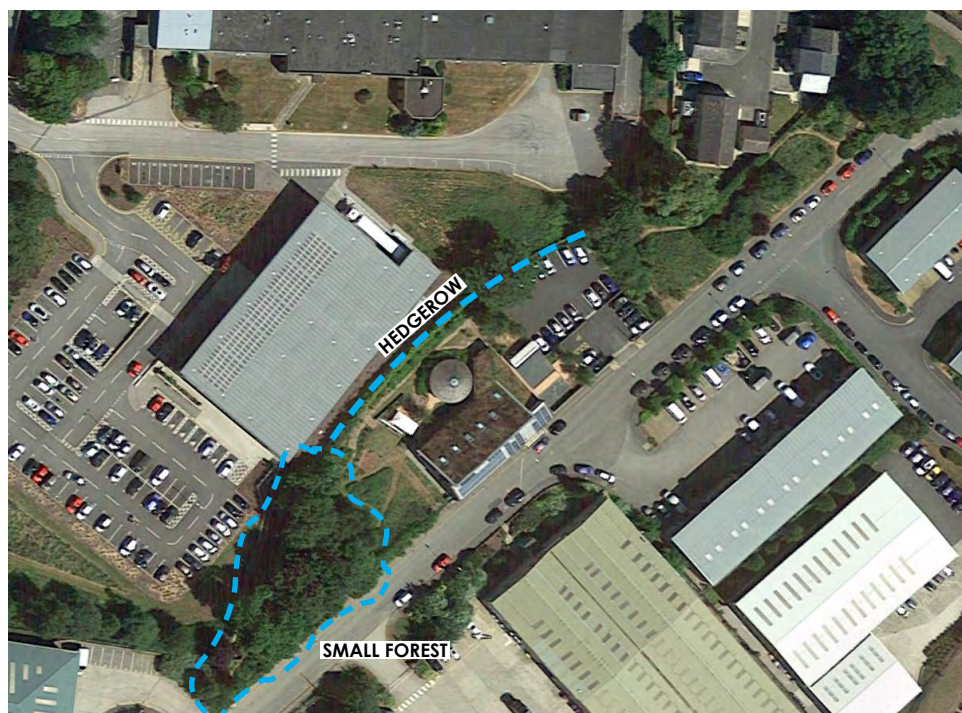
This subsection explores further the idea of financialisation in construction. Rather than coming from the position of acquiring land however it explores how financialisation is present within the permission to develop on land. This is done through describing selective processes undertaken by REACH on the EBS project to see how, through the alternative nature of their practice, they suggested further undercurrents of non-hindrance for financialisation within construction.

"The prototype is just the badly torn-up sheets version" Jon explained, as we drove to the EBS office, up the m1 and into the bleak moorland of West Yorkshire, *"this one needs to be perfect"*.

My excitement, whilst still present, had been marred by a creeping trepidation towards all the hoops REACH had now subjected itself to - Building Regulations, Planning Permission, CDM - to name a few. Whilst my year working as an architectural technician would allow me to provide specialised knowledge to REACH, I was cautious towards the prospect of inputting my skills on the project.

Transcribed from field notes.

EBS wanted REACH to build them a stand alone meeting and recreational building on their grounds. The building had to accommodate both one-on-one and larger, office-wide meetings, it also had to be able to be used for social events and as a chill out space (15/01/19 meeting). REACH quoted £35,000 for the footprint of one 40ft container, without solar panels, and entered into a memorandum of understanding contract to deliver the project (15/01/19 meeting).



Site Trees

The vegetation that we considered in our design is the hedgerow at the back and the small forested area on the south west side of the site.

In keeping with the values of both the Ecology Building Society and our own, we will be setting the development 1m away from the hedgerow and approximately 10m away from the forested area.

Figure 5.3.1 The EBS Site, from the planning application.

Taking into account the copse to the south west of their land and the gate opening up onto the road on the south east, the only logical place to propose the building was at the north westerly rear side that backed onto the Aldi car park and was taken up by their veg patch. After deciding on location, the first task was to start producing test designs. Initially we took the prototype, which was the same footprint as the proposed office building, and drew it on site. From here we realised it would be better mirrored to have better connection to the main EBS building. Design continued in this iterative fashion until a presentation with the EBS directors where a final design was agreed upon. Once the design was agreed upon with the client and within REACH, REACH could apply for planning permission.

Thinking it was a 'pre-app', we arranged a meeting with the duty planning officer. As we found out their role was to mostly advise residential schemes, and that a pre-app was a paid for meeting that would look over our proposal. "This is quite exciting for me, I never get to do stuff like this, it's mostly just housing extensions" he said. He went on to push me to undertake a full pre-app which entails a cost and 8 weeks notice - had we known this at the time we could have potentially submitted a pre-app, however by that point submitting would take us over the final deadline we had set with the EBS. There were many other things we (either individually or collectively) didn't know, simple things such as Jon booking me a meeting with Building Control instead of Planning because he found their number on the planning website. I wasted a whole afternoon looking for land ownership and agricultural holdings certificates I could send to the EBS to sign, only to find out after I had started the planning application that they were contained within the online form.

The duty planning officer pulled up the 'Bradford Replacement Unitary Development

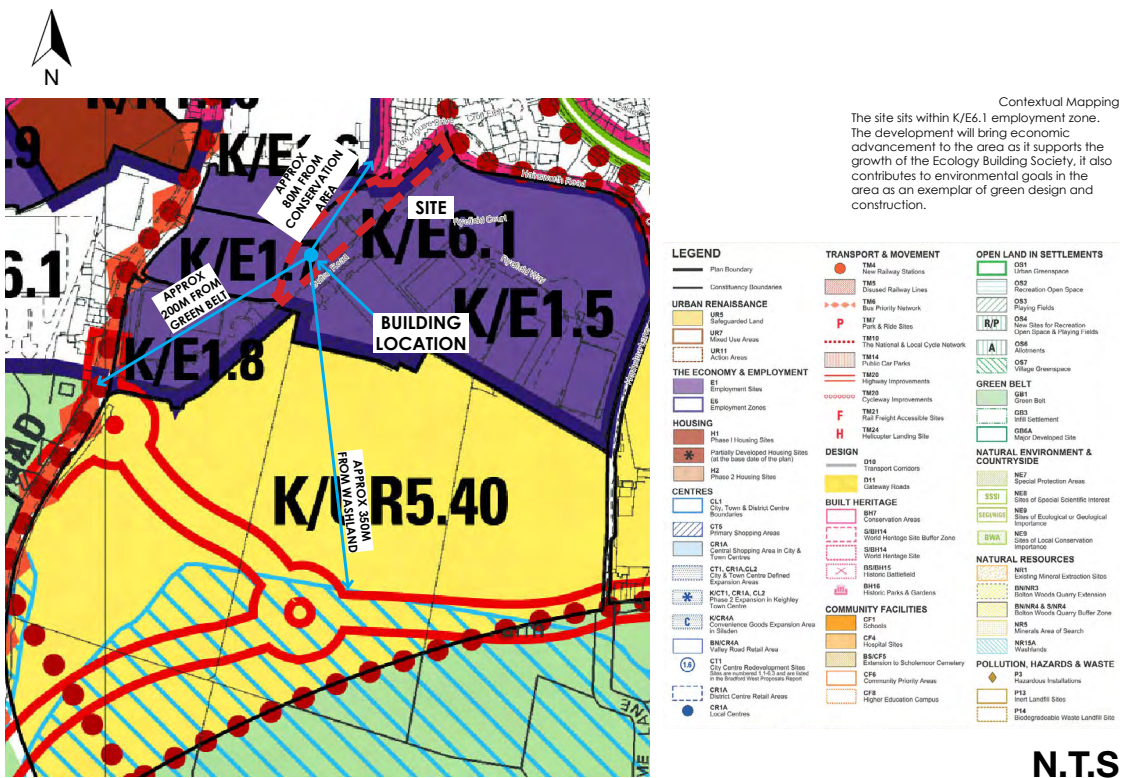


Figure 5.3.2 Showing the proximity of the EBS site to different zones, from the planning application.

Plan' on his computer, it is found simply through an internet search, however the issue is knowing of its existence in the first place. Finding the document led to other policies we had to check we were in compliance with chiefly floods, and trees; this is all information REACH was unaware that it had to provide. The plan gives a good indication of acceptable developments within Bradford Council's jurisdiction. Finding the information is the first issue REACH had when attempting to gain development for the EBS office; the second was interpreting this data. Discovering the project was "in the shadow of a conservation area" meant having to tailor the application to highlight the use of nature-based aesthetics. Additionally the duty officer pointed out that the project was in an "employment zone" which meant he advised REACH to downplay the recreational elements of the scheme, which included the growbed and the use of the office as a chill out space. These two requirements of employment zone and conservation area came into contradiction with each other because in order for REACH to push the notion of employment they ended up reducing the environmental benefits of the scheme, which included introducing grow beds for vegetables and other flora.

The most confusing part of the Unitary Development Plan was the site's designation as a medium flood risk area. We approached employees at the EBS about the potential for flooding on the site; they told us that the 2015 flood in Silsden, a 1 in 100 year event, didn't come anywhere near the site. Further to this I researched the recently built supermarket that backs on to the EBS site, their flood strategy was to designate the car park as a sacrificial zone for any flooding and have it lower than the rest of the building. This meant that in order for any flood water to reach the EBS site it first had to overflow from the supermarket car park, to a depth of around 0.5m, then breach a stone wall. Irrespective of these measures REACH still had to create a full flood risk assessment; the outcome being raising the building 500mm off the ground adding considerable costs

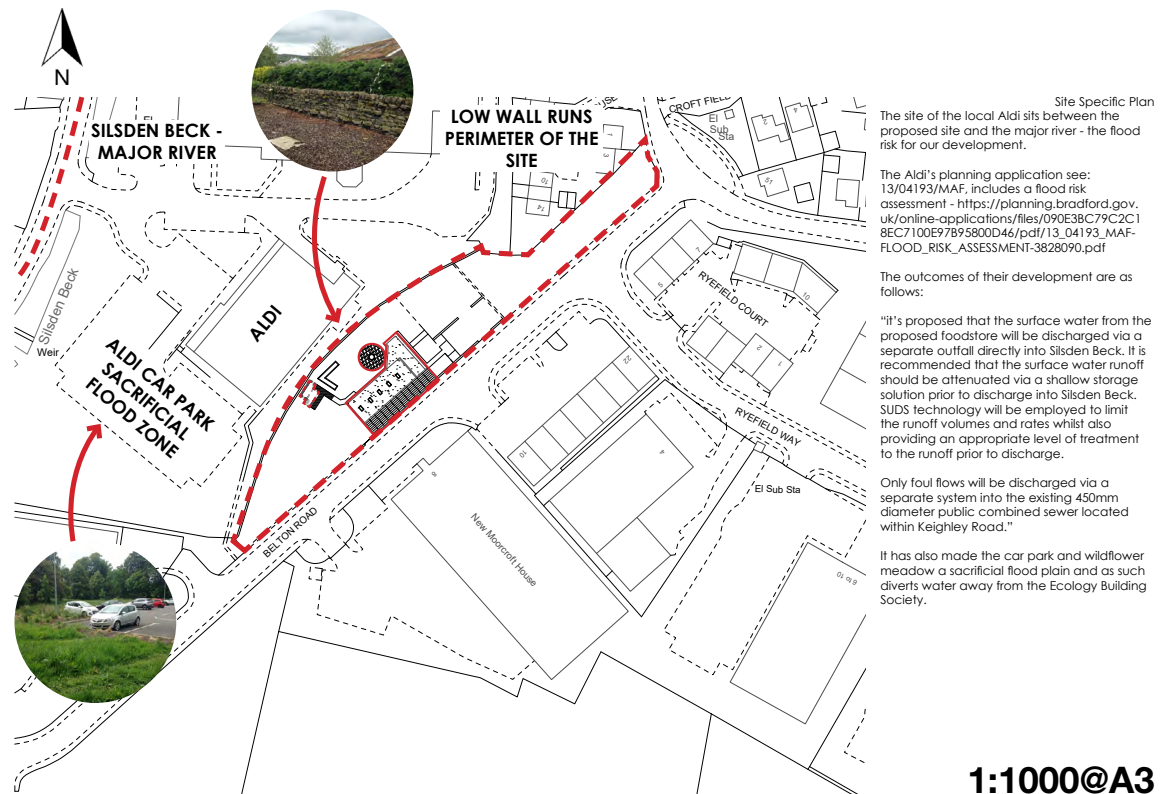


Figure 5.3.2 Showing the Aldi car park as a flood zone, from the flood risk assessment.

as a ramp had to be added for disabled access.

REACH's alternative construction practices around land development were simple. Instead of hiring specialists to navigate the bureaucracy of the planning and regulations they undertook these tasks themselves. They discovered a series of procedures entwined within formal languages that weren't necessarily always even correct, for example the flooding designation. Through becoming involved in alternative construction practices, REACH has become aware of the financialisation of the construction process; this is shown here through Jon's opinion on land development.

"The planning system needs completely revamping anyway because they've completely gutted the planning system with austerity because every council in the country's cut their planning departments, and they've cut all the experience out of what's left so there's very few really experienced planners left who know what it's about. It's again where the big builders have just run roughshod over 'em, because they've got huge legal departments so if they happen to get planning permission turned down they just challenge it. Go t' secretary of state, secretary of state says 'yeah, you're my mate at the club, yes of course you can have that planning permission'"

(17/08/18 interview with Jon Johnson)

Jon's statement is backed by Bowie (2017), who states that "*powers to override planning obligation agreements between councils and developers*", granted to the secretary of state in the Housing and Planning Act 2016, undermine the post war consensus of the 1947 Town and Country Planning act, which established that ownership alone did not entitle the right to development and that planning permission also had to be sought. This shows the ways in which financialisation has seeped into the construction process, creating loopholes so as to not impinge the flow of capital, whilst at the same time still keeping the rules in place for those without the money to circumvent the bureaucracy. Furthermore there is a continual lobbying for the deregulation of the sector as a way to increase profits so as to not slow down the transformation of capital (Bowie *ibid*; Minton 2017). There is a language that accompanies land development which, as we experienced first hand, is hard to follow for non-professionals in the sector. When the financialisation of construction dictates that these languages can be sidelined, through policies such as the Housing and Planning Act 2016, then these languages only serve to inhibit those who cannot circumvent them.

When land is a speculative asset that relies on construction to be realised, there are ways to circumvent the administrative roadblocks that would otherwise hinder the flow of capital. As Jon's quote shows REACH's engagement with alternative construction practices, and the wider sector, serves as a revealing moment for them to see the absurdities of formal construction. Another example where Jon shows this clarity is when talking about supply and demand for housing:

"The government says y'need to build more houses and they [house building companies] say if we build more houses and we build them faster we can't charge as much for them, so why would we want to do that? It doesn't make any economic sense; that's why there's four hundred n' fifty thousand planning permissions out there that are not getting built out, 'cos they dont wanna build them any faster, they won't build them any faster because the infrastructure's not there to do it, the people aren't there to do it."

(17/08/18 interview with Jon Johnson)

Here Jon's engagement shows his critical thinking behind the lack of housing. For him there isn't enough housing, yet lots of planning permissions not being built, he considers why this is and concludes it is based on supply and demand and that flooding the market with houses would lower the prices. Although this line of thought doesn't take into account the increased value of land with planning permission and build to rent housing it does show an acknowledgment of the financialisation of housing, how land may be banked without development until it will create the most profit. This is obtained from REACH attempting to create an alternative to the present condition.

5.4 Alternative Construction Practices as Decommodification

Alternative construction practices are a way in which those without capital can build in the financialised construction sector. Formal construction practices are regularised through a series of procedures that are grounded around financial restrictions and feasibility - financial capital scripts the procedures by which construction unfolds. In this way alternative construction practices act simultaneously as a method for critiquing the financialisation of formal construction and as a tool for building within it. They should be understood as a form of decommodification. The alternative in their name means an alternative to the financialisation of formal construction and they attempt to decouple from this in order to contest established procedures. This decouplement inevitably means finding construction practices without profit as the driver; in this way decommodification becomes a useful descriptor of these practices.

Land is a flashpoint for revealing the financialisation of the construction sector. REACH's attempts to acquire and develop land required alternative construction practices. REACH used alternative equivalence extensively in attempts to acquire land, a way of offering something other than money in an immediate exchange whilst also providing mutual benefit as opposed to the shrewd nature of barter. This is not to say that alternative equivalence is the only other way of acquiring land. Other ways of acquiring land for non-normative modes of construction include community financing and illegal occupation. In both of these examples, neither are reliant on other actors to provide any kind of support. Community financing involves people coming together to raise capital for the self provision of housing (Brugman, 2017); in this way a community engages with a non-standard practice, instead of courting construction finance, in order to engage in the standard practice of land purchase. Pickerill & Maxey (2009) state that Low Impact Developments (LIDs) may engage in illegal occupation as a way to acquire land; this is a rejection of all normative forms of land acquisition as it requires no form of exchange and doesn't acknowledge the landowner. These are unlike REACH's attempts to acquire Castlebeck and Hemsworth as these did acknowledge the landowner, the Council, yet were unsuccessful in the negotiation of alternative equivalence.

The lack of success with the Council reveals new information about alternative equivalence - the participants are crucial to its success. Not only is ideological alignment an important part but the participants' motivations can determine the success of the exchange. Participants who are tied to the financialisation of the construction sector are unlikely to agree to an alternative equivalence; in this way the financialisation of construction reflects back on these alternative construction practices and serves to limit their success. REACH's proposal went against Council procedures of using land as a financial asset and didn't succeed. Where the alternative equivalence did succeed, with Heeley City Farm, the farm did not view land as a financial asset. This reveals again the decouplement required for alternative construction practices to be successful, they have to find ways to slightly distance themselves from formal construction procedures in order to be successful.

This decouplement is not only necessary for alternative equivalence. The ordering scripted by financial capital - first the money is obtained, by promising to make a profit,

and then the land is purchased - explains why REACH were unsuccessful in securing the charity funding for Castlebeck as it was predicated on first having the land. The Council wanted REACH to prove they had the money before providing the land but the charity didn't want REACH to spend money on purchasing land so they needed REACH to have secured the land first. The charity's sequence, which is differently ordered to the formal procedure put forth by the Council, was not accepted by the Council and became another reason why REACH didn't acquire the land.

Alternative construction practices become a method of education for understanding the absurdities of formal construction. Why, for instance, Sheffield has the highest social housing waiting list in the country yet the Council encourages the construction of luxury homes. Or Why there are stringent planning regulations that can be circumvented for those with the capital to do so. Understanding the permissions and languages required to develop land served as a primary educating point for REACH.

As a decommodified practice, through attempts to navigate and critique financialised construction for those without capital, alternative construction becomes a way for self development, decommodification for self development (see Room, 2000), evidenced by the learning process REACH undertook to better understand the financialisation of the construction sector. The efficacy of the decommodified idea of trading land for X to undermine the whole notion of land as asset is precarious, it is often unsuccessful and depends on untangling the scripts of formal construction with participants that are able to do so. More than the efficacy being precarious, Polanyi (2001) argues that decommodification emerges as a countermovement against increasing commodification and Harvey (2014) goes further to suggest that decommodification serves to offset the contradictions of capitalism without necessarily overcoming it. These authors, and the empirical data, suggest that this general countermovement against land appears to be the first effort to overcome the capitalist contradiction of land financialisation. Namely, as housing becomes more unattainable for more people - either as bought or rented - because of the continued financialisation of land, either some type of land reform countermovement that decommodifies the land will become co-opted by capital or else there will be a new market crash based around land and housing. This idea of decommodification being co-opted to overcome capitalist contradiction may suggest a failing in the efficacy of decommodification, yet the idea that decommodification is acting as a tool for a greater understanding of contemporary capitalism is strengthened through the empirical data presented here.

6. *Materials.*

This chapter carries on where the previous left off, by exploring alternative equivalence and how it relates to alternative construction practices through material deployment. For REACH, alternative equivalence within material sourcing became a way to not just acquire materials without cost but also to develop their sustainable mission. This is because the materials they were most likely to obtain through alternative equivalence were from waste sources. Waste can be understood as a material that has no use value for the owner and, as a result, either has already been, or is going to be, discarded.

The ways in which REACH acquired materials in order to be able to build suggests that alternative equivalencies can be used to acquire materials but these materials are often serendipitous and fleeting, so other material sources must be used. The success of waste materials within alternative equivalence, where non-waste materials couldn't be sourced this way, suggests that alternative equivalence is inextricably tied to value. The acquisition of these waste materials would at times support waste practices within formal construction. This suggests that alternative equivalence cannot be understood independently and must be related back to a wider economic ecology. Within this wider ecology, formal construction practices play a big part and the ways in which REACH used materials was limited by the languages and protocols of formal construction. These were not technologically necessary in order to build and this suggests that decommodified construction is limited by the formal languages of materials; this includes the sequencing by which buildings are constructed.

Therefore this chapter's three subsections provide three points that can be derived by looking at REACH's material cultures:

1. That alternative equivalence is linked to value.
2. That alternative equivalence must be related back to a wider economic ecology.
3. That formal construction has languages and procedures for material cultures that have to be navigated or decoupled from in order to build but aren't technologically necessary to build.

The exploration of these alternative construction practices allows the continuing questioning of the efficacy of decommodification as seen in the previous chapter. It also starts to explore the relationship of decommodification as a process and an action.

6.1 Alternative Equivalence and Value

By exploring the ways in which REACH sources its materials for construction, including waste, this section argues that REACH's alternative equivalence only worked when sourcing materials that had no value to the current owner. This is achieved through exploring the different ways REACH sources its materials for construction, both waste and non-waste. Through this exploration, an argument can be made that because only waste materials were acquired by REACH through alternative equivalence then alternative equivalence is inextricably linked to value. This can be used to reflect back upon the alternative equivalence seen in the acquisition of land in the previous chapter. Of importance first however is why REACH sees the reappropriation of waste as a critical way to build and how this differs from industry norms.

The reappropriation of waste is a key strategy for REACH. Not only does it provide an environmental critique of formal construction, but it also provides free materials for construction. These free materials are critical to reducing the cost of REACH's end product because up to 60% of a formal construction project's budget is on materials (Petchpong et al, 2005). The environmental critique is a foundational one for REACH, the "R" in REACH standing for recycled and the "E" for environmental. Jon made REACH's position against material cultures on the formal construction site clear from our first meeting:

"25% of anything that goes onto a building site is junked basically. 100 million tonnes of building waste every year... well they always over order it [building materials] 'cos there's always contingency 'n stuff getting damaged or things going wrong and then yeah they've either gotta send it back or get rid of it."

17/08/18 Interview with Jon Johnson.

Jon's claim about the amount of waste created by formal construction is verified by wrap (N.D.) a leading actor within formal construction that seeks to reduce construction waste. Within formal construction, materials can be bought as and when they are needed; this is a management task on site because *"Firms also need to weigh the lower cost of ordering large quantities against the difficulty of storing the procured material on a congested construction site"* (Sawan, 2018:974). It is within this chaotic nature of the construction site (Cicmil 2005; Löwstedt, 2015) that Jon sees waste being produced.

Whilst working with REACH I saw materials being procured in a way similar to formal construction projects, through monetary exchange. This occurred most often when suitable waste alternatives were not available. This included fixings, such as screws, that couldn't be acquired from waste because the threading and head had to be in good condition. It also included other materials such as the cladding, the spray foam insulation, the damp proof membrane (DPM), and the denim insulation. Most materials however were acquired as waste; with Jon noting that the prototype is made of approximately 84% waste materials (fieldnotes, 17/09/2018).

The prototype remains a living testament to what can be achieved through harnessing waste materials in both traditional and creative ways: We look round the room and Jon speaks candidly about different objects and their origins, '[the roof is] just kingspan glued to the outside with render over the top... it came from the roof of the mosque, while they were replacing it, the panelling in the shower room was the front of the counter at the indian restaurant opposite the mosque, which they were chucking out. Cymbal's up there [acting as a light fitting], bedhead's an old piano, every bit of wood here's reclaimed.'

Transcribed from fieldnotes 17/09/2018.

Waste is defined by REACH as any material that is not wanted by the owner and has either been discarded or is going to be discarded. In this sense the material has no use value to the owner and, because exchange is tied to the use (Harvey, 2014), exchange value. This is why the kingspan insulation can be considered a waste material but materials such as the denim insulation (which is made from the waste product of old jeans) is not - because it has a use and an exchange value (see figure 6.1.1). When REACH identifies a waste value it immediately acquires a use value for REACH, namely its ability to be used as a building material. Because of this use value, bestowed upon the material by REACH, the owner could charge a fee to REACH for the material - thereby giving it an exchange value. However REACH would never accept this commodified transaction as one of the main points for them to use waste is to gain free materials. In this way REACH acts similarly to a waste disposal service. This is reflected in, and emerges from, the way

Figure 6.1.1 - exploring where the prototype materials came from.

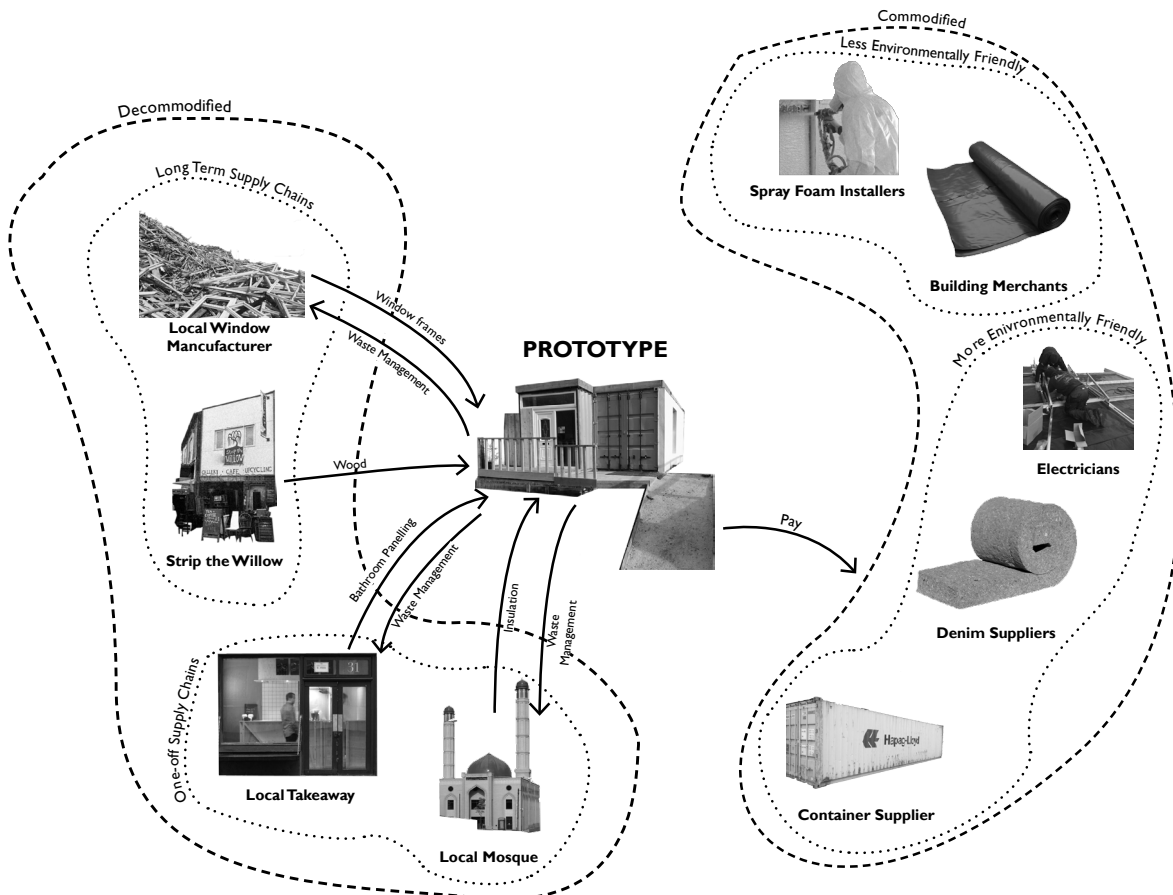




Figure 6.1.2 - L to R, *Strip the Willow*, using waste wood as framing internally and externally.

REACH's sister project *Strip the Willow* operates.

As an upcycling shop, *Strip the Willow* receives waste wood that is no longer useful and transforms it to give it value and sell it on. Whenever we arrived at the shop [*Strip*] our first task often involved sifting through the waste that had been left outside, not just wood, as some people thought *Strip* could be used as a dumping ground (fieldnotes). However this relationship of *Strip* as a waste disposal service served REACH well as *Strip* was able to supply: all the wood, from the studwork to the reclaimed scaffold floor, to the furniture (some made new by REACH, such as the kitchen units and the bed, and some simply brought back into use like the chairs and I believe the bookcase), and even the big structural beams that connect the two halves of the container were salvaged by *Strip* from a church (fieldnotes).

In this way *Strip* undergoes an alternative equivalence, it provides a waste disposal service and receives materials for upcycling and using in REACH's construction. Other prominent materials that REACH acquired as waste included the majority of insulation, the window frames, and many of the furnishings. In most of these instances the materials were acquired through alternative equivalence. For instance, with the window frames: Jon told me how end of life recycling for this plastic is an energy intensive process; as such manufacturers recycle the glass and keep the frames in their yards - despite them being perfectly usable but second hand. In exchange for the frames REACH is freeing up space in the manufacturer's yard; this gives the frames a second use of life which is more efficient than recycling (fieldnotes).

The minority of waste materials that didn't come from alternative equivalence were from the REACH team diving into skips if they saw a good quality material that was otherwise going to landfill. In these instances, REACH acquired the materials without giving anything in return; this is similar to the category that Gibson-Graham et al (2013) would refer to as non-market as there was no agreement or interaction between actors - beyond REACH asking if it was ok to take the material.

All of the successful alternative equivalence practices of acquiring materials that I witnessed with REACH had one similarity, their value. As waste materials, each of the materials acquired by alternative equivalence had no value to the owners. Conversely,

where REACH failed to acquire materials through alternative equivalence the materials had value to the owners. This revealed itself critically during the sourcing of the facade for the EBS office project:

A manufacturing company who had recently gotten into the construction industry by designing a clip-on facade and roof cladding system. The aesthetic was panels of solid stonework and panels with green wall attachments. Jon had been in negotiation with this manufacturer for some time and although he had no guarantees he was almost certain that they would provide us with this material for free as a way of showcasing their new product - an alternative equivalence. I took these reassurances at face value and designed the building to suit, submitting the necessary documents to planning and drafting images to seduce the client. My faith in this verbal assurance was not wavered until our visit to the manufacturer where we were told that the materials would be provided at-cost (i.e. without profit to the manufacturer), I agreed to send the measured drawings to the manufacturer so a price could be calculated (it is worth noting that the company had recently announced financial difficulty). Cracks in the relationship started forming around July (2019), we were building but hadn't had any information from the manufacturer about costs, the manufacturers were finding it hard to read the drawings despite REACH providing measurements of every panel (meaning in theory they should just be able to go and produce it). This came to a head on the 31st of July when we had a meeting with the manufacturers, they were nervous about the timeframe REACH had set for the project and they ended up quoting £17k for the roof and facade, which came as a shock to REACH because the total project budget was £40k. After much design and cost deliberation REACH decided that the facade would have to be sourced from elsewhere but the manufacturer could still provide the roof, which would be under £10k - still extremely expensive for the project. Transcribed from field notes.



Figure 6.1.3 - UPVC window installation.



Figure 6.1.4 - Clip on facade system.

In this example, REACH failed in their use of alternative

equivalence (of materials for the advertisement of the product) to secure the materials for the roof and facade. These materials were new and had a high value, with production alone costing £17k. The way in which alternative equivalence was successful for acquiring waste materials but unsuccessful for acquiring new materials suggests that alternative equivalence is linked to value. Specifically, that the lesser the value, the more likely that alternative equivalence is able to occur.

Reflecting back onto the land chapter, this claim helps to further illustrate the success of the Heeley City Farm land deal against the failings of the Hemsworth and Castlebeck land deals. At HCF the land REACH use doesn't take up much space, around 40m² for their single prototype. This land is leased by HCF so they can't sell it, and it occupies a small corner adjacent to the energy centre and a field for goats. In other words it had little value to HCF except as a potential to provide more grazing room for the goats or as a storage space. Contrast this with Hemsworth and Castlebeck, both sites are much larger, REACH proposed 9-12 houses on Castlebeck and 50-60 on Hemsworth; furthermore the Council can speculate on these sites to help balance their books; in this sense these sites have value as financial assets. The alternative equivalence at HCF (land for energy) was successful whereas the ones at Hemsworth and Castlebeck (land for housing) were not. Taking this information into account, alongside the equivalent exchange of the materials, then looking at these sites in terms of value further reinforces the argument that value is linked to alternative equivalence. Namely that the lower the value the more likely that alternative equivalence will be successful.

The financialisation of construction limits the effectiveness of alternative equivalence. Where materials are foundational to land being transformed into a building and adding value as a financial asset then providing materials that are not waste (i.e. have value in the construction process) runs counter to this logic. This explains why not only materials like the cladding, but also land that has value were not part of REACH's successful alternative equivalencies. By going back to a foundational understanding of value, namely that exchange value enables a commodity to be measured against another commodity, then this conclusion starts to suggest that alternative equivalence is linked to a wider economic ecology.

6.2 Alternative Equivalence and Economic Ecology

The previous section explained that the main reasons REACH deployed waste was to reduce the cost of construction and as an environmental critique of formal construction waste practices. By looking further into the reasonings behind REACH's individual material choices, this section argues that alternative equivalence should not be understood as an isolated economic action, but should be linked into the context of a wider economic ecology. The concept of an economic ecology argues that non-profit driven forms of economic actions exist within capitalist societies (Polanyi, 2001; Gibson-Graham et al, 2013; Tsing, 2015; Peredo & McLean, 2019). Therefore understanding how alternative equivalence fits within this ecology helps to understand the present economy. The existence of non-capitalist forms of economic actions does not foreground a necessarily anti-capitalist movement however; Polanyi (ibid) explains that these actions may support or offset the contradictions of capitalist economics.

Through looking at individual material cases, the argument that alternative equivalence is linked to a wider economic ecology simultaneously serves to justify REACH's use of new, i.e. not waste, materials whilst questioning the effectiveness of critiquing formal construction waste practices by using waste materials. This section looks at four materials used in REACH's construction practice (spray foam, containers, fibreglass, and UPVC) and how they demonstrate a link to a wider economic ecology.

The use of spray foam is perhaps the most contentious within REACH, the chemicals within it are most often extremely bad for the environment and as it is a chemical composition that is blown directly onto the wall there is no possible way of obtaining a waste version; it can also give off dangerous fumes when not installed correctly and must be done by specialised installers. All these negatives however are offset by the use of the spray foam - when using a container for construction there is a high likelihood of condensation. Water vapour on the inside of the building travels through the air, the plasterboard, and hits the metal container wall (which is usually cooler than the inside of the building) where it condenses and pools at the bottom of the metal - rotting away internal linings and creating mould buildups. The reason spray foam is so useful is because it expands in its application. This creates an airtight seal meaning that condensation is minimised to areas such as windows which have their own strategies for dealing with it. Unfortunately the reason it is not environmentally friendly, namely the chemicals that cause it to expand, is the reason it is so good in container construction.

Transcribed from fieldnotes.

spray foam cannot be acquired by REACH through alternative equivalence because it has a high use value (as an airtight insulation) and by extension this grants it an exchange value, as well as carrying a cost to install because no-one at REACH is trained to do it. Furthermore, as a single use application material, in that it expands and in doing so is fixed in place, spray foam is not a material that can be acquired as waste. Despite this, REACH still uses spray foam even though they have access to waste insulation (such as

reclaimed kingspan sheeting) and less environmentally harmful non-waste insulation (such as recycled denim). This is because, for REACH, its usefulness in creating an airtight seal to stop condensation on the inside of the container walls outweighs its environmental impact.

As a purchased material, REACH's deployment of spray foam within their construction starts to suggest that in order to build REACH cannot solely interact with other actors through alternative equivalence. This is because spray foam is necessary for REACH's shipping container structure, to stop condensation, but it is also a material that can only be used on first application (it is not possible to shrink the spray foam after it has been applied). Therefore this example argues that alternative equivalence for REACH's material acquisition can't always happen because of other economic factors, including the use value of the materials and specialist training required to use the materials. Furthermore it creates a relationship between the use of the spray foam insulation and the use of the shipping container, indicating that if REACH wants to use the shipping container as a structural frame they have to also engage in traditional exchange for acquiring spray foam. This starts to suggest that alternative equivalence is linked to a wider economic ecology, because without looking at the wider context REACH is not justified to purchase the spray foam when they have access to other insulation they acquired through alternative exchange.

One of REACH's primary justifications for using spray foam insulation was because of the use of shipping containers as the structural frame in their work; this necessitates the use of spray foam to minimise condensation. Therefore an analysis of REACH's use of shipping containers serves to further argue that the deployment of the spray foam operates within a wider economic ecology, whilst also arguing that the shipping container is a part of this ecology. Although the use of shipping containers may illicit condescension from the architectural community, Jon's lack of exposure to this snobbery has served him well in finding a material that fits the bill. For him shipping containers do not represent uncomfortable memories of first year projects, but instead are a cheap; upcycled building material, that require minimal technical knowledge to work with, and are not labour intensive to convert - all things that make the construction process easier for self-builders (fieldnotes)

The container is the material REACH is most known for, the C in REACH standing for container. REACH's attachment to the container is because they are cheap and easy to use; the shipping container for the EBS project cost £1,200, which is cheap for a structural frame (fieldnotes).

Unwittingly standing against another entrenched architectural faux pa, Jon explained how REACH Homes started from watching Grand Designs and wanting to build his own house with his then partner, because they couldn't afford anything on the market. What started as a Lego model on the kitchen table quickly evolved:

"I costed this idea up with containers and was like 'that's less than 100 grand for a 3500 SqFt house with atrioms and a garage for Barry's Ferrari' he was 12 at the time, he still wants a Ferrari, he knows it's got to be an electric one though."

Transcribed from fieldnotes.

REACH does not have a consistent supplier of shipping containers. Some, such as the one for the EBS office were bought, whereas others were acquired through an alternative equivalence of material for waste removal service (in a similar way to how the other waste materials were acquired). The containers that are bought by REACH come from local shops that sell used shipping containers most often used for storage. Although they are past their first use in international shipping, they cannot be understood as waste because they still have a value in the form of static storage units. The fact that a shipping container still has a use value, which indicates an exchange value, creates a difficulty for accessing containers as a waste material. As such, the instances where REACH acquired containers through alternative equivalence has been rare. REACH's use of containers is also based on its future; they believe that as they grow more containers will be accessed through alternative equivalence. Jon believes that there are 15 million unused shipping containers worldwide (fieldnotes) and that if REACH could expand it could tap into this waste supply. Whether this is true or not it adds a temporal nature to the understanding of why REACH uses containers - the belief that when they expand containers can be accessed through alternative equivalence.

Without the container the spray foam is unnecessary. As a cheap and easy to work with structural frame the container justifies, for REACH, the use of spray foam. The environmental impact of the spray foam, for REACH, is an acceptable trade off for the benefit of containers. This further contextualises the use of the spray foam within a wider economic ecology that connects itself to the shipping container and opens up questions about costs, waste acquisition, and technical knowledge.

The container itself expands how REACH looks at materials to focus rather than on a type (e.g. shipping containers) to a case by case situation (each individual material). In some cases REACH acquired containers through alternative equivalence; in others REACH had to buy them. This suggests that each container has different stories behind them - the EBS container had to be bought because REACH couldn't acquire one in the time before construction started; an alternative equivalence container currently serves as extra storage space for materials because it hasn't been allocated to a project yet (fieldnotes). This connects to a wider economic ecology, because each of the vendors have their own reasonings behind selling or providing containers to REACH. Furthermore, although sometimes shipping containers were acquired through alternative equivalence, this still carried a cost for REACH because the cost of hiring a crane and lorry to move a container is £250 (fieldnotes). Therefore this suggests that alternative equivalence cannot be looked at in isolation but must be connected to wider economic actions, such as shipping, which may outweigh even the value of the container for REACH. For example, if the container was structurally unsound, it may not justify the transport cost. When REACH has to buy a container, the usefulness of the container as a structural element outweighs the cost and justifies, for REACH, its use over a waste material they could acquire through alternative equivalence but may not have the knowledge to work with (for example timber); this suggests that alternative equivalence should be linked to a wider economic ecology. This ecology justifies why REACH would use a bought material over a waste one. It also suggests a temporal aspect should be included. For example In the short term, REACH bought a shipping container for the EBS project because they ran out of time to search for a free container. In the long term, REACH believes that by expanding their project they will be able to tap into a supposed supply of waste containers which they could obtain through alternative equivalence. This Means

that in the immediate, the container is a cheap and easy material to work with but in the future it is an easy material to work with that could be acquired through alternative exchange.

This discussion of temporality connects to REACH's acquisition of UPVC frames:

A material REACH accessed throughout the construction process was the UPVC window frames, Jon told me how end of life recycling for this plastic is an energy intensive process; as such manufacturers recycle the glass and keep the frames in their yards - despite them being usable but second hand. REACH undertook an alternative equivalence to acquire frames for the prototype and the EBS office, in exchange for the frames REACH is freeing up space in the manufacturer's yard; this means that the frames get a second use of life which is more efficient than recycling.

Transcribed from fieldnotes.

With the UPVC, temporality plays a key role in understanding how alternative equivalence connects to a wider economic ecology. Looked at in the singular, the acquisition of UPVC windows is a simple alternative equivalence that stops the frames either taking up space in the manufacturer's yard or undergoing the high energy recycling process. In the short term this appears to show an environmentally friendly way of reducing waste in the formal construction sector and critiquing waste practices. Yet by looking at this action within a wider temporal context the alternative equivalence that frees space in the manufacturer's yard enables the manufacturer to collect more waste windows and supports the waste practice of UPVC windows as opposed to critiquing it. This suggests that alternative equivalence must be connected to a wider economic ecology to show how it can be complicit within the reproduction of formal practices; Polanyi (2001) argued similar to this, that non-profit driven actions can serve to offset capitalist contradictions. This temporal context is further revealed through looking at how the UPVC frames were used. Although the frames are a waste product, they had to undergo a commodified process in order to be used in the ecology building society office. The brief for the building called for grey windows (Design Meeting 15/01/2019). As grey UPVC is a relatively new

Figure 6.2.1 - Container ownership

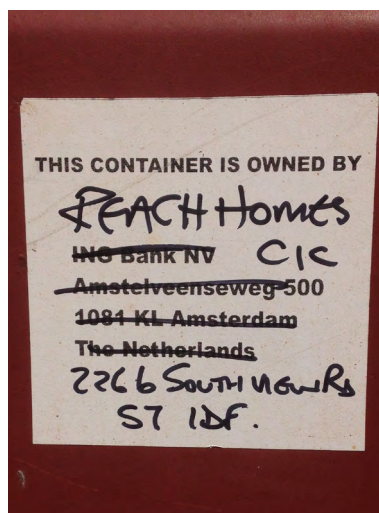


Figure 6.2.2 - L to R, Chipping the UPVC paint with a fingernail, spraying the UPVC with more resistant paint.



product, REACH could not source any as waste from the manufacturers. This resulted in REACH contacting specialist companies to paint the UPVC, as standard paint didn't adhere to the plastic well. Some companies failed to deliver as their paint would easily chip from light wear but eventually a company was settled on.

This temporal context is similar to the containers that were acquired through alternative equivalence. Just as REACH had to pay to move the containers, REACH had to pay a company to provide paint suitable for UPVC windows to meet the requirements of the EBS office design brief. Whilst this cost was cheaper than buying grey UPVC windows, what it shows is how alternative equivalence needs to be seen within a wider context because in this situation the use of alternative equivalence predicated a monetary exchange later on. This tension between monetary exchange and alternative equivalence faces other factors; this is explored by REACH's use of the fibreglass insulation.

Similar environmental tensions to the ones faced in the prototype occurred, primarily around materials that REACH could get as waste products that would otherwise be sent to landfill but are not environmentally friendly. An example of this is some fibreglass board that was provided to REACH through alternative equivalence (getting rid of the material in exchange for the material):

It is not easy to work with - we had to wear dust masks, goggles, and gloves; even then I developed a minor rash on my arms where I scraped against the material, nor is it easily biodegradable. Similar to the decision on the prototype REACH took the stance that it was better to keep the insulation in an inert wall than to have it specially disposed of in a presumably high energy facility, or left to damage the environment in landfill.

Transcribed from fieldnotes.

Within the example of the fibreglass REACH's environmental agenda is brought into tension with their sourcing of waste materials. Looking In the short term, and at the alternative equivalence in isolation, it might be decided that fibreglass should not be used because of its lack of environmental credentials. However by understanding the alternative equivalence within a wider economic ecology the fibreglass becomes justified by REACH as they believe that installing it to be inert within a wall is better than having the material go to landfill. REACH could've bought a commodified product that was



Figure 6.2.3 - Different types of waste insulation.

more environmentally friendly to dispose of at its end of life but wasn't a waste product; this wouldn't have taken into account the energy consumed in the production of that material nor the cost of the material.

The ways in which REACH acquires and transforms these four materials is radically different. Through these radical deviations, the section is able to argue that alternative equivalence cannot be linked solely to value but that it can only be understood within a wider economic ecology. This ecology explains why spray foam insulation, despite being a new and environmentally harmful product, is the best internal insulation for REACH - because it is almost necessary when building with shipping containers. The use of the container may seem odd when there are potential other structural frames that can be acquired from waste but the container is a material that is easy to work with and can be reliably sourced cheaply as a commodified material. Furthermore REACH believes it can tap into supply chains of waste containers in the future; this adds a temporal element to understanding alternative equivalence within an economic ecology. This temporal theme is continued by exploring REACH's use of UPVC frames. These are acquired through alternative equivalence as a waste material but in the long term may be understood as complicit within formal waste practices. Finally the waste fibreglass shows that for REACH value judgements have to be made for materials that can be acquired freely and the environmental impact of materials. Each of these materials in their complexity allow an argument to be made that alternative equivalence must be understood within a wider context of an economic ecology whilst ultimately understanding that the primary purpose of that ecology is profit.

For REACH working within this ecology to actually construct has meant navigating, and at times decoupling from, languages and procedures for material cultures that are a requirement to build but aren't technologically necessary to build. This is the focus of the final part of this chapter.

6.3 Alternative Equivalence and Material Bureaucracy

To build in a way where profit isn't the primary driving force or the primary outcome of construction, as REACH does, within a context where profit often is the primary motivation comes into tension with formal construction procedures. The deployment and acquisition of materials through REACH's method of alternative equivalence clashed sharply with the procedure and bureaucracy that permits development within formal construction, specifically planning permission and building regulations. To navigate this situation two choices can be made, firstly these formal procedures can be ignored and permission sought retroactively after the building has been completed. This is a strategy commonly employed by LIDs, Where different types of construction materials, from cob to straw bale, circumvent the otherwise necessary bureaucracies of construction and seek them later.

"Restrictive planning laws have meant that LIDs have tended to involve people moving onto land without planning permission and seeking to gain retrospective permission once they have become established or discovered"

(Pickerill & Maxey, 2009:1531)

Secondly these planning procedures can be navigated. This navigation was the primary strategy for REACH in the construction of the EBS office and this was because of REACH's contractually binding agreement with the EBS to provide an office. This section explores REACH's navigation of the bureaucracy of planning permission and building regulations through the EBS build and how these structures came into tension with REACH's material acquisition and deployment strategies. The tensions I witnessed between REACH's material cultures and formal construction practices emerged around the aesthetics of waste materials, the practicality of waste materials, and the acquisition of waste materials all on the EBS project.

When looking at the tension between the acquisition of waste materials and formal construction regulations, the examples of sourcing the container and the cladding are two that stand out.

On the 12th of June (we submitted for planning on the 17th), Jon and I were having a discussion about the sourcing of the container for the build. Jon had been having difficulty sourcing a 40ft container as a waste material but had a potential contact for a 45ft container. He explained that it doesn't matter if it's a 40ft container or a 45ft container because the building process is still the same.

Transcribed from field notes.

In terms of the technological process of construction Jon was right that an extra 5ft wouldn't make a lot of difference, for the formal construction procedures of planning and building regulations however this difference is crucial. The extra 5ft would mean having to redo the planning application, including the drawings, to account for the change in size. Furthermore, and far more impactful on the project, this extra 5ft would increase the size of the building over 30m²; after this size the building is subject to

building regulations and would require a whole other application that would significantly stall the project.

This example shows how REACH's material acquisition clashed with planning and building regulations. REACH's chance to get a container as a waste material was marred by the time it would take to find a container so they could start construction without delaying the project. When a potential waste container was found it was a different size to the one shown in the planning application and this created a tension between REACH's technological ability to build and the lawful requirements of building.

Due to the labour and significant delay that would be caused by changing the planning application REACH decided that the best course of action was to buy a 40ft container that would correlate with the planning application and would not delay the project. This was further rationalised against the cost of buying a container (£1,200 for the EBS container), and moving a container acquired as waste (£250). This difference of £950 was deemed an acceptable cost within the project.

As previously explored, REACH had to change cladding due to misunderstandings around the acquisition of materials between REACH and a cladding manufacturer. REACH were under the assumption they would receive it in exchange for showcasing the product whereas the manufacturer thought they were providing the materials at cost (i.e. without profit added on). This misunderstanding created an issue, REACH could not afford the materials at cost and so a different material had to be found, agreed upon by REACH and the EBS, and then we had to change the planning application.

The material we decided on was a timber batten style cladding which I thought could be made from reclaimed and treated bits of wood sourced from Strip the Willow, however after going through this option the rest of REACH decided to choose a waney edge timber instead, as it was believed that this could be sourced more quickly as time was becoming an issue on the project. This time issue was weighed against the costing issue, as waney edged timber would have to be sourced from a commercial supplier; yet by this point it was the 22nd of August and we knew the initial deadline would not be met. REACH decided to go with the commercial option.

Transcribed from field notes.

Similar to acquiring the container as waste, REACH struggled again to acquire the wood as waste. This highlights the precarity of alternative acquisition, unlike formal modes of construction these materials aren't guaranteed to be easily acquired; this sits at odds with formal construction regulations and it required REACH to resubmit the planning application with the changes. REACH had to make a decision, deciding it was better to purchase a material rather than potentially stalling the project further by spending time looking for waste alternatives.

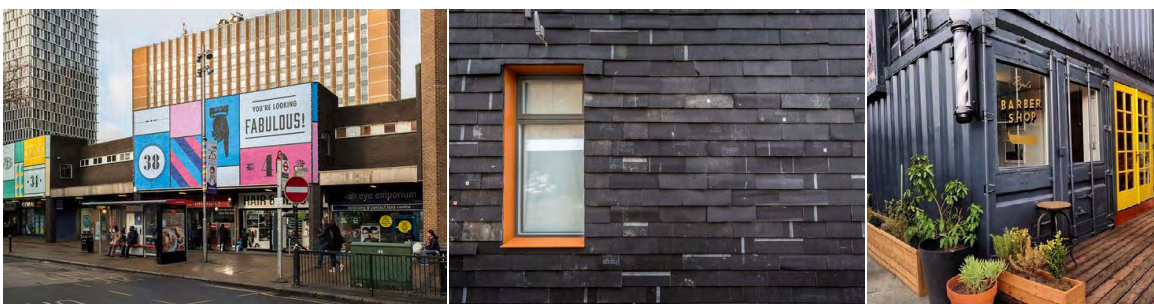
Both of these examples demonstrate that using alternative equivalence to acquire materials can clash with the formal construction regulations. This is mainly due to the precarious nature of acquiring materials in this fashion which means that some alternative equivalence will fail, in these examples through a breakdown in communication and not

having time to source the material, and this is inevitably at odds with formal construction regulations which have a rigid structure for applications as they usually expect that once the size of a building and its cladding materials are decided they will rarely change. Due to the project having an external client, REACH decided it was better to buy non-waste materials rather than running the risk of delaying the project and annoying the client. The facade plays a crucial role in understanding the aesthetic tensions of materials both within REACH and in their interactions with other actors.

The ways in which REACH used waste materials in the EBS build was subject to several aesthetic factors that ran parallel to REACH's ability to acquire waste. The aesthetic exploration deals with the facade of the building as it is the part that is seen. The brief stated that the aesthetics should be "*Contemporary looking, Recycled materials, Want to be reminded its a container*" (design meeting, 15/01/19) and the materials REACH used had to be either "*fully recycled or that can have a legacy after the building's life*" (ibid).

With this brief in mind I set to work exploring different material options, the waste house in Brighton was of particular interest for me because of the inventive use of carpet tiles as a shingle-esque cladding by having the black rubber side facing outwards; which I thought looked good - especially if incorporated with green wall elements. I thought we could contact Brighton University to discover how they sourced this material and whether REACH could tap into that supply chain to access a new waste material. Other ideas I had included the extensive use of reclaimed wood to make a more rustic style facade (using REACH's existing supply at Strip the Willow), old car tires cut and flattened, and the use of paint can lids either as roofing or to form a section of the facade. I felt these met the brief of using waste materials in innovative ways that would meet the aesthetic

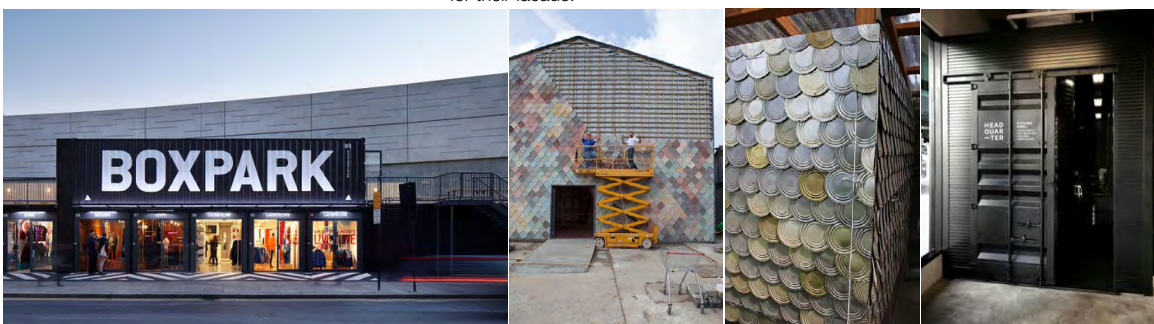
Precedents.



Making facades pop.

Waste House Brighton uses upcycled carpet tiles for their facade.

Container doors.



Boxpark paints on their containers

Assemble Tile facade.

Paint Cans?

Using container doors to blackout the patio doors?

Figure 6.3.1 - Precedent page I presented to REACH

and green aspirations of the client (field notes).

I thought this project could be used to showcase REACH's use of waste materials, however these were all politely, but firmly, dismissed; the consensus within REACH was that the building had to look professional and as such more inventive ideas were dismissed prior to ever being looked over by the client. This posed a dilemma for me, if REACH were to use 'standardised' materials, then how would we be able to firstly access them through decommodified transactions, and secondly to ensure their sustainable credentials? both of these were necessary for ensuring that we met the brief and stayed on budget (field notes).

To understand this decision it is important to see what the EBS project represented for REACH.

"The prototype is just the badly torn-up sheets version" Jon said, as we drove to the Ecology Building Society up the M1, *"this one needs to be perfect"*.
Transcribed from field notes.

For REACH this project isn't just about constructing an office space, it is a legitimising project that they hope will provide further work and prove that their construction model works with an external client. Looked at in this light, it is more understandable that REACH would want to use non-waste materials for the facade:

As the first project for REACH with an external client, the Ecology Building Society office represents a chance to demonstrate REACH's waste material acquisition strategy whilst negotiating with the clients wishes and the planning department. As such it was clear from the design meetings that took place, both between REACH and the client and solely within REACH, that there was a reluctance to attempt any radical material decisions. Material suggestions I was making did not even make it to the stage of client discussions as REACH arrived at a consensus beforehand that as a legitimising project, that would showcase REACH's ability to build, the project should be aesthetically more traditional.

Transcribed from field notes.

The difficulty they faced in not using waste materials, as previously explored, was that non-waste materials are hard to acquire through alternative equivalence; as such REACH eventually ended up buying the facade material.

REACH's reluctance to even try to use a waste material as the facade was motivated by their attempt to be legitimised by formal construction. Whether this caution was needed or not, it is impossible to know because REACH didn't even take the chance of using a waste material for the cladding. It shows the paradoxical situation REACH is in, how they negotiate working within and against formal construction. In this case they decided the best thing to do to expand their work is to provide an aesthetically traditional design. Rather than potentially having their work denied by the planning authority, REACH decided it best to stick with standard aesthetic codes for the facade. This however questions REACH's whole modus operandi because if they cannot reduce

the cost of construction through using waste materials then their cost of production rapidly increases due to the issue of acquiring non-waste materials through alternative equivalence¹.

Just because REACH ruled out waste for the cladding this doesn't mean they didn't attempt to acquire a material through alternative equivalence. as previously explored, REACH attempted to acquire a facade material through alternative equivalence. I laid the issue out in my field notes:

If REACH were to use normal materials, then how would REACH be able to firstly access them through alternative equivalence, and secondly to ensure their sustainable credentials? Both of these were necessary for ensuring that REACH met the brief and stayed on budget. The answer appeared to come out of the blue from a manufacturing company who had recently gotten into the construction industry by designing a clip-on facade and roof cladding system. The aesthetic was panels of solid stonework and panels with green wall attachments.

Transcribed from field notes.

This material gave REACH an aesthetic code to work with that would allow elevations to be designed and submitted to planning for approval. I had reservations however:

The idea of a rock panel facade potentially fits in well with the surrounding area which uses majority stonework. The issue is that the rock panels are not representative of the local gritstone and so REACH has a decision of choosing the closest looking panel or a panel that would contrast with the

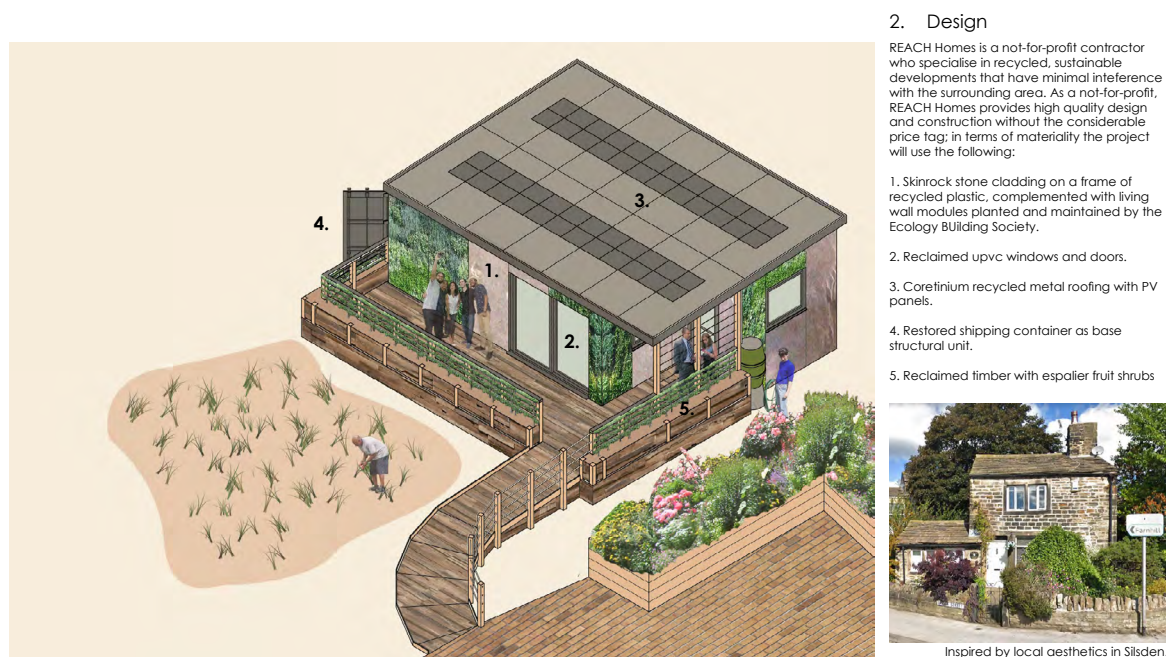


Figure 6.3.2 - Design page for the first planning application making a case for the use of skinrock stone cladding to be similar to the Silsden stonework.

¹ Although REACH didn't use waste materials in the facade they were still used extensively in the non outward facing elements of the project, particularly the insulation and cladding frame.

surroundings. This is of particular importance because the duty planning officer told me to be aware that the site is *'in the shadow of a conservation area'* - meaning *'if we had a mind to, we could make your building follow all the rules for the conservation area'*. This seems paradoxical to me considering the site is in an industrial estate surrounded by steel framed buildings.
 Transcribed from field notes.

As it transpired, post completing the planning application the potential alternative equivalence with the cladding and roof manufacturer fell through. This meant finding an alternative to the rock panels, redoing the elevations and requesting an amendment to the planning permission.

Here REACH was in an uncertain position about whether their rock panels would pass the application process because it wasn't the same type of rock used in the area. Ultimately this didn't matter for the build because REACH couldn't access the rock panels but it suggests a disconnect between formal construction languages and REACH's construction method. The aesthetic codes imply, down to planners interpretations, what materials can be used in an area but if these materials are not available through alternative equivalence then REACH has to spend extra money to acquire them which ultimately pushes up the cost of construction in a not-for-profit project because there is no profit margin to eat into. REACH had to navigate these codes to be given permission to build and these are ultimately decided by individuals who work in the planning department meaning there is a partiality to the whole process. The whole process of obtaining permission to build became an attempt to convince the unknown people who would be making the decision that the project was right for the area. This partiality was crucial within understanding the tension between the practicality of waste and the planning

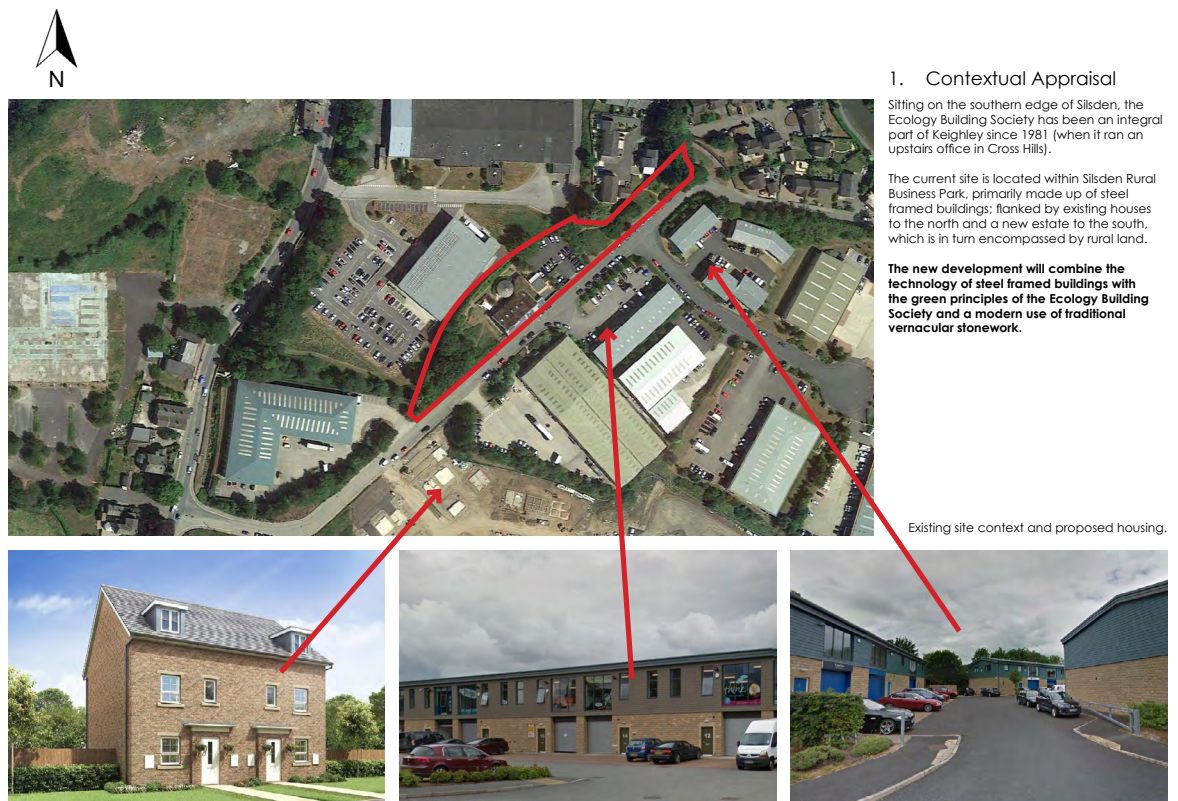


Figure 6.3.3 - Contextual appraisal page for the first planning application making a case that because the site is in an industrial estate with steel frame buildings then the aesthetics should be quite loose.

process and other actors.

The question of practicality of waste materials only appeared when dealing with building control. In the first design meeting it was specified that materials such as concrete should be avoided because the EBS:

"Want materials that are either fully recycled or that can have a legacy after the building's life. Potential for gabion or tyre foundations?"

(Design meeting minutes, 15/01/19)

Concrete rarely fits either of these criteria. this left REACH with an issue regarding the foundations. I had been reading about, and was keen to test, using reclaimed aggregate and old road surfacing as a hardcore style foundation. These options provided a way to reduce or eliminate concrete in the construction however faced difficulty when presented to the building control officers. *'The only thing we insist on is that you use concrete foundations,'* said the officer who had worked on the EBS hay bale office space and had been averse to their proposed alternative sustainable foundation ideas back then.

Transcribed from field notes.

Owing to the size of the development being under 30m², REACH was under no lawful obligation to follow the advice set forth by the building control officer. However REACH felt it best to not antagonise the department by ignoring their advice because of the connections that building control had to the planning department. In the end REACH hired a commercial contractor to do simple concrete pads (Field notes).

REACH negotiated the foundation material with EBS, who accepted it on the basis that they had faced the same issue on their straw bale extension. Here REACH's alternative use of materials caused tension with formal construction regulations who believed that concrete foundations are the only way of safely holding up a building. REACH decided to concede this point, after negotiating with the client, because they were worried that disagreeing with building control may lead to delays or possibly even rejection of the building's planning application. Concrete isn't a necessary foundation material and there are many examples of different, more sustainable, materials being used. Due to formal construction regulations, REACH was not able to explore these and this represents a disconnect between what is dictated to be built by formal procedures and what is technologically possible to be built. Furthermore it also shows the partiality and bias possible within these procedures dependent upon the officer that inspects the project, where one may see concrete as the only possible foundation another may disagree.

The EBS project serves to demonstrate that inevitably alternative forms of construction have to either reconcile or reject formal construction procedures of planning and regulation. In some ways, such as ensuring the building was under 30m², REACH bypassed the need for regulations and thus sidelined the issue entirely. This however created problems in their material sourcing method as it meant they had to buy a container rather than potentially getting one as a waste product. In most cases REACH had to accede to the demands and stipulations of the planners and building officers.

This was due at times to the contract they signed with the EBS which put them under obligation to provide the office and so they couldn't risk not following the law. At other times it was due to the subjectivity of the individual planners and officers who could deny the project based on their opinion of it not fitting the local area or technologically working. This follows on the sequencing of formal construction that was explored in the land chapter. REACH required the financing to be in place before the Council would give them Castlebeck; simultaneously the charity wouldn't give the money before having a guarantee of the land. Alternative construction again struggles with this sequencing that expects materials to be decided before planning just as it expects finance to be in place before land acquisition. Furthermore, REACH saw this project as a way to legitimise themselves within formal construction, not only to show their construction model (not for profit) worked, but also to gain publicity. In this way REACH felt it best to downplay the use of waste on outward facing facade materials but in doing so brought into question their economic model as costs rose from purchasing these materials.

6.4 Materiality in Alternative Equivalence

Through the exploration of REACH's material deployment and acquisition new understandings have been discerned about alternative equivalence and not-for-profit modes of construction. At first the first two arguments may seem connected whilst the third may look out of place:

1. That alternative equivalence is linked to value.
2. That alternative equivalence must be related back to a wider economic ecology.
3. That formal construction has languages and procedures for material cultures that have to be navigated or decoupled from in order to build but aren't technologically necessary to build.

Alternative equivalence interrupts sequencing in construction that is regularised through the universal equivalent, this inevitably effects the bureaucratic side of construction. This relationship is also reflexive and formal construction interrupts alternative construction. In the material bureaucracy section, the size of the container was dictated by Jon's sources, as such, REACH had to buy a 40ft container instead of acquiring a 45ft through alternative equivalence so as to not have to reapply for planning and be subject to building regulations. This example shows how the bureaucracy of formal construction reflected back to undermine alternative equivalence. When the alternative equivalence for cladding fell through, REACH had to quickly find a different cladding material for the construction deadline and resubmit a planning application. This involved using a purchased material, waney edged timber, as they did not have the time to find another suitable material. This shows how alternative equivalence creates precarity if it falls through and meant that REACH had to follow formal procedures of construction. The use of concrete foundations was a capitulation by REACH to the building control officers in order to simplify the bureaucratic process at the expense of not using other materials that could be acquired through alternative equivalence - for example tyres and excess aggregate.

The sequences of alternative construction are not the same as those of formal construction. The precarity of alternative equivalence meant that materials, such as the container, were not available for the planning application. As such, REACH either had to disobey the planning application that was granted, wait until they could source a correctly sized container, or purchase a correctly sized container. Being contracted to the EBS made the first two options unviable as they would cause REACH to be in breach of contract.

Looking at the RIBA plan of work - which is intended as a "*model procedure for the design team*" (Chappell & Dunn, 2017:199). Within formal construction, particularly on-site manufacture, acquiring land is foundational to place the building, a design is drawn up, then permission is granted to build, this allows work to begin on the construction site including foundations, then materials are ordered and the building can be erected (Chappell & Dunn, *ibid*). As explored, for REACH the materials are not guaranteed, their precarious nature means that supplies may be fleeting or alternative equivalencies may

fail. This clashes with formal construction regulations, mainly planning permission, which requires knowing what a building looks like to see how it is contextually responsive. If materials aren't guaranteed this can't be done.

Alternative equivalence is invariably tied up with value; as such the only materials (and land) that REACH could acquire was surplus to requirement or not part of the financialised circuits of construction. Where there was a chance for the land and the materials to be used as speculative assets or in the construction of speculative assets respectively, REACH failed to acquire them. Furthermore rather than changing capitalist economic practices many of these examples serve to offset its contradictions. Take for example the sourcing of UPVC windows that offloads the waste of the manufacturers. In this scenario, although aesthetically it may critique the amount of waste produced in construction, it does not disrupt these circuits and instead serves to reinforce them by making the waste an acceptable part of the window's lifecycle.

In order to have a smoother construction sequence, alternative construction practices have to conform to the sequencing of formal construction. If these practices use alternative equivalence then in order to also have this smooth construction sequence they have to use waste materials because alternative equivalencies are tied to value. In using waste materials they are reinforcing, as opposed to challenging formal construction by providing an offset for its waste. They are using decommodification as a singular action. This needs to be looked at not just in relation to the wider economy, but also in relation to REACH's goal of reducing profit in the construction sector and providing not-for-profit housing. Looking at REACH as a whole requires using Vail's (2010:310) definition of decommodification:

"Decommodification is conceived as any political, social, or cultural process that reduces the scope and influence of the market in everyday life."

In this way these singular decommodified actions - alternative equivalences and other alternative construction practices, building out of sequence, looking at different financing strategies, etc - become understood as part of a process of decommodification. Under Vail's definition even commodified actions that serve to reduce the scope of the market, for instance purchasing wood for a facade that proves a less commodified construction method, becomes part of the process of decommodification. However this is conditional as there is currently no guarantee that REACH will create a process that reduces the scope of the market. This suggests that neither definition of decommodification, as single action or as process, adequately encapsulates the scope of the word.

However difficult REACH found the integration of alternative construction practices within formal construction, the mere existence of alternative construction practices critiques the notion that the economy is only made of capitalist exchange (instead it is an economic ecology). From this existence, these alternative economic practices critique the efficacy of decommodification as a way to move beyond capitalism because they are already accounted for within the present moment. The difficulty in integrating alternative equivalence within formal modes of construction serves to suggest decommodifications inefficiency of replacing regularised capitalist processes. Furthermore, when REACH did find a stable alternative equivalence, such as the UPVC window sourcing, it ended up

offsetting the contradiction of waste for the UPVC manufacturers. This questions the efficacy of decommodification, if in creating these new practices and processes REACH is either having to capitulate or offset the contradictions of contemporary construction then can the creation of decommodified circuits be used as a way to move beyond capitalism?

7. Construction Site.

REACH's construction site during the EBS build echoed Löwstedt's (2015) description of formal construction sites, albeit on a much smaller scale. It was chaotic and in flux. When working with REACH the construction site started to reveal how they differed from formal construction in terms of labour relations and how the lack of capital in their construction method became a driver for experimentation.

The causes for the chaotic nature of REACH's construction site, the dependency of labour, REACH's lack of capital, and the unpredictable nature of REACH's waste acquisition strategy, were different from formal construction. The EBS construction site forms the primary empirical base for the first two points of this chapter which seek to address the causes for the chaotic nature of the construction site.

The tensions that REACH faced between the availability of their labour and formal labour relations forms the first section. This links back to the final section of the materials chapter which focussed on the formal regulations. As such both this section and the previous chapter suggest that decommodified practices must be understood within a wider context of laws and regulations and this creates the transition between the chapters. The link with the previous chapter is further strengthened in the second section which explores how REACH attempted to overcome their lack of capital on the construction site through innovations in their use of materials. This innovation emerged as a process of material experimentation that became an integral part of the construction site. The final section extends this innovation beyond the understanding of immediate construction. It moves away from the EBS site and focuses on the interactions I had with Jon when he lived in REACH's prototype. This section suggests that through Jon's direct labour in the creation of the prototype the lifecycle of the construction site is extended into inhabitation in a way that is qualitatively different from residents simply making changes to their own homes as Jon is intimately acquainted with the construction process.

Through looking at REACH's construction site, three points are discerned that link back to understandings of both formal and alternative construction practices:

1. To understand the availability of labour, the decommodified construction site must be contextualised within formal relations of labour.
2. One way that decommodified practices attempt to navigate through a lack of capital in the construction process is through material experimentation on the construction site.
3. The use of direct labour on the decommodified construction site can extend the site's life into inhabitation as the difference between builder and resident becomes blurred.

The ways in which REACH had to experiment on the construction site and engage with different labour relations emerged ultimately because they were building outside of the accepted realm of formal construction. Within formal construction there is a predictability that emerges and is mediated by market relations. From without, there is a precarity that is clear in REACH's construction and on the construction site means there has to be new forms of engagement to make up for REACH minimising the influence of the market. This emerged directly from REACH's alternative construction practices and

particularly from alternative equivalence.

As a reflection on REACH's construction site, these three points allow an expansion in the understanding of REACH's decommodified practice that emerges as an alternative to formal construction. As REACH had to engage with formal relations of labour their decommodified practice can be understood as precarious and contingent upon wider economic processes. As a way to minimise construction costs, and acting directly out of a lack of funds, REACH's construction site became a space for experimentation with different practices that created a more decommodified construction site than that of formal construction. Finally the extension of the construction site through Jon's direct labour starts to suggest that REACH's decommodified practice can be understood as a process that points towards a less commodified future even though it does not necessarily provide a way out of the present.

7.1 The Construction Site and Labour Relations

Any form of direct labour, i.e. produced for communal benefit, within formal construction is a novelty. Apart from, for example, someone building their own house or commenting on a planning application wage, abstracted, labour is the norm. This section explores the ways in which REACH had to negotiate the labour of their workers with the very conditions that enabled them to labour with REACH. Through This exploration it can be argued that the labour that takes place within REACH must be connected to wider economic processes otherwise the scarcity and precarity of said labour appears absurd. Furthermore these labour relations further reveal REACH's entanglement within an economic ecology. Therefore to understand REACH's tension with contemporary labour relations there must be an understanding of how labour is understood and connected to decommodification.

Within a capitalist mode of production labour is primarily abstract. As opposed to pre-capitalist societies in which the output of labour was primarily for the benefit of the labourer or their community (Polanyi, 2001), in a capitalist mode of production workers produce commodities in exchange for a wage which is then used to purchase a worker's means of subsistence. In this way; within a capitalist mode of production, labour in itself is a commodity, something to be bought and sold (Marx, 2013).

As opposed to treating labour as a commodity, by valuing its exchange value in relation to other commodities, a more direct form of labour places a greater focus on the usefulness of labour - what it can produce for immediate benefit. As such, just as the decommodification/commodification relationship can be understood as a continuum, so too should the direct/abstract labour relationship. Although forms of direct labour occur within capitalist societies, including domestic labour, and forms of abstract labour occurred in pre-capitalist societies to mediate trade between communities (Marx, 1972; Polanyi, *ibid*), they were not the primary labour forms; these examples illustrate the notion of a continuum as opposed to an unrealised hegemony of either direct or abstract labour that excludes the possibility of the other.

Just as Marx (2013) splits value into two, exchange and use, exchange being based entirely on value in relation to other commodities and use being based entirely on the object's usefulness, abstract and concrete (here direct) labour. Where abstract labour is based upon labouring for a wage and direct labour is labouring for communal benefit (Marx, *ibid*). Because abstract labour is understood as a commodity, one of the fictitious commodities as it is not strictly created through labour (Polanyi, *ibid*), the relationship between decommodification and different forms of labour becomes crucial.

For REACH, although not stated, the lessening of the abstraction of labour within their labour relations, as opposed to formal construction, is a key part of their project:

"[REACH is] not something that's being done to people, it's being done for people, by people... it will change the way people approach certain kinds of houses, because they'll have a stake in it."

(17/08/18 chat with Jon)

Here Jon explains that REACH's vision is to allow residents to have a stake in their homes through producing it; this is a labour that is done for benefit, as opposed to for wage, and can be understood as a more direct labour. This is not to say that all of REACH's labour is direct, rather that REACH attempts a construction method with more direct labour within it.

The use of more direct labour in the construction process is an integral part of REACH's method. The section uses data from the different labourers of REACH to show the varied manner that REACH's labour relations takes form and comes into tension with formal labour relations. Furthermore through these tensions a narrative is revealed about the nature of decommodification that emerges from REACH's construction that shows how it is precarious and dependent upon these formal processes. In other words, REACH's REACH's lack of capital became limiting when sourcing their labour force. The limitation of this system became clear through understanding the stories of the individuals who were unpaid.

Most of REACH was made up of volunteers, myself included. Our availability to volunteer was down to personal circumstances. Some want to support their friend Jon without any immediate expectation of recompense, others are students who use REACH as a project for their work, others simply support the cause and want to lend a hand, yet others are retired, redundant, or not in work and are hoping that REACH will one day create a paying job for them, for others it is a combination of these elements. Jon will always make it known to volunteers that their labour probably won't provide them a paying career and he won't be able to recompense them with money, though there is always a bottle of wine on hand for anyone who has been particularly dedicated to the project. There are other ways Jon supports volunteers as well, from writing references to supporting benefit applications.

In the way that these labour relations are replacing the universal equivalent with something else, they can all be understood as alternative equivalences. But these alternative equivalences don't offset the precarity that is created by not paying for



Figure 7.1.1 - REACH volunteers working on both construction and design work.

labour.

One director, a civil servant who was made redundant, raised the concern that if he didn't receive a salary soon HMRC would think he was conducting some form of tax evasion (field notes). Another volunteer explained that they were out of work due to mental health issues but were not receiving enough from the government. Jon offered them some secretarial work, on the mutual understanding that REACH had no funds available for paid staff, which helped add a routine to their life (field notes, 16/10/2018). Jon introduced them to someone at Heeley City Farm and through this they were offered a job which ended their time with REACH. REACH was introduced by a friend to a construction consultancy; this friend had worked with the firm a lot and felt they owed him a favour; they provided technical advice for REACH (field notes, 04/02/2019).

In each of these unpaid situations precarity was a defining factor in the availability of labour and this emerged directly from a lack of capital. Whether it was fear of being accused of tax evasion, the potential to find a job and so not having the time to perform administrative tasks, the finishing of PhD fieldwork and subsequently having to finish the PhD before funding ran out, or not having the resources in the consultancy company to provide pro Bono work monetary recompense was the defining creator of precarity. Precarity is the way to understand REACH's alternative construction practice, when formal relations cannot be paid for, REACH shows how precarity rules.

For many of the labourers, their unpaid labour and precarity was justified because they believed in REACH's aims, to a greater or lesser degree, but this was not always the case. The most obvious contrast would be Jon, who has dedicated the past few years to the project, and the volunteer, who joined in exchange for experience. This application of unpaid labour begins to question the efficacy of decommodification because if direct labour is a form of decommodification (as labour that is non-commodified) then how can all decommodification be understood as lessening the effects of the market (as argued by Vail, 2010; Peredo & McClean, 2019)? Furthermore, exploring REACH's different types of unpaid labour starts to complicate the definition of abstract and direct labour and in doing so reinforces the idea of a spectrum between the two. It may appear that all unpaid labour undertaken could be understood as direct labour in that it is not monetarily recompensed and therefore not abstract, but how is this resolved between different unpaid labours? For example, is Jon's ability to build his own house comparable to administrative volunteering as a way to gain experience and re-enter the abstract labour market? Just as an economic action can be more or less commodified, so too should labour be understood as more or less abstract. The labour that Jon undertakes is a step towards his autonomous freedom from the formal labour market whereas the administrative volunteer used unpaid labour to secure their future undertaking abstract labour. As such these labour decisions only make sense in relation to each other and a wider economic ecology. To further the examples, the reason Jon is able to remain unpaid at REACH is because he worked as a policeman for 30 years and is receiving a pension. Similarly the reason the administrative labourer decided to volunteer for REACH is because they knew REACH couldn't provide a wage and they needed experience after being redundant but at the same time were relatively secure through receiving government benefits. The only reason I could volunteer was because of my university stipend. The construction consultants wanted to return a favour to REACH's friend, and it probably crossed their minds that REACH's friend is a prominent player within Sheffield construction and helping them could secure them future work.

The precarity created by replacing money with alternative equivalence as explored in the material chapter emerges again here and reveals the difficulty in trying to integrate decommodification practices within already existing formal procedures. By not providing a wage, volunteers had no legal obligation to continue working with REACH and it was not uncommon for volunteers to not turn up without warning. This is understandable as participation within REACH could not support a volunteer's subsistence within the wider economy.

Alongside the abundance of volunteering REACH employed people when there was money to do so and when they were not financially able to volunteer. During the EBS project, Jon had mentioned that the people joining us on the build would be mainly from his crew at Strip. This amounted to two guys: Sean, who had experience with welding, and Billy, who had played a leading role in building the prototype with Jon. Due to his disability, I only saw Sean a few times and so Jon, Billy, and myself became the primary build team, with Billy and Jon taking prominent roles as I got back into writing and analysing the data.

"He doesn't stop talking" Jon jokingly warned - a fact that was confirmed to me through a deluge of crude jokes, stories of family troubles and BMXing prowess, and comments of pessimism about the project that sat awkwardly at odds with his determined work ethic. Nonetheless, I found Billy quick to please and full of ideas drawn from years of experience, that is not to say they were always the best options, but we all made mistakes on site. When his ideas were relevant they caught things that both me and Jon had missed, for instance it was Billy who had suggested that we lap the damp proof membrane round the back as well as the front because moisture could come up through any gaps missed by welding the steel plate onto the container; although it would be a lot more effort, it has ensured the insulation would not get wet. Despite Billy's wealth of good ideas however he was still reluctant to vocalise his criticism of Jon's ideas. This seemed to be rooted in the implicit hierarchy on site - despite Jon encouraging us to vocalise when he made a mistake and to suggest solutions for the best possible



Figure 6.1.2 - Paid REACH labourers, the construction team.



Figure 6.1.3 - Trying Billy's idea, lapping the membrane around the insulation frame.

outcome. *"You're the architect, he'll listen to you"*, I heard from Billy on more than one occasion, and if Jon was off site it would be, *"Ring him up, he won't get annoyed at you"*. This implied worker/boss relationship that hung over Billy meant he was unwilling to disagree with Jon and this stalled the project at times as he didn't want to move onto the next task without first consulting with Jon. The abstraction of labour created a simple economic transaction, REACH paid Billy to do as instructed. Conversely, this hierarchical relationship was something I never saw between Jon and the unpaid labourers. Their relationships could not be boiled down to a simple economic transaction; some were doing favours, others believed in the project, in all cases there was no contractual obligation.

The example suggests an ingrained relationship between employer and employee that is created by abstract labour. Even within REACH, a company that is trying to overcome the disparity between housing provision and with Jon not extracting a wage the implicit hierarchy is still present. This is represented by Billy feeling frustrated but unable to voice his concern properly when Jon kept forgetting to complete his universal credits paperwork in fear that Jon may just get annoyed and fire him. It was represented again in Billy not wanting to critique Jon's ideas to anyone but me, he used me as a mediary to voice his concerns without them being traced back to him. Whether Jon perceived it or not, the relationship in Billy's eyes was clearly hierarchical. It was a subconscious reality that moved through REACH. Billy wasn't invited to any of the internal meetings with the directors despite having intimate knowledge on the progress of the build, nor was he included in any emails about REACH. Just as he had unique knowledge in the build he may also have had knowledge to share in terms of organisation, particularly as a wage labourer.

By comparing the direct and abstract labour use within REACH, a pattern emerges that shows how the contractual arrangements and formal procedures that surround wage labour created a hierarchy that wasn't observed in the unpaid labour. This hierarchy stifled development on site and, at times, made Billy unwilling to share his ideas. REACH's labour sourcing process is based upon volunteering and providing a wage when one is available. This has created a precarious workforce that emerges due to a lack of capital. In contrast Ferro argues that contemporary construction seeks to create a precarious workforce in order to produce more capital. This suggests a limitation within REACH's construction process - an issue of scalability for similar projects to REACH that rely on a precarious workforce.

Despite the supposed stability that came with receiving a wage, Billy's connection to wider wage relations left him precarious:

I arrived at site one Monday to find Billy and Jon already at it, the progress over the weekend was startling. *"I came up on my off days"* Billy explained to me, *"I end up volunteering 'cos i'll lose my universal credits if I work too many days"* he carried on *"hopefully i'll be gettin' a big bonus [from REACH] to make up for all my time working for nothing"*. Billy carried on by explaining his homelife situation. He and his "wife" were not married but had undertaken a commitment ceremony and they both lived separately. The reason for this, Billy said, was that both he and his wife would lose their benefits, or have them severely reduced if they cohabited, and so she, and their son, were living at her mothers' whilst Billy shared rented accommodation. *"I'd love to live in one of these"* Billy pined; referring to a

REACH house, most likely aware that it would affect his benefit payments. On occasion Jon said things like "*the next one we do is for you Billy*", but the next one hasn't happened yet. Stories like this made the events on site more poignant. I started to understand why Billy kept reminding Jon to send off and sign certain forms for his benefits, and getting frustrated if Jon forgot. The relationship entrenched the hierarchy; Jon (had he a mind to) could simply ignore Billy's requests, which could lead to a reduction in payments. This formal relation served in my mind as an impenetrable barrier between Jon and Billy, coalescing with me as a mediary - a person Billy felt comfortable confiding in.

Transcribed from field notes May 2019 - August 2019.

To understand Billy's labour relationship to REACH he has to be connected to wider processes of labour. Billy cannot find sufficient wage labour that will support him and his family and so is on universal credits. The purpose of his benefits, universal credits, is to support him to live when the market has failed him and to support him getting back into work, yet Billy cannot live with his family because doing so, supposedly, would lead to a reduction in payments for both him and his partner. Nor can Billy engage in further wage labour because this would also reduce his benefits to what he perceives as an unlivable condition.

Therefore Billy is stuck in his precarious position of undertaking abstract labour, but not too much because that would affect his benefits. So Billy looked for an out from this situation by undertaking direct labour on the construction site that will hopefully get him a bonus and secure him a house in the future. This alternative equivalence presents precarity for Billy, there is no guarantee he will get the house, and for REACH, as without providing Billy with a house they may be losing a valuable worker.

"The mere presence of social assistance or insurance may not necessarily bring about significant de-commodification if they do not substantially emancipate individuals from market dependence. Means-tested poor relief will possibly offer a safety net of last resort. But if benefits are low and associated with social stigma, the relief system will compel all but the most desperate to participate in the market."

Esping-Andersen, 2013:41

In the quote Esping-Andersen introduces the idea of significant decommodification, the notion that there is a certain amount of decommodification required to "*emancipate individuals from market dependence*". Alongside the data, what this quote suggests, apart from that Billy does not have "*significant decommodification*", is that decommodification is a scale that works within a wider economic ecology. Billy's reliance on benefits, a decommodified form of income, was not significant enough to ensure his independence from the market. The cap on the amount of income Billy could earn before having his benefits reduced meant that he tried to find a way to bypass this, through undertaking unpaid labour in the hopes of receiving a bonus. there was no contractual or even stated obligation by REACH to pay Billy more and I don't know if they did. It is impossible to understand why Billy undertook this unpaid labour for REACH without first understanding his relations to the state benefit system and how that affects his work with REACH. Furthermore, decommodification doesn't emerge as an emancipatory force that lessens the influence of the market but instead as a way to navigate market regulations. Again

it was a lack of capital that caused this precarious position for Billy. If REACH had more capital they could pay Billy enough so he isn't reliant on universal credits. A lack of capital is not just a creator of precarity; in the next section a lack of capital is used as a driver for innovation on the construction site.

7.2 Experimentation on The Construction Site

The previous section ended by showing that in order to maintain a regular workforce for the EBS build REACH depended on the wage relation. Whilst minimising the precarity of an inconsistent labour force this served to reinforce hierarchies on the construction site. This hierarchical relationship was not always in place and this section explores how experimentation emerged from all members of the construction team, primarily as a way to negotiate the lack of money in the build. This is not to say that experimentation doesn't occur on the formal construction site, however the causes for experimentation on the formal construction site is based more on the disconnect between the rigidity of design drawings and the messy realities of production (Löwstedt, 2015).

REACH's experimentation provides a reflection on the nature of decommodified practice. For REACH there is not a formal; correct way to build, everything is in negotiation depending on availability of funds, labour, and capital more generally. This is shown in this section through the way in which REACH separated the halves of the containers, the use of offsite construction, and the reuse of materials:

Billy was also a vocal (to me at least) critic of Jon's more eccentric ideas, believing that there was a standard way of doing things, and when deviations were made by Jon, Billy would have an aside with me. Running simultaneous, yet somewhat contradictory, to this position Billy was also all too happy to be proven wrong and revelled in success with us when we pulled apart the two halves of the container using scaffold boards, poles, a rope, and the van.

Me, Jon, and Billy were on site trying to work out our newest problem. We had cut a shipping container in two and were trying to separate the two halves without spending the £250 to hire a crane. For Jon the solution was simple "*we'll stick one half on poles and roll it, like the Egyptians did 4,000 years ago*" (field notes). So that's what we did. We had some scaffold boards that were going to be used as flooring and some scaffold poles that were used to provide overhead electricity to the site. We used a heavy duty jack to give us enough clearance for our scaffold boards and poles to slide underneath. We then lowered the container and tied it to the van. As the van pulled, me and Billy moved the pads that the container was previously sitting on in order to give it something to rest on.

Transcribed from field notes.

Here a lack of capital became a driver for experimentation in which myself, Jon and Billy came together to solve the problem. We could have separated ourselves into individual roles based upon our expertise and where we deployed most of our labour in the build process. Jon would be the site manager, Billy would be a general labourer, and I would be the designer, but this would ignore the fact that we all performed these tasks throughout various moments of the construction. Furthermore, the task of splitting the containers required three people and REACH didn't have the funding to have three labourers, so we

Figure 7.2.1



1. Sliding Scaffold boards underneath the container.

2. Jacking the container up to remove the pads.

3. Tying the container to the van.

4. Driving the van to pull the container apart.

5. The two halves of the container, now split.



all took part. Collectively we undertook the role of designer, in which we came up with a solution to pull the containers apart, of site manager, in which we thought through the logistics of the task, and of laborer, in which we performed the task.

REACH's practice of finding a different solution to using a crane not only reveals the experimental nature of their decommodified practice but also, in its execution, shows a less hierarchical way of organising labour relations. This decommodified solution emerged in response to the problem that it cost too much to move the container using a crane, it emerged in reaction to a commodified condition and as an experimentation to navigate around it.

This experimentation can be seen at all levels within REACH's construction process. At an individual material scale the REACH construction team experimented with the reuse of spray foam. As previously explored in the materials chapter, the spray foam is not an environmentally friendly material but it provides a vapour seal; this stops condensation whilst providing a decent u-value. It is almost mandatory for container construction and so because REACH uses containers they have to use it.

To minimise the environmental impact of the build REACH made the decision to limit spray foams use as much as possible. This negotiation worked for REACH until they saw how the installers had sprayed parts of the container clearly marked as "no spray zones"; these zones were to be cut out for the doors and the connections between the two halves of the container. We had to go through a process of chiselling the excess spray foam off the "no spray zones" which resulted in wasted time and a considerable amount of irregular spray foam chunks. Rather than just straight away disposing of these chunks, and considering them as waste, the construction team experimented with them by placing a random assortment of chunks in a makeshift mold (a plastic bag inside a cardboard box) and filled the mold with expanding foam to seal the gaps between the chunks and make, in effect, a solid insulation block. The block was disposed of due to the time taken for the expanding foam to cure, meaning it was unsuitable for the time scale of the EBS build. However this shows another type of experimentation



Figure 7.2.2 - Taking off the waste insulation and testing a new insulation block.

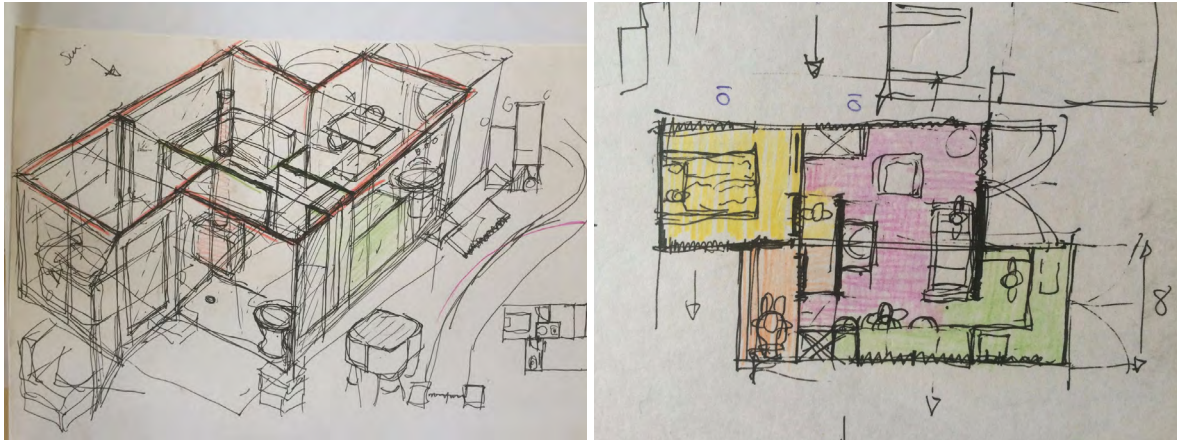


Figure 6.2.3 - Prototype design drawings.

happening on the REACH construction site based around reducing waste and not having to search for, or purchase, other insulation through REACH creating their own. This experimentation can only make sense within the context of an alternative construction site engaged in decommodified practice where the search for new materials inevitably would reduce costs. Furthermore this experimentation would appear absurd on a formal construction site where new materials are bought in and waste is an accepted part of the process (WRAP, n.d).

Experimentation for REACH emerges from the precarity created by not having the capital to engage in formal construction. This allows them to engage in methods that do not follow capitalist construction logics. As explored in the literature review, Ferro (2016) explains that industrialisation, i.e. the replacement of labour with machinery, would reduce surplus value to such an extent as to create a crisis:

"Think of the considerable part construction plays in the composition of gross domestic product (GDP). The extraordinary amount of surplus value produced in this sector not only supports the general rate of profit, but also serves as a generous source for the accumulation of capital (many of the greatest fortunes originated directly or indirectly in construction), and is one of the main devices – together with monopoly, colonialism, imperialism, etc. – used by capital to fight against its worst nightmare: the inevitable tendency of the rate of profit to fall with the constant advance of the productive forces." (Ferro, 2016:95)

To sideline the contradiction that a development in productive forces causes a falling profit rate, Ferro argues that construction processes that have tended towards industrialisation, including modular and offsite production, are either limited to the margins or rejected by contemporary construction. In other words, the rate of profit is prioritised over the development of productive forces in the formal construction sector and this is represented by the high rate of employment and lack of machinery in the construction process. For REACH, whose economic model is not based on turning a profit, this is not an issue. This has enabled REACH to explore, and theorise, a more industrialised construction practise that is based on offsite and modular production. REACH wants to be pioneers in a new wave of offsite and modular housing as they allow for rapid production (minimising costs) and personalisation within a relatively standardised template (allows more personalisation than traditional homes) whilst causing minimum

disruption on site for present residents (field notes). This is a process REACH sees currently happening on the margins of the construction sector but in isolation:

"We've got a government who haven't got a clue what they're doing. We've got Homes England who're still going through this massive period of change and really don't know what they're doing... lots of people out there doing lots of good stuff, but everyone's doing it in isolation, in silos and nobody was pulling it all together and that's why I started to shepherd the direction because we all need to get together and capture the good practise and share it and stop doing this 'not invented here' syndrome. Why not share good practice?"

(17/08/18 Interview with Jon Johnson)

Jon sees this lack of development as isolated working practices; yet this fails to explain the push in offsite and modular housing production post WW2 that lost traction. Only through Ferro's analysis does this make sense and, if Ferro is correct, this more recent wave in isolated modular development will either fail or cause a huge economic crisis through the loss of surplus value.

REACH sees its goal of industrialisation as a necessary modernisation project. They want to encompass the whole construction process to stop profit in the industry - there would be no subcontractors; it would all be done in house. The only thing that would remain out of house would be safety regulations (Field notes, 05/12/18). Thus this industrialisation is bound up in their attempt to minimise the cost of production, which according to Ferro (ibid), it would.

"REACH will take housebuilding out of the Victorian era"

(An oft quoted Jon saying, field notes)

Understanding REACH's long term goals for a more industrialised process is important because it contextualises their practice on the EBS construction site. It serves to explain why they use the container, as a standard modular block that is easy to use and why they produce offsite, as a way to move towards a factory process whilst also meaning that REACH doesn't have to hire builders near the EBS office or pay accommodation costs for their builders to work up there. For REACH, modular and offsite production are the ways in which housing can be brought out of the Victorian era. This spawns other questions about education and its relationship to the construction site.

"We're still training kids in the same old techniques, where they're training them at all. Building is not an industry that young people want to go into these days, cos who wants to sign up to having 3 years of being out on a building site in the freezing cold over the winter getting the shit kicked out of y' and being forced to make the tea all the time when you're on an apprenticeship on about £4 a week? ... take some 16 year old straight out of school, virtually no qualifications, we can put them through the sustainable building academy, they can work on a house, they can go on and live in that house, they can afford to live in that house, even on minimum wage carrying on in a building job somewhere else, and because they've got a stake in that house, they're gonna look after it they're gonna care for about here they live. Certainly the chances are higher that that kind of thing can happen."

(17/08/18 Interview with Jon Johnson)

Ultimately REACH's critique of the formal construction sector and their attempt to further industrialise is a process to simplify their method of construction and speed up the construction process. This is reflected in REACH's current mode of construction - modular containers built offsite.

"three of us with a [NVQ] level 3 in joinery did this and it's not complicated, we just had a bit of help in spraying the foam insulation on the inside cos that is a job i never want to do, and the electricians and plumbing obviously 'cos they needed to be certified. But for the rest of it, literally, it was designed on the back of an envelope by me and me 14 year old and we built what we drew pretty much with a few tweaks and we didn't really make any mistakes, well nothing that went wrong while we were building it. We did some stuff that I clearly wouldn't want to do again, but that's the point of doing a prototype. But we've got a perfectly serviceable building that's worked through; even when it was really, really, cold in the spring it was fine"

(17/08/18 Interview with Jon Johnson)

This section shows the experimentation implicit in REACH trying to move towards an offsite; heavily industrialised housing production process from starting with a small team where the highest relevant qualification was an NVQ in joinery. As previously explored, the main reasons behind the use of containers is that they are a cheap structural frame and they are simple to convert. Their other benefit is that, according to REACH:

"The many advantages of offsite construction lend themselves to container architecture"
(IPPR funding document)

However there are also downsides - Any cut outs require reinforcing as the container's strength as a structural unit doesn't come just from the reinforced edges and vertices but from the unit as a whole; hence why the walls are corrugated. This limits the shapes of a container building considerably and REACH were designing large open plan spaces the structure would have to be cut so much that the use of containers would be aesthetic over structural (Field note analysis of the container structure).

Experimentation in the method of construction has developed from an initial ideological idea of moving everything in house and industrialising to reduce costs, speed up production, and remove profit from the construction process. To date this has meant using containers as a standard module size and experimenting with ways to manipulate the module through the prototype and the EBS project whilst being mindful of its clear limitations. The construction for the prototype was created on site, but the EBS was built off site and transported to Silsden; this was a clear decision to reduce costs from the commute/hotel costs of working in Silsden and allowed REACH to move further towards their goal of working in a factory with a fully industrialised construction process. This experimentation without necessarily having any explicit decommodified actions contained within being built offsite and industrialisation leads to a more decommodified practice in the future that lowers surplus value and reduces the costs of construction to provide cheaper housing. In REACH's attempts to reduce commodification in the construction sector through their own construction method, this can be seen as a decommodified process, i.e. a series of economic interactions working temporally to reduce commodification.

As opposed to the predictability of formal construction where contractors own cranes, materials can be bought, and buildings have to be constructed a certain way to maintain profit margins, REACH's construction method used experimentation as a key way of overcoming their lack of capital. Within this experimentation, precarity played a leading role. There was no guarantee that their experimentation would be successful, the creation of a spray foam block was deemed too time consuming to be usable for the EBS project. In the attempt to move further offsite the experimentation is only really beginning and is dependent upon REACH having future projects after the EBS office. This experimentation is key for understanding the way decommodified practice emerges for REACH, it is a trial and error process brought about in reaction to commodification of construction practices. Looking at the previous chapters, this experimentation is present in many of REACH's construction practices. Experimentation weaves through the story of REACH. The primary practice of REACH, being the replacement of the universal equivalent with alternative equivalence, was a constant experimentation and negotiation process that wasn't always successful. Of course, precarity is inevitably bound up within this experimentation process as REACH attempts to reconcile their alternative practices within formal processes of construction and, as has been documented, they are not always successful. REACH suggests that experimentation is intrinsic within the setting up of decommodification practices where money and profit are not primary drivers. The REACH example of experimentation supports Peredo & McLean (2019) that decommodification emerges by degrees and in reaction to market forces and is not a totality. Yet the REACH example also disagrees with Peredo & Mclean by showing that this experimentation with decommodified practice does not automatically act as a countermovement that serves to limit commodification. As can be seen with the crane and insulation experimentation examples these were just one off actions that attempted to overcome REACH's lack of funding. REACH's move to offsite and modular production however could start to be considered as part of a countermovement because, as REACH stated, its aim is to reduce profit in the construction sector by reducing construction time. In addition this decommodified process would also serve to undermine the labour relations within the construction sector which relies on a large labour force to produce surplus value, as explored by Ferro (ibid), but this is not an explicit goal for REACH. These examples of experimentation then serve to differentiate between decommodified actions, those that occur without acting as a countermovement to commodified forms of construction (such as the crane and insulation examples), and decommodified processes, a temporal attempt to replace or reduce commodification. In a grander narrative it can be argued that the project of REACH is a decommodified process acting as a countermovement to formal construction yet these individual actions within this serve to suggest that decommodified actions can happen in isolation.

7.3 The Extension of The Construction Site

The notion that decommodification should be understood not just as action but also as a process is explored further through looking at the ways in which Jon's residence within the prototype extended the life of the construction site and what this implied for the future of REACH. This continues the argument of the first section in this chapter which showed the ways in which REACH's division of labour is more egalitarian, through a conscious attempt to avoid subordination, than formal construction and takes it one step further into residence. The ways in which REACH envisages a future resident's ability to engage in the construction of their house is tested through the prototype, so that the prototype becomes not just an experimental method of construction but also a method of dwelling. Just as REACH's construction attempts to critique formal construction methods, their proposed unity of construction and dwelling, through having future residents involved to some degree with the construction process. In this way, the construction of the prototype represents a more direct labour method of construction, in which the producers - specifically Jon - are not abstracted from the product of their labour - the house.

This direct form of production represents a different type of decommodification, a decommodification of labour. This presents a new issue in defining the efficacy of decommodification, because whilst Room (2000) argues that decommodification cannot be understood as moving beyond capitalism, Room also argues that a decommodification agenda should include production as a method of personal self development. This section goes further than this to argue that decommodified production can also suggest how modes of production beyond capitalism could operate. This section takes data from



Figure 7.3.1 - Interior of the prototype.

various visits to the prototype and puts them alongside REACH's vision for its own future to suggest a narrative of growth that REACH imagines through the experimentation of its present.

Once inside, the house - through its act of simply being - raises the absurdity of professionalised and abstracted labour in the construction industry. Small though it is, it is perfectly homely and designed to a far higher, and infinitely more personalised, standard than houses found on the glossy pages of estate agent brochures. The space resembles a studio apartment. I am greeted by a stylish kitchen of what look like reclaimed wood cupboards, with a lounge over to my right - laying claim to the glass facade, and a copper curtain rail with desk and raised bed behind. An alcove behind the kitchen hints at a bathroom. The high ceilings, large windows, and hardwood floor erases from my mind visions of dank shipping containers and is more reminiscent of a Nordic chalet. There are touches of story behind every object, a light fitting made from two drum cymbals, the beams that connect the two halves of the shipping containers together, the wood beading that holds the windows in place, and the small hook-on wooden ladder that provides access to the bed all hold their material stories of construction and use. Transcribed from field notes - my first visit to the prototype.

From my first visit to the prototype I was impressed by the detail and layout of the space. Jon explained this was made possible by his own input into the project which enabled him to plan the spaces out in the best way for him and his son. As a prototype though, the house has flaws and is a process of experimentation that shows not just how REACH can build but also how REACH can live.

"cos we didn't know how long it was gonna stay we d'int really get round to plumbing the loo in. So we've got a temporary solution at the moment and I have to wander up the road when necessary but I don't mind having an outside loo again, it's no particular hardship except when it's cold and wet in the winter but that's my problem, it's something we could've got round if we planned it better. It's like the insulation, we dint do the insulation underneath properly, it was all done in a bit of a rush. So what we shoulda done, cos the way these are built there's a series of metal fins almost across under the bottom which create a sort of space like that [Jon gestures a corrugated effect] and we just were gonna get old Kingspan and Rockwool and just all sorts 'n reconstitute it into a block of recycled insulation and just shove that under the bottom, yeah so we didn't do that properly. But the rest of the insulation build up in this is, it's just cobbled together really we've got... there's some insulation under the floor, on the actual underneath, then there's a vapour barrier, cos you don't know, this container was made in 1985 so its gone all round the world, you don't know what kind of things and stuff have been spilt on the wood and it's marine ply so it's not that absorbent but even so... So we put a thick vapour barrier across 50mm of recycled denim on the floor. The walls obviously it's all sprayed out with foam which counters condensation - which is the main issue with living in a container. Insulated plasterboard and there's another 7 inches of earth wool on the ceiling and on the outside there's another 10 inches of Kingspan sheeting wrapped in DPM, it's not a permanent solution on the roof obviously but A: I wanted to see how the roof of the container actually worked in this kind of situation and B: that

was the best I could come up with in terms of a design for the roof."

This extract from Jon reveals the experimental nature involved in the tectonic production of the house - the reconstitution of insulation, not fully understanding the history of the container, specifically its marine ply base, and the non-permanent roof solution which Jon aims to fix. What is also revealed is the experimental nature of living, specifically living within a house that Jon has constructed; this is revealed through Jon's evening sojourns to the Heeley City Farm loos. This is something Jon wants to fix in the future, and to make sure it doesn't happen on any of the imagined future housing projects.

"Jimmy is 16 and has few qualifications as he is dyslexic and hates school. He's good with his hands but sees no future for himself. He joins REACH Academy as an apprentice in sustainable building, works on a 1-bed unit which he moves into in a nearby development. Able to pay the rent and acquire a share in the equity he is proud of his home and looks after it, settling in and working as a volunteer on the estate maintenance team to keep it looking nice."

(14/02/2019 Jon's interview with a journalist)

REACH's vision for the imagined Jimmy echoes the reality of Jon's present in the prototype. Jon used the prototype as a learning experience that wasn't perfect but an experimentation. Jimmy is expected to use the construction of his own house as an education through the joining of the 'REACH Academy'. Jon's experimentation proves, for REACH at least, that the construction of and dwelling within a REACH house is an attainable possibility.

Another example of this is the way in which a REACH home can adapt. The builder-cum-resident is intimately aware of the construction and so issues can be quickly resolved.

"We did get a tiny bit of condensation and one of the things I would do differently is not putting the wooden surrounds around the window stuff 'cos we've reglazed all the recovered UPVC, so we've done that with the wood just to hold it in place; that should be triple glazing."

(17/08/18 chat with Jon)

During our chat, Jon took apart, drilled a whole, and refixed the wood surrounds with a makeshift drip tray to catch any water that may condense on the windows (field notes). His intimate knowledge of the problem made a solution simple; it is this ability to change very quickly that REACH wants to take forward and does so with another imagined example.

"Alex and Cody are expecting their first baby so can't keep living with Cody's parents. They have a tiny amount saved but not enough for a private rental. They put £500 down on a 1-bed REACH Home and help to design the exterior panelling and choose the internal layout. As baby Austin grows up they have managed to save through paying tiny fuel bills and can afford to add on an extra bedroom unit by the time he is 18 months. REACH make and install it in just 2 weeks and everyone sleeps happier. When his sister arrives a year later the bedroom is partitioned and then a playroom is added a year later, again bolted on within 3 weeks."

(14/02/2019 Jon's interview with a journalist)

In this imagined scenario, flexibility and the ease to change are crucial for how REACH wants to present their future build of housing. This is achieved not only through REACH's modular construction method but through this immediate relationship to the house that blurs the line between the builder and the resident.

Finally, the way in which a REACH house is lived in is different to other new builds. This is particularly evident through its environmental aims and how they differ from formal constructions' understanding of sustainability. Jon contrasts a REACH house to a Passivhaus, a leading standard in designing sustainable housing that makes the resident passive within the home. This is done through measures such as airtightness, meaning limiting openable windows, and automatic temperature controls, meaning it is difficult to just turn the heating on if the resident is cold. Doing renovations or installing a satellite dish, for example, affects the thermal bridge as does everyday acts such as opening windows to let out cigarette smoke or smells if the food gets burnt when cooking. Contrast this with the REACH method.

"I'm sitting writing this reply with frost on the ground outside and no heating on, it's cosy and if it gets any cooler I'll put a few candles on which will warm me up for the rest of the night."

(14/02/2019 Jon's interview with a journalist)

Through the use of waste materials, REACH's method moves beyond the realms of Passivhaus. REACH uses a similar insulation amount but considers further the environmental impact of construction.

"we've used Passivhaus principles but its not Passivhaus and we'd never get it certified because we're using recycled stuff and it doesn't work with PHP [Passivhaus Principles] you need to know the u-values of everything and we'd have to measure each item individually and there's no way it'd work, but we're doing it based on energy it's producing, and it's just clicked over onto 2 megawatt hours from the 6 solar panels in 18 months and the first year it used 975 kilowatt hours so we're in credit with that. So this is zero fuel bills, I've not paid a fuel bill since I've been here."

(17/08/18 chat with Jon)

If Jon gets too hot, he can open a window; if he's too cold he lights some candles or turns on the heater. This further extends the role of the active resident within the home. In isolation this may not be very different to more traditional housing, when taken alongside REACH's experimentation of living this further establishes the extension of the construction site into the residency. REACH is testing a model where a resident can build the house, live in the house, and change the house to suit their needs.

"[REACH is] not something that's being done to people, it's being done for people, by people... it will change the way people approach certain kinds of houses, because they'll have a stake in it."

(17/08/18 chat with Jon)

When issues emerge within the prototype, Jon treats this as a learning experience. This extension of the builder is seen most clearly with REACH's vision, believing that the

production of their housing can serve to support social issues.

"We can show a completely different model and a completely different way of making a success out of building houses that people actually want, where they want them, so community led, involving people in the design and the place where they're gonna be living. That gets round some of your more outside the box things your builders don't normally take account of like mental health and wellbeing, crime, antisocial behaviour... you're building the right houses in the right places with the right things around them..."
(17/08/18 chat with Jon)

These extracts from the fieldwork have shown REACH's present realities that are testing grounds for future potentials. REACH's construction method, to extend the construction site, differs from traditional modes of construction that presupposes a builders detachment from the site post construction owing to their inevitably abstract labour.

Whether it be working for REACH and acquiring a house or reducing costs by being involved in construction these future potentials are always grounded by alternative equivalence. This shows that for REACH, alternative equivalence is not just a way to get their project off the ground without having the initial monetary investment. Decommodification in this example is a process that enables more people to enter into housing.

Whilst the practice of extending the construction site may not appear to be grounded in decommodification this extension is dependent upon the direct labour of builders-cum-residents that means their labour is not abstracted for a wage but is for the labourer's immediate benefit. This contrasts with formal construction, where labour is abstracted for a wage, and shows a less commodified way of construction. Again this way of constructing is experimental, it emerges in trial and error and is based upon REACH's ability to make mistakes and fix them. This moves from the small scale of finding that lighting candles can rapidly heat up the prototype, to exploring new solutions to the roof finishes. Emerging from this experimentation is a temporal aspect to decommodification. REACH at once understands its position within formal construction whilst also using this position, and experimentation within it, as a testing ground to suggest future practice. This testing ground becomes a proving method not just for the tectonic; technical resolution within the construction process but how this is extended into a different mode of living as an active resident within a REACH house with a goal for communal living.

"A village community based around shared community space, so a community laundry, with some space above it, meeting room space - so you can use the heat from the dryers to heat the room, all the spare electric off the shared solar arrays across the whole estate goes to offset the cost of running the laundry. People use it as a place to interact, to get to know each other. The person running the laundry is the de facto caretaker for the whole estate. You get the right mix, obviously it's this chemistry of a sort of microcosm of society, it's about how people interact, you can't ever legislate for that... I can see it as a blueprint. On paper it looks great, sustainable drainage, beautiful plantings everywhere, fruit trees, vegetables, just like stuff you can help y'self to, stuff that everyone looks after, tended in common kinds of stuff. You've got play equipment round the site for the kids and it's all self-contained and everybody looks out for each other."

(17/08/18 chat with Jon)

From this, REACH's decommodification evolves not as isolated actions but as a process that points beyond the immediate relations of the construction site towards a different set of relations based upon direct labour and the inevitable extension of the construction site that emerges beyond this. Whilst it suggests the potential for what construction may look like beyond the boundaries of contemporary formal construction this does not mean that the method is correct as a way to move beyond current relations.

7.4 The Efficacy of REACH's Construction site

REACH's construction site is borne from their attempts to undertake an alternative method of construction which they believe is key to overcoming the contemporary housing crisis. The character of their construction site was defined by a lack of capital that underpinned all of REACH's work. Yet it was precisely REACH's lack of capital that allowed them to define their alternative method of construction and the relations within it.

The characteristics of these construction site relations became precarity and experimentation. Precarity came from not always having the money to, for example, be able to purchase materials thus REACH had to engage in alternative equivalence which, as explored in the materials chapter, create precarity. Experimentation emerged from, for example, testing out a new method of insulation by injecting expanding foam into a mold filled with spray foam offcuts. Within this precarious relation, finding ways to circumvent wage labour was a rarity; REACH rarely had the capital to recompense labour. This meant that alternative equivalence was used, from helping in job searches to providing a PhD case study. REACH's myriad labour relations reveals more about the people who make up REACH. REACH is not an ideologically coherent mass of people who come together to attempt a solution to the housing crisis. Whilst probably all of the people working within and for REACH have sympathies for their cause it is not this cause that defines them. In this way REACH is more of a ragtag group of people from many echelons of society, loosely aligned around a problem but involved in REACH for many different personal reasons from wanting to gain experience, to receiving a wage, to returning a favour.

Where wage relations were used by REACH they could only happen when REACH had funding and were explicitly to help those who couldn't engage with REACH otherwise, the only paid labourers I saw were those involved in the construction of the EBS project. Even when labour was monetarily recompensed for Billy this caused issues with his government benefits and so he engaged in unpaid labour with the hopes of receiving a bonus that wouldn't be declared to the government. Furthermore a hierarchy began to emerge between Jon and Billy as Billy was keenly aware of Jon's ability to fire him. In both these ways capital may have allowed Billy to engage in the project but at the same time created a precarity that other labourers experienced from not being paid.

Despite the hierarchical relations that started to emerge on the construction site, meaning Billy felt uncomfortable criticising Jon's ideas aloud, every member of the construction team engaged in putting forward solutions to the problems we faced and jobs were shared out of a lack of capital to allow a clear job hierarchy. This created a more egalitarian construction site than formal construction where the site manager sits in a cabin, the architect rarely visits, and the labourers are on site. The fact that REACH's construction team was primarily three people meant that we all got stuck in. The experimentation that all of the construction team engaged in emerged directly from the lack of capital and was transferred to all aspects of the construction site from its offsite nature, which was a method to reduce costs, to material management, and to

technological construction solutions. This experimentation started to suggest REACH's future vision. In particular REACH shows how Jon's direct experimentation and labour within the construction process of the prototype extends to not just his occupancy of the prototype but also how REACH may operate in the future. REACH's deployment of direct labour suggests REACH's vision of how imagined future residents would be involved to different degrees in the construction process. Jon's direct labour creates a personal involvement for him with the prototype which means he is not merely a passive dweller in the house but an active participant in its maintenance and functioning. In this way Jon extends the construction site beyond the building's erection into its dwelling and means that he is intimately aware of any problems that may arise.

Understanding the configuration of REACH's construction site is useful for, and characteristic of, other construction sites that are operating within, and against, formal modes of construction yet lack the capital to fully engage with them. It provides an understanding of ways to circumvent the capital that is almost essential to fully engage within the formal construction site. REACH's alternative configuration of the construction site also allows a theoretical reflection on the nature of construction economics and how REACH's use of decommodification fits within this. As previously established, the lack of capital created different formulations for REACH's construction site that became defined by precarity and experimentation; REACH used decommodified practices to overcome this lack of capital. What becomes increasingly clear through REACH is that their precarity and experimentation only makes sense because of REACH's operation on the margins of formal construction. From labour relations, where directors were worried about being accused of tax evasion because they weren't getting paid, to site experimentation, where REACH couldn't afford to hire a crane to pull the containers apart so rolled it on scaffold poles, to the extension of the construction site, where Jon's active participation within the home reduces the cost of hiring professionals to fix issues. These actions only make sense when REACH is understood to be acting within and against a wider economic ecology based upon capital that normalises wage relations, enforces hierarchy on site, and creates passive dwellers within the home. Decommodification emerges here then as a way for REACH to overcome or circumvent the norms of formal construction. Direct labour replaces waged, technological experimentation reduces reliance on costly solutions, and the extension of the construction site creates a more autonomous way of living. Simultaneously REACH uses these strategies to suggest how they can scale up. REACH proposes that direct labour can be used by residents to reduce the cost of construction and allow them to be active residents. In this way, REACH presents a critique of formal construction by proposing an entirely different way of constructing however, because their goal is to overcome the contemporary housing crisis, REACH's efficacy must be brought into question.

Ferro (2016) shows that the contradictions of the formal construction site primarily manifests itself in the issue of industrialisation, if construction industrialises it becomes more efficient at producing houses but would lose profit because there would be less labourers. In this sense the construction site already points beyond itself. new relations, such as REACH's experiments, don't need to be created because the construction site already can industrialise but the contemporary arrangements of capitalism prevent it. Abstract labour already points beyond itself because humans already produce socially but on a global scale, it is the wage relation that ties this labour back to capitalism; overcoming this would mean a direct, concrete, labour but on a global scale as opposed

to the local scale proposed by REACH. Furthermore, can we be sure everyone wants to be involved in the production of their own homes? Probably not. Formal modes of construction already have the capability to build enough houses but it is contemporary relationships of land ownership that stop them from being distributed to those who need them. All of this suggests that instead of producing new relations, such as REACH's, activists should be seeking to appropriate existing relations by moving beyond the profit motive. This means that the REACH model is probably not a successful way of overcoming the contemporary housing crisis. This isn't to say REACH has no contribution; as a project it highlights the absurdities of formal construction whilst also showing that organising the construction site can happen without profit. They aim to provide immediate benefit for future residents through alternative construction practices that are not limited by the formal construction industry. Different actors, networks, and knowledges are available through the way they address the construction site. Yet as a method to overcome the contemporary housing situation it is trapped within the wider economic ecology of capitalism.

8. Conclusion.

Through the observation and participation with REACH Homes, this thesis has focussed on alternative construction practices that are based more upon use-value than exchange-value. These practices emerged as a critique to the prevalence of exchange value within formal modes of construction and were necessitated by the lack of capital that REACH had. Although these practices were specific to the REACH condition and way of producing, they hold lessons for others who are looking to build without the prevalence of exchange value through providing a deeper understanding of alternative construction practices. Alternative construction practices, by their very nature of being alternative, exist within an existing and established construction sector. They have to navigate the languages and nuances of this formal mode of construction in order to meet the requirements and regulations to build. This formal construction sector has been scripted by the logics of financialisation, of treating land as a speculative asset and construction as a tool to transform the asset to attain its full monetary potential. An alternative construction that attempts other economics is at odds with this logic and has to find work arounds through trial and error. Understanding this alternative construction practice required reviewing the ways in which construction was reconfigured without profit being the primary motive.

The primary alternative construction practice undertaken by REACH was the replacement of the universal equivalent, money, with alternative equivalences. The formal relations created from equivalents are disentangled through the practice of alternative equivalence which searches for non-profit based alternatives but in doing so creates precarity. The three domains of land, materials, and construction site were chosen because of the regularised practices created by the universal equivalent and, by extension, REACH's extensive practices that sought to disentangle money from construction within these domains.

This thesis explores the 'part' of alternative construction practices to better understand the 'whole' of the present moment of capitalist construction. Adorno (2017) carries forward the work of Marx in using the dialectic between the whole and the part. Adorno argues that there is no way to fully understand particulars and generals, parts and wholes; as new information is revealed the nature of both changes. He states "*through the micrological insight which immerses itself in the particular that what is rigid, what is seemingly distinct and determinate, begins to move*" (Adorno, *ibid*, 102). pushing into the particular is a method for better understanding a preconceived knowledge of the general but can never provide a full picture because both are continuously in flux. The thesis' literature review provides a general understanding of formal and alternative forms of construction which was taken forward into the empirical research. The empirical research into the particular, REACH Homes, then extended outwards to provide insights not only into alternative construction but also capitalist construction. This exploration of whole and part is an acknowledgement that alternative construction is accounted for within the capitalist moment.

The thesis argues that in our present moment of financialised formal construction,

alternative construction practices emerge as both a way to critique formal construction and to build with little money. The primary example is alternative equivalence which serves as a way to acquire the necessary components of construction without purchasing them. In this way REACH replaced an equivalent relationship, where the relationship between two equivalents are equal and countable, with an equivalence relationship, where the relationship between two equivalents is equal but non countable. Through their attempts to critique the financialisation inherent in formal construction, alternative construction practices should be understood as a type of decommodification. Studying them as such allows a complication and clarification on decommodification's definition. Understanding the dialectical nature between decommodification as an action and as a process is prominent amongst this as is questioning the efficacy of decommodification. Whilst proving a different method of building is possible, alternative construction practices exist in the present moment and can be used as a tool to offset the contradictions of financialised construction.

The theme of Land allowed a critical look at how alternative ways of procuring and developing land had to navigate procedures and languages of formal construction. It then explored further the way in which land was acquired in alternative construction, as juxtaposed to a standard monetary transaction; introducing the term alternative equivalence, as a way to understand a reciprocal, non-monetary economic practice where REACH would provide something for the land. However these alternative equivalencies were not always successful and this could only be rationalised by looking at the motivations of the actors on either side of the alternative equivalence to understand that many do not wish to engage in this economic practice because money is a necessary component of the wider economy.

The materials theme carried on examining the practice of alternative equivalence in relation to material procurement. This practice can work as a way to acquire materials but this is not always a reliable source, and acquiring materials in this way is often a fleeting chance therefore REACH also had to use bought materials. Furthermore the efficacy of this alternative equivalence that facilitates this material procurement must be brought into question, because although a goal of this alternative construction is to critique formal construction it may in fact serve to off-load its contradictions by providing an outlet for waste materials. Finally these materials and the sequencing they are acquired in is different to formal modes of construction that specify that the building already has an aesthetic dictated by the materials; this can not happen when the materials have not yet been acquired and when there is no guarantee what the materials might be. This inevitably creates a tension with formal modes of construction and so alternative construction can be held up by this process and limited in their material acquisitions; this exploration of tensions was carried through to the construction site theme.

The construction site explored firstly how the availability of both paid and unpaid labour is intrinsically linked to formal relations of labour due to the use of alternative equivalence. It also demonstrated how a lack of capital, whether that be machines or money, can be a driver for innovation on the alternative construction site as a way to circumvent conventional practice. Finally it suggested that the intrinsic relation between builder and construction site is extended as builder becomes dweller, providing a different relation than formal construction that is based upon a labour that is abstract from the building as product.

These alternative construction practices are called such because there is no profit

motive within them; REACH, the practitioner, explicitly uses these methods to critique financialisation and profit more generally within the construction industry. REACH's goal is to remove profit from housing construction, in other words to decommodify it. This decommodification emerged on the margins of the construction industry, it is not a centralised; top down decommodification that is legitimised within the wider economy as described by Esping-Andersen (1989). This research explores decommodification not only as an alternative to capitalism, where alternative construction practices may work towards replacing formal construction, but also as offsetting capitalist contradictions, such as the use of waste in construction that offsets the issue of overproduction in formal construction. It sees this decommodification as a precarious and experimental practice that struggles to be legitimised whilst simultaneously fighting against the status quo. It also calls for more in-depth studies of decommodification existing as an observable practice, not just to understand the practice itself but also because undertaking alternative construction practices worked as an educational mechanism for REACH, revealing to members the nature of formal construction.

Adding to the literature of decommodification forms one of the contributions to knowledge. The other contribution is in the methodology required to obtain the data of alternative construction practices. The deployment of a modified Participatory Action Research (PAR) allowed me to play a part in the development of REACH through the use of my architectural experience. This methodology differs from PAR because although an improvement of REACH's practice was a part of the output another output was the ability to add to the definition of decommodification; as participatory based research focuses on the collaboration itself as the output I modified the methodology to fit the outputs whilst questioning this core tenet of PAR. This modification required inputs from Research by Design (RbD), to incorporate my architectural experience, and an ethnographic approach to case study methodology, to allow for an analytical reflection on the nature of decommodification.

This conclusion chapter starts by providing a more in-depth view of these two contributions. The contributions to knowledge lay the groundwork for how to take the research forward and highlight the specific parts I took interest in, namely how REACH's construction site reflected back to reveal more about the nature of formal construction sites. This holds promise from both a research based and a practice based agenda.

8.1 Contributions to Knowledge

Methodology

The first contribution to knowledge this thesis makes is in the methodology. It is derived from the outputs and builds upon participatory action research (PAR). The purpose of the thesis was to critically explore the definition of decommodification as it reveals itself through alternative construction practices. In the literature review authors such as Gibson-Graham (2006), Vail (2010), Gibson-Graham (2013), and Peredo & McLean (2019) saw decommodification as a practice that emerges in activist circles to lessen the pervasiveness of capitalism; this is counter to the state imposed decommodification researched by Esping-Andersen (1989). This activist element that is built upon by the decommodification literature supported an action based methodology that would allow REACH and myself to reflect on both the successes and failings of our collective construction practices. Yet running in tandem to this action element is the definition of decommodification which is contested. Authors, such as Vail (ibid), understand decommodification as any action that lessens market influence whilst others, such as Room (2000), see it as limited within capitalist thought and advocate for a revolutionary agenda. Analysing this requires a step back from the action element; this is because decommodification is not a part of the REACH lexicon. REACH's aim may be to remove profit from housing construction and consumption but this is through their alternative construction practices and not as an explicit decommodification agenda. Thus this methodology starts from a PAR process, where REACH and myself collaborate to change and improve their practice, but then moves beyond this into an individual research based analysis of decommodification as it occurs within REACH's alternative construction practices.

The methodology used in this research is unique to PAR in two ways. Firstly although one aspect of the research is based around improving REACH's practice, the other is about problematising the definition of decommodification; this is an issue within PAR as this is not a co-produced output. As McTaggart (1997:28) states "*Authentic participation in research means sharing in the way research is conceptualised, practiced, and brought to bear on the life-world. It means ownership, that is, responsible agency in the production of knowledge and improvement of practice*". Although knowledge was co-produced when exploring how to improve REACH's practice, there is a definite split between PAR and the methodology at the point of analysing decommodification. Secondly from an ethical standpoint my views do not fully align with REACH's. Their position is that they can solve the housing crisis through providing a non-profit alternative, shielding housing from capitalism. I believe that whilst this practice can be useful for showing alternatives to capitalist organisation it is ultimately impossible to shield certain aspects of the economy from capitalism and instead they become a way to offset the contradictions of capitalism. This creates an undeniable divide between us because whilst I can support them in their work it is from a position of not believing in their core goal, orthodox PAR researchers (see Fals-Borda, 1989) might claim that I am exploiting REACH to further the research on decommodification. This is the issue I find with PAR. To restate, the output of PAR is

the positive change of a collective project (McTaggart, 1997; Gaffney, 2008; Waterman, 2014), some argue with a collective political consciousness (Fals-Borda, *ibid*); these outputs are limited to the immediate people that the researcher is engaged with. Yet the lessons learnt could be of benefit to other people. Take for instance the way in which REACH used alternative equivalence in their attempts to acquire land. Knowing that actor motivations are of importance to the success of acquiring land through alternative equivalence could be relevant to other groups undertaking alternative construction practices, but PAR argues that the output of the research is for the benefit of the participants. In *The Pedagogy of The Oppressed*, a text that laid the foundation for PAR, Freire (1985:45) states:

"Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor... knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whose they consider to know nothing. Projecting an absolute ignorance onto others, a characteristic of the ideology of oppression, negates education and knowledge as processes of inquiry."

Whilst this is a call for a more participatory knowledge production process it does not deny that people may have knowledge that others do not and that there is nothing oppressive in sharing it, it is more in the way that it is shared. In this way this thesis contends that other outputs could be included within PAR to open it up for other people who may benefit from access to this knowledge. Although every situation and context may be different there are ideas, methods, and stories that can be transferred from each and tested in new settings. Expanding this thesis' outputs to analyse decommodification as it emerges from alternative construction practices can be of help to other groups.

To extend the potential of PAR as a methodology that benefits those outside of the project I complemented it with two other methodologies, research by design (RbD) and case study analysis. RbD is a recent methodology that explores design as a type of research (Megahed, 2017) and makes use of my architectural training. Similarly to PAR It is an inward looking methodology that focuses on a reflection of an action (Montague, 2014), the two differences being that RbD is focussed on the researcher as a designer without strictly needing a participatory element and that RbD uses this research to reflect on the process of design. This focus on the process of design naturally fitted within the research as design was a facet of the alternative construction practices of REACH. Reflecting upon the alternative research practices became an integral part of my work with REACH as a way to see what worked, expanding outwards however this reflection has the potential to support similar groups undertaking these practices; this is where RbD moves beyond PAR, by making the research more directly relevant to others. The analysis on decommodification required a level of distance from REACH as decommodification was not a stated goal, furthermore I did not feel comfortable engaging in a theoretical debate about the efficacy of their work as it may have closed doors that had been opened by the relationship I formed with the group and my background in architecture. To achieve this analysis of decommodification, I took reference from case study methodology. Case Study allows an intense study of one or several cases to understand a wider phenomenon (Swanborn, 2010), typically employing observational or ethnographic methods in a qualitative case study. Though the outputs of some case study research projects have been the improvement of practice, case study research

attempts to have no manipulation on the experiment by the researcher so that the true phenomenon can be uncovered (Dul & Hak, 2008). This is what separates this methodology from PAR, where researcher participation is a requirement within the study, emerging as a proposed more ethical relationship between researcher and researched, and from an acknowledgement that no researcher can be completely detached from the object. Complementing PAR with case study methodology unlocked the ability to analyse decommodification and create the distance between the researcher and the field. With this comes the acknowledgement that I, the researcher, was not removed from the field during the data collection phase, unlike a case study methodology, yet my participatory relationship with REACH revealed more about the alternative construction practices (and by extent decommodification) precisely because we were collectively reflecting on our actions. This is why naming the methodology as a case study would be problematic, although ethnographic and observational methods were present, participation was the main driver for producing the research. Furthermore, only undertaking ethnographic and observational methods would have limited the resource collection, my work with REACH on the EBS project helped to push it through the regulatory processes of formal construction.

Incorporating RbD and case study methodology to build upon PAR within this thesis provides a contribution to knowledge that PAR need not only focus on the immediate change as the output of the research but can also analyse the phenomena witnessed through the fieldwork in order to build upon knowledge for those outside of the research.

Decommodification

The contribution to literatures on PAR enables the work to focus on a phenomenon outside of the immediate scope of the collaboration with REACH. Decommodification emerged as a key component that repeated throughout REACH's alternative construction practices, somewhat inevitably from REACH's stated goal of attempting to remove profit from housing (both production and consumption). Decommodification has a contested definition and this contribution uses the observable practices from the fieldwork to add to the definition and provide more clarity.

From the literature review, there are two contradictions that exist within the definition of decommodification that this thesis explores: is decommodification an action or a process? And is decommodification complicit towards the upholding of capitalism or is it an emancipatory tool?

The contradiction between action and process is based around different definitions of decommodification. La Grange & Pretorius (2005) see individual actions that sit on a spectrum with use value at one end and exchange at another, decommodified actions are those that have purely use value with no exchange value. This spectrum is useful as it breaks away from binary notions of (de)commodification to understand between the two extremes - more, and less, (de)commodified. For Vail (2010:310) however:

"Decommodification is conceived as any political, social, or cultural process that reduces the scope and influence of the market in everyday life."

Understanding Vail's definition of decommodification, as a process, requires an analysis of the efficacy of decommodification. In Vail's understanding an individual action that focuses on purely use values, but supports "*the scope and influence of the market*", is not decommodification. Take, for example, the idea of a free sample, a vendor may give samples away in order to hopefully attract future customers. Looking at this as the individual economic action of giving someone a sample in exchange for nothing La Grange & Pretorius' (ibid) theory would state that it is a decommodified action, Vail (ibid) however would argue otherwise because the purpose of the sample is to support the growth of the market. This means that to understand economic actions it is crucial to look not just at the action in isolation but in its relation to the rest of the economy. Vail's (ibid) statement that decommodification is any process which lessens the influence of the market requires an analysis of what constitutes lessening market influence. This is where the efficacy of decommodification is brought into question. Esping-Andersen (1989), Vail (2010), and Gerber & Gerber (2017) all argue that a decommodification agenda should be used to lessen the influence of capitalism and as a progressive transition towards a socialised economy. Yet at the same time decommodification serves to offset the contradictions of the market economy. Take the welfare state, Harvey (2015) uses this example to show how providing decommodified healthcare creates a higher effective demand for commodities, supporting market growth. Understanding that there are decommodified relations that exist to support capitalism further reinforces the idea of an economy in complex relations, as an ecology; from this commodification and decommodification share a contradictory unity. Commodification is reliant upon elements of the economy being somewhat free from market influence whilst also constantly trying to encapsulate everything within this influence. This contradictory relationship serves to question the ability of decommodification to create a socialised economy and supports Room's (2000) claim that decommodification can only serve for self development and that socialised economies can only occur post revolution. This self developmental side of decommodification opens the potential for questioning the cultural usage of housing. Through undertaking these practices REACH exposed themselves, and were educated to how formal construction is a tool for financialisation. Through REACH exploring the particular, they learned a more general knowledge of formal construction. This links back to the enlightening of participants in the research as a core concept of PAR, however in this scenario REACH were undergoing a self-education process which was already being revealed to them before my engagement.

The alternative construction practices of REACH allowed the two contradictions, identified in the literature, to be explored as decommodification became a foundational aspect of these construction practices. This thesis used the fieldwork to understand a negation between the dual elements of the two contradictions. This is not to say that the two properties are not observable but instead that they must be considered together as a complex whole, akin to the wave-particle duality of light.

In the land chapter, REACH acquired the land for their prototype by providing energy to Heeley City Farm; in the materials chapter, REACH sourced waste UPVC from manufacturers who have difficulty disposing of it; in the construction site chapter, REACH received a long-term unemployed volunteer's labour and helped them in getting a job. Each of these examples can be understood as a type of Polanyian (2001) reciprocity, where goods and services are given and taken to suit the needs of the user, however they can be categorised further because reciprocity doesn't always imply an instant transaction

between two actors, as each of these does. Therefore I termed these economic actions as alternative equivalence to mean that there is an immediate transaction between two actors, but the two sides aren't necessarily commensurable; which is what separates this from barter. Furthermore these examples all demonstrate decommodification as an action, an individualised event taken without context. To understand the context it is necessary to look at decommodification as a process. As a process, to lessen the sphere of market influence (Vail, *ibid*), none of these alternative equivalencies could be categorised as decommodification. Volunteering as a way to gain a job supports someone who was previously relying on benefits to engage in the labour market; if anything this is expanding market influence. Sourcing waste UPVC from manufacturers supports the continuous use of the material, offsetting the difficulty it has in its disposal; and whilst renting land for energy might not be supporting market growth, neither is it reducing it. To understand decommodification as a process REACH needs to be considered as a whole to understand that their aim is to remove profit from the construction and dwelling in housing. REACH engages in commodified actions, from buying materials to paying abstracted labour, but because they are attempting to lessen the scope of the market they can be understood as undertaking a decommodified process. Within REACH, this presence of both decommodified actions and processes indicates that neither of the two definitions of decommodification wholly encapsulates decommodification. Instead there needs to be an understanding that decommodified actions, that may or may not reduce the scope of the market, happen; but also running at a larger scale there are tendencies to reduce the scope of market influence and these could be understood as decommodified processes. These don't have to be made up of decommodified actions, just as tendencies to increase market influence are not only made up of commodified actions - think of Harvey's (2015) analysis of the welfare state.

The second contradiction questions the notion that decommodification can serve to limit the scope of the market; critiquing the idea of decommodification as a process. The efficacy of decommodification as a means to overcome capitalism through a transition to a more socialised economy is a popular theory (see Vail, 2010; Gibson-Graham et al, 2013; Gerber & Gerber, 2017); this thesis argues against it whilst also claiming that this does not mean that decommodification should be disregarded as a tactic.

Exploring decommodification as an action has already shown how it can instead serve market interests. Furthermore, alternative equivalence shows the difficulty in implementing decommodification within the existing economy because of the inherent precarity that is created in replacing equivalents with equivalence, see chapter 6 - materials in particular.

The difficulty in the implementation and maintaining of alternative equivalence, REACH's primary alternative construction practice, suggests that rather than this replacement practice a seizing and appropriation of already existing commodified practices is the way to move beyond capitalism (see Luxemburg, 1986; Lenin, 2008). Therefore, rather than becoming an exemplar of decommodified practice as a way to move beyond capitalism, REACH's alternative construction practices suggest the opposite - that decommodification alone does not serve to move beyond capitalism. The thesis argues that the value in REACH's decommodified practice is beyond the immediate economics of its actions and process.

Engaging in decommodification became a learning process for REACH, participants

became aware of the contemporary housing situation and uneven distribution of resources. Different networks and practices were established that support the continuation of REACH. Furthermore, by attempting, failing, and retrying alternative construction methods, REACH shows that construction without profit can exist, even if the way to get there is obscured. This echoes Marx's (in Jossa, 2005) sentiments on producer cooperatives. For Marx, it is not that the cooperative model can be used to overcome capitalism but that it shows how there are alternatives that can exist within capitalism that reveal the limits of capitalism by demonstrating a production process without profit. The experimentation undertaken by REACH suggests something further, that on top of showing an alternative way of formulating construction it also becomes a testing ground for this alternative - that through its failings it becomes a way to find an alternative that works both in the present and in the future. The efficacy of alternative construction practices is to show that an alternative to reified construction is possible. In this way the efficacy of decommodification is not around its ability to create a transition towards a socialised economy, but in its ability to point beyond the present and show that alternatives exist whilst simultaneously participating in the reproduction of the present. This is why when referring to REACH, and decommodification as a process in general, the word 'attempting' becomes a caveat to Vail's (2010) theory that decommodification is any process that limits the scope of the market. For REACH this 'attempting' caveat is not just from an empirical fact, that they are still quite small and haven't made an impact on the housing market, but also that as they grow there is no proof that they will limit the scope of the market. Even if they do impact the market, they are still subject to the contradiction of decommodification's efficacy. Therefore, only by understanding Decommodification as both part of an emancipatory strategy and as reinforcing the existing present can a negation of the contradictory concept of decommodification's efficacy be reached.

Limitations

This is not to say that these contributions do not have limitations. As with most PAR the research was an in-depth study with one group, REACH; this meant that whilst I gained a deep knowledge into their construction practices this work is best taken forward and tested with different groups to see if alternative construction practices are similar across different contexts and with potentially different regulations. Where the methodology differed from orthodox PAR, by introducing case study and RbD methodologies, presented unknowns that could have potentially limited the outcome of the study. Moving away from a more rigid PAR structure however allowed the research to step back and critically analyse decommodification without including REACH. Whilst this may seem exploitative I am not hiding the research and I have a clear delineation between my participation with REACH, where we engaged in the reflective cycles of PAR through our alternative construction practices, and where I stepped back to analyse the cycles themselves as indicating decommodification. This stepped back analysis allowed me to circumvent another limitation in the research, that myself and REACH weren't ideologically aligned. I see REACH as an example that shows that other forms of construction are possible; this derives from Marx's (in Jossa, *ibid*) understanding of non profit driven initiatives operating within capitalism, Ferro's (*ibid*) understanding of construction as a foundational

source of surplus value for capitalism, and Adorno's (ibid) methodology of exploring the particular to better comprehend the whole. REACH sees itself as a way to overturn the housing sector by removing profit from construction and dwelling.

From a more practical side, there were limitations in both the data collection and the selection of REACH as a case. When I first started working with REACH, although they had several projects attempting to acquire land, they had no project that was due to be built. During this time I was also engaged with Sheffield Community Land Trust. As SCLT wound down, REACH acquired the EBS project; this happened right around Christmas, with my fieldwork starting in August. This meant that I could tailor the research more around REACH, however for those first few months there was no guarantee that either REACH or SCLT would provide sufficient data for the thesis. Engaging in REACH's alternative construction practices quickly revealed the precarity of their situation. Whilst the precarity itself was instrumental in developing the analysis it at times hindered data collection. The main example of this is the cladding manufacturer who rescinded their deal of free roofing and cladding for the EBS project. For a time it seemed as though REACH might have to cancel the build project entirely because delivering the project in the time contracted appeared impossible without going extremely over budget. Fortunately REACH found an alternative and the example serves to further highlight precarity in alternative construction practices. A final limitation I found in the data collection was councillors ignoring my requests for interview, particularly with relation to the Castlebeck and Hemsworth projects. In these situations I used secondary sources to construct an understanding of why the Council would not, or could not, provide land for REACH's projects. These were mostly due to being financially constrained in their own way.

8.2 Future Work

The thesis presents numerous ways to take the research forward. Firstly, the exploration of alternative construction practices could take place with different groups across multiple settings. The construction site becomes key for these initiatives and understanding the construction practices so that it could start to be understood as an anthropological phenomenon. This could continue along a similar methodology to the modified PAR I present here or it could take a more general case study approach. If it continued developing the modified PAR methodology then it could become a way to enhance comprehension on the construction site to allow participants to understand what they're doing and where it sits within a wider network of alternative construction practices. This would allow knowledge to be built upon by various groups, something PAR doesn't usually fit within its scope, whilst also building collective consciousness, something that is a primary output of PAR. If it was to use a case study methodology the purpose would probably be to see similarities in the alternative construction practices and to see how decommodification emerges from these settings. The avenue that currently excites me the most is following on in Ferro's footsteps to understand the capitalist relations of construction further. This avenue had promise in earlier analysis of the fieldwork because by looking at REACH's criticisms to the construction sector a different angle to the sector was potentially being revealed. This eventually got sidelined because the work on decommodification started to take prominence and I didn't want to detract from that. This research could be quite broad but I would most likely start from the individual everyday stories; examples such as Billy's really stuck in my mind. The fact that he took unpaid labour for REACH, because being paid more would affect his benefits, in the unspoken hopes (to REACH anyway) of getting a bonus really intrigued me. The way his story expanded outwards and connected to issues of welfare, labour supply, construction knowledge, class, and hierarchy proved promise not just as a research project but as a way of telling his story and countless others.

Using activist methodologies in the architecture discipline provides a way to further understand the informal modes of construction and why they occur. When their goal is to change aspects of the sector then the inherently change based methodologies connect well with these aims. There is already a wealth of research into alternative architecture, emerging particularly from the Sheffield school (see authors including Till and Petrescu) however these authors often take either a descriptive approach to these practices or a positive engagement with them. Whilst these approaches are invaluable to understand the present state of social architectures they rarely approach these architectures with a critical lens. When critiques are made (see Brenner, 2017), they emerge from the outside. By critiquing the efficacy of decommodification this thesis presents a Marxist criticism towards those in the architectural discipline engaged in alternative or social architectures. Terms such as social reproduction are cherry picked from Marxist literature, leading to conclusions that we are entering into an emerging post-capitalist era (Petrescu & Trogal, 2017) and that the right to the city is an emancipatory project from capitalism with architecture at its centre, building new relations. Just as these theorists criticised the ivory tower architectural practitioners for their condescension and abstraction from

the real world (see Till, 2009), they now see architecture as the central part of an emancipatory project. This is not to say that these social architectures do not have value, this thesis was based on showing the potential of decommodification through alternative construction practices whilst acknowledging its limitations, but it is only through understanding their limitations that these values can be captured. As such this thesis argues for a return to Marxist theory for the left in architecture, through Lukacs and Tafuri. These authors explore reification within construction and this may allow practitioners of social architecture to see social architecture's limits. By understanding these limits they may be able to see its potential of showing a world without the profit motive even if the route towards this potential is currently obscured. Furthermore the engagement with decommodified practices that often accompanies social architecture projects serve not only as an educational tool for understanding contemporary urban processes but still has the benefit of helping people in the immediate. A critique on the optimism encapsulated within the proponents of social architectures, for example from adherents of spatial agency, is another area of research I would be interested in exploring.

Finally, the most promising area of future research is the testing of alternative equivalence as a theory in other contexts. Developed to decode REACH's decommodified construction practices, alternative equivalence has helped to explain the successes and failings of REACH through the lens of political economy. I believe there is a potential for alternative equivalence to be used in different contexts. For example, it can be used to explain Sheffield Community Land Trust (SCLT) – one of my potential case studies that I was engaged with for several months before deciding they would not produce enough data for the project.

When I joined SCLT they had just failed to secure the Laycock block, a scheme they had put considerable effort into acquiring from Sheffield City Council in exchange for providing affordable housing – an alternative equivalence. As this thesis argues, the motivations of actors are crucial in determining the success of alternative equivalence, see sections 5.2 and 5.3. For the Council, Laycock was a flagship in their Heart of the City regeneration project and the land had a high value – the thesis also argues that value is directly related to the success of an alternative equivalence, see section 6.1. Using alternative equivalence as a lens to understand SCLT's proposal, it appears unlikely that the Council would accept the proposal – and they didn't. Furthermore, alternative equivalence can be used to understand why many of the architectural academic members of SCLT are no longer engaged. For them, SCLT represented a research opportunity, predicated on a successful land acquisition. Now, with no guarantee of an architectural project, they are receiving very little in return for their labour – as this thesis argues in section 7.1, alternative equivalence extends to understanding volunteer labour relations.

As can be seen from even a brief analysis of SCLT, the lens of alternative equivalence can be used to decode what happened in economic terms. The next step would be to take alternative equivalence outside of Sheffield and apply it to different contexts, potentially outside of construction.

This research used activist methodologies to uncover alternative construction practices and make a critical judgement on how they interact with the wider economy through expanding the definition of decommodification. Deploying material dialectics to decode the literature and the empirical data enabled this critical lens and allowed distance

from the activist methodology. Untangling the present moment on these terms is as valuable as decoding the past; in this way this research follows in the footsteps of Ferro (2016) and is important in critiquing alternative architecture whilst also understanding its potential.

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10. Appendix.

NB - As can be seen in figure 3.4.2, it would be unreasonable to include all of the data in the appendix; as such I have curated some of the more pertinent pieces.

10.1 Regather and SCLT Extracts

Regather Extract

Gareth is the founder of Regather, a group critiquing existing access to food through their own food delivery and production infrastructure - which has also enabled education, waste, transport, and energy projects. The researcher met with Gareth on a chilly morning in late February, at the home of Regather a former little maesters cutlery workshop that users affectionately describe as a warren - owing to the many offshoots and passageways. The purpose was to establish an initial contact and assess Regather as a suitable case study. Having pre-warned of his potential lateness Gareth advised to go to the Co:Social event which was happening in the bar, and after being directed, Rachel (the organiser of Co:Social) was introduced. Rachel explained that for a minimal cost to hire the room Co:Social allowed the self-employed to meet, chat, and work in the same space to combat isolation and leave their houses. Gareth had helped her set Co:Social up and was giving her advice on becoming a social enterprise - she mentioned whilst handing out moist beetroot fairy cakes made from Regather vegetables and stating that she never knows what to do with beetroot. Gareth's arrival was met with friendly greetings and a promise to talk to Rachel about social enterprises after he met with the researcher, which started with a tour and ended in the office. The tour included the events space, storage, micro brewery, and the production line (a cool; bustling space where 8 people worked in what looked like an old loading bay, with large wooden doors, to receive vegetables, sort them out, and send them for distribution). The office space had several workstations with someone working in the corner, Gareth talked animatedly about Regather's work and was interested in this project and the researcher's previous dissertation on Sheffield, concluding that the outcome should be a book written about Regather to help similar movements set up. The meeting was a success with a feeling that both parties had gained from the experience.

In this brief snapshot of an initial meeting a spirit of Regather was imparted - to provide more ethical and sustainable commodities and services, to ground their work in a material reality of commonly owned infrastructures, and to support these infrastructures to grow. This is how these infrastructures are created, aside from large events of expansion, by performing these daily rituals of an alternative reality they are doing what Lefebvre (1991) may identify as appropriating the urban condition - allowing and facilitating new actions that challenge the logics of accumulation and inscribing them through spatial realities. But what are these spatial realities and what rituals do they allow?

SCLT/Studio Polpo Extract

Studio Polpo is in a central location of Sheffield, just up from the train station and down from the Town Hall on the second floor of Union Street. Union Street is a social enterprise comprising of a ground floor café with co-working spaces above in what I believe used to be a council office – the bog-standard suspended ceiling in the café remains almost as an homage to the building's former occupation. Despite this relic of monotonous bureaucracy the café itself is a pleasant space, to a certain extent typical of many independent coffee shops with upcycled furniture and house plants, the fairy lights attached to the ceiling strangely fit so well that it is the first suspended ceiling that hasn't elicited from me some internal anarchic rage for the disillusionment of contemporary society.

I order a cup of tea. The lady serving me asks if I would prefer a pot, her boss has just ordered some and is very proud of them, I relent. I take my mug and pot and find a seat, the place isn't busy but most tables are occupied by people on laptops, people reading, or on the phone; I get the feeling the design of few but big tables is to encourage strangers to sit together. On this occasion where I will be recording the meeting I decline to participate and find a seat on a long bench flanked by tables, made of old (probably reclaimed) planks, and school chairs. On first inspection these may not appear extraordinary for a coffee shop until on second glance where I noticed the table legs comprised of two cheap office desk legs with long runners at the bottom and little feet – it seems to me there had been compromises between the aesthetic vision and the process of production, but in this setting it worked.

Mark appears in the thin strip of safety glass in the door, he heads on to my side and round the corner. Just when I think he hasn't noticed me he reappears with a box of dumplings and salad from the lady serving them as part of Union Street's daily rotational pop-up café. We reacquaint ourselves with pleasantries and sit down to talk.

S: let's see if it wants to... ah it seems to be working.

M: ok.

S: But yeah, so I guess what I'm kinda really interested in is erm understanding erm, kindof spatial productions and the community economy surrounding more like erm grassroots or non-traditional modes of construction.

M: ok.

S: So I was lookin at, you know, as you know that I've been interested in Gibson-Graham and all that sort of

M: mm.

S: work before. But it didn't seem to have a lot of, there dunt seem to be a lot of thought brought into about how these spaces are actually produced that these community economies are then formed out of. And they don't have to be a lot of... you know it could just be throwing up a couple bits o' plywood

M: yeah, yeah yeah.

S: and you know, refurbin' a kitchen or summat like that, but it just enables all these... and so I'd be interested in how these actual, erm, how these community economies in practise once the building's in use

M: mm

S: how they filter through from the construction process and if there is any kind of link there.

M: right, so specifically from the, building the space aspect

S: yeah, yeah yeah. I think, I think so at the moment, I mean, there's still scope for it to change, I've been told that as soon as I go into the fieldwork it'll probably all change anyway, but it's a good place to 'ave a, a starting point to head from.

M: yeah yeah. So you're gonna be doing stuff with, erm... the... what's the... container house...

S: oh Reach Homes!

M: yep.

S: yeah yeah yeah well

M: looking to do stuff there

S: well Jon seems really err excited at the moment, and erm, you know I've had a couple o' chats with him before sort of thing before I was doing the project so I knew him, and he seems like quite a, he's a good guy you know? And erm, more than happy for me to help out in any way I could.

M: ok

S: so yeah he seems like he's pretty interested in that sort of stuff.

M: and we're doing, with the Tinsley thing, I suppose we're not really... building anything

S: mm, yeah

M: but, it is quite interesting I suppose from... kindof diverse economies thing, particularly with the Gibson-Graham iceberg thing

S: yeah

M: I'll show you some stuff upstairs afterwards, cos er I did a talk in Cardiff about, erm, kindof representation of finished architecture projects, and how that's always about the bit that's closest to those kindof ideal, whats envisaged in the design before it started, and all the kind of behind the scenes stuff is kindof edited out or not shown. And I tried to use the iceberg diagram and adapted it a little bit to sort of show that.

S: nice.

M: no that would be interesting. No but the Tinsley thing is... although it's not really building, it is interesting from a kind of diverse economies route, I'll have to kindof hook you up with Julia as well at Polpo, cos her, the studio that she and Cristina did at Hallam [University] last year, they did a lot of research around, they based their projects in Tinsley, they did research there. And they kindof slightly ran out of time to do the design bit as much as they'd like to of done, but they did some really really interesting mappings of economies and how things work there, which are kindof helpful to understand. But I think it's really interesting because there are definitely parallel economies, and they won't, where they have to interact is quite complicated. So for example, and I don't know if I said this before, we got the students came in to do a big measuring day and we got some catering for them, which we thought 'oh that will be good, get like local people to kindof, cos there's local caterers; if they provide, you know, a big kind of Pakistani buffet its better than everyone buying sandwiches from tesco'. But then, y'know, the caterers would only take cash, hallam needed like someone who's set up as a supplier, so they wouldn't, they could never of paid the caterers, so then we had to work as a go between so we said 'we'll take the cash and give you a receipt' and then we were set up as a supplier so then we kindof brokered it. So there's lots of little things like that you know, where we're saying people can use space for free in return for doing something for the building, but it can't all work like that cos we still need to pay bills and they're not gonna say... so I think that's where theres, although theres, there will be kindof very small elements of building, I think making that kind of building as a sort of ecosystem

work with all those different trade, or payment things, I think is probably quite relevant to what you're doing.

S: I think yeah definitely, I think that's what I was trying to get across, I mean it's quite hard for me to kindof define it at this stage as well but like, yeah this actual, this setting up of that moment to, not a final form cos obviously its always gonna be evolving to how it was kindof originally conceived or how you expect it to... right cos I know, well I seem to remember you talking about being eventually, hopefully, handed off to the community, so that process and all these sorts of...

M: but that is happening now, I mean that's, it's a good time to follow it cos we've just done a bid, power to change bid with groundwork, who's a tenant there now, so theyre like a paying rental tenant, but theyre also... either a social enterprise or a charity, set up to help groups do funding, and sortof environmental work. So weve done a bid with them and Tinsley Forum, who are the local charity, and us, to basically put more time into the building, someone there more fulltime who can run stuff, but with a sort of timescale that, whether we get that funding or not, by May next year it is handed over to the forum. So we're, our time kind of runs out in November, and nothings gonna be ready by then, so we're saying to the council 'well give us another six months while we do this handover they're a charity, so they can then, they'll have reduced rates and stuff and sort of run it. But at the moment theres like two or three people, so they've not got the capacity, I've not really got enough time, so we need to make sure something gets in place so we're not just kind of setting them up to fail by giving them a bigger liability'. We can get, if we've got more paying tenants and a much higher rate of people hiring space for parties and events which is happening, they know they've got something that will at least cover its own costs, and there not worrying kindof about how theyre gonna make this thing work. The council don't have to give it away or sell it, they can keep owning the building, and the forum lease it, but they've got another revenue generating asset. So that's like, literally happening between now and spring, y'know we're trying to work out how that's gonna work.

S: well 100%, that process as well is just, would be really interesting to me, youknow, if erm, if you know its possible to keep abreast of that sort of stuff cos it's 100% cos its this idea of setting up these, how does it work? And how... you know all this nitty-gritty that tends to be quite hidden I think from the process. I mean like you say it tends to be shown just, I mean in a traditional construction project there's a shiny new building, so I wanted to see how these processes are different. Its different from just having a developer, you know a contractor and all this sort of thing.

M: and I spose mapping, like it would, the only way it's happened is that we, as studio polpo, have been happy to sort of take on the risk of taking on that building and do a lot of stuff upfront for free, which y'know some people in the community said 'oh we should just be allowed to use this as our building, we shouldn't have to pay for it' and we're like 'well... I get that its in the middle of your community but y'know, who's paying the heat, y'know the council aren't willing to pay running costs theyre willing to let you not have to pay rent initially, and also, y'know, the council, although they'll fix stuff they haven't got the time or the money to run it', y'know. So they're being helpful by saying 'you can try this thing out', we're taking on a risk to say 'y'know if we never get anyone using it we're paying crazy utility bills for this big building' and in a way we need to sort of say 'well what are we gonna get out ogf it?' at some point, other than just 'we made it work', which would be great.

S: yeah which is fantastic in itself but it needs to be sustainable for you guys as well

M: yeah, and how can we capture, I 'spose, where what you're doing is then useful or interesting is how do we kind of capture that process of what's happened so that it can be replicated. Cos I think our whole thing is like 'well, if everyone's gotta do this from scratch each time it's kind of massively time consuming and no one's gonna do it', but if we can say well 'this is what we've learnt from that process and you could then do it to another building it would be interesting. So there is another building, somewhere in Darnall, so next to Tinsley and the planning department is a guy called Lee Crookes, they're doing something a bit, I don't really know yet, a bit similar with that, and he was involved with the planning department at Sheffield Uni, doing some, a big local project in Westfield. so Westfield is like a little satellite town of Sheffield, right at the end of the tram, and they as the planning department, urban design, planning worked with students to help this community group who applied for and got this million pounds funding thing, quite a long time ago. I think, to help come up with strategies of how they could sort of develop this little area. and they pulled out in the meantime because of kind of local personal politics and people in it didn't quite work, and so they were like 'we can't really commit the time to this'. So he's got quite a lot of knowledge of that process, that you imagine he's gonna try and bring to the Darnall thing, I haven't caught up with him since he's started that, but it's an interesting kind of parallel, where do you put the kind of student input in? because again that's time that is as a value, because it's part of the student's coursework, they're not, effectively they're not volunteering because they're just doing it as a project, however they are putting time in that someone else would pay for. So it is again this sort of, it is an economic, there's an economic benefit to them being funded I suppose by the student paying their fees. It's kind of somewhere further back that's what's paying for it.

S: this is kind of the initial point that I started off from, cos I mean one of the main reasons I wanted to do this sort of phd was, y'know, I'd seen groups such as yourselves and things that I was quite interested in, and it just felt like they weren't necessarily projects... they were obviously very bespoke and very contextually driven, it didn't feel like there was necessarily some kind of underlying, it felt like there wasn't a lot of accessibility into this sort of work, and I thought by trying to reveal these processes and things, I mean obviously, every situation isn't going to be the same, y'know, you've got these very very deep contextual conditions but if there's something that can be taken that other people can learn from it and y'know, this is what I'm kind of interested in.

M: I think particularly there's almost this sort of difficult area of, with kind of austerity, y'know and councils being cut back of kind of stepping in and providing something that government should provide y'know and they can just say 'ooh big society is brilliant, y'know you just do it all yourselves'. However, I think it's interesting to try and, y'know as kind of an outsider, to the process, so what is the role of someone that works between the local and the council, like we're doing in this case to sort of go between and facilitate. And I think that's, that is an interesting role, and how that gets paid, I mean it could be paid for by loaners, and you could say to people 'there's not a risk of you having to do it all for free, if you can know that you'll get something back once the revenue of the building gets going, that's possible. But also if there is a volunteer led thing and people wanna do that how do they see what's gone before and what to kind

of be aware of. There's probably people who could do it from scratch better than me cos we've not done this before, and there's probably people who have done it before that we haven't found out about

S: and that's the thing as well, just making these connections and these networks and stuff its y'know, its quite a supportive network once you get into it, people always tend to be willing to, y'know, be quite proactive and interested

M: yeah what are you doing with Reach? Are you building stuff with them

S: well, in theory, I mean hes currently on holiday so we're gonna have a meeting, I think he gets back on Wednesday and we're gonna arrange for a meeting at some point. But hed been in the council and theyre looking to provide him with some housing, some land sorry, to start, because theyre really impressed with his prototype and everything. So he's in talk with, I think hes in talks with Doncaster and Rotherham council, but I think he may of just got the go ahead with Sheffield, which he doesn't mind disclosing. but it's just on these final stage now, and if that happens then it would be fantastic, but if it doesn't as well there's these whole processes of negotiation, y'know how is the land accessed and all this sort of thing – that's a very important rthing in these whole processes, and it's definitely something that I'd be interested in as well.

M: the other thing, I think that in terms of you getting involved with things, what might be more easier and more useful is the Sheffield community land trust thing that Cristina is doing, again I'll show you a bit more upstairs but that is at the moment, working with a group just over the road who've taken on a block. The new, what used to be called the new retail quarter, which was basically all the city centre being redeveloped, stopped and then it became, well its gone through various stages of different names. I think there was a lot of cynicism of it from Sheffield saying 'we don't need to try and compete with Leeds or something like that to be a massive shopping centre', then there was all sorts of financial issues, so it's kind of slowed down and fragmented a bit. And within that process this group have now said well can we look at ways to buy our block and keep that as a community land trust, so its always affordable, it keeps a mix of independent houses and businesses. so Cristina's done quite a lot of research on that and done various kind of student led, sorry, led student master's research projects developing a body of knowledge, but that is, now the council have said well give us your proposal and lets start looking at this seriously. So that's really interesting but she hasn't got a massive amount of time and that would be really interesting, because again its about, the council aren't gonna give anyone that land, it's like super prime right in the middle of the city, however theyre willing to say well we'll look at this different method of doing it, and again it might be like tinsley where rather than saying we're gonna give something away they say we'll try this and facilitate it y'know and maybe be a bit flexible in how it works. So that's really interesting, it's a totally different scale to the tinsley project, in terms of meetings and maybe doing a bit of legwork and research in a way you are part of that process, and that's probably in a way easier but equally relevant, because it is at super early stages, not many people will be involved in the land trust thing. And it's a bit like your, cos you're involved in the old town hall?

S:Yes

M: so they'll be some overlap and common things with that which I think should be interesting . well particularly you know with contact y'know , Cristina knows a bit more what they've done .

S: well I mean to be honest the main reason I wanted to go through this kind of more hands on methodology is I dint want it to be some kind of extractive process where im just kind of meeting up for meetings kind of just taking all this information, I want to try and give something back in any way that I could so... but I mean just depends on how you guys wanna do it as well I don't wanna force you guys...

M: well I think with the tinsley thing, its probably better, thinking about it, that we can make information available to you and you can sort of follow that, cos it's a bit erratic and uncertain, but easy to summarise it as you go along. Whereas the community land trust thing is a bit more definite, all the people involved are sort of doing little bits here and there. But they are studio polpo, theres a guy who was an architecture graduate who opened runs the bookshop up there, biblioteca, Alex, cos that's the block, and then the guy who lives above, in one of the houses above runs a gallery, someone else, so some of the things is actually how do you broaden that group out what do you do with the bit that's not being kept, so the bit on the back is kind of weird empty hotel offices, might be more costly to try and refurbish than demolish and rebuild. It obviously needs some financial input from maybe a developer but how does that link up... so yeah that's a really interesting stage. And I think particularly because there will be negotiation with the council theres always this, kindof they sort of use this thing about triple bottom line, y'know, where they say if we're selling something sell it for less potentially if its gotr a social value, its very very hard to quantify; so its never really happened within our experience, but would they, would they sell the land for less to this than they would to a sort of developer, I dunno, theres a big pressure on money isn't there for councils so probably its gonna have to be like market values but what can the council do that doesn't lose them money that helps groups like this take off

S: and that's an interesting thing as well becvause I was thinking about like, especially with,y'know, allowing them to go ahead with the tinsley project as well because in a lot of the texts and stuff its seen as the council, or the state in general, are seen as kind of like a barrier in a lot of this, but I think if you actually look at it, especially with local councils and stuff they are trying to a cetrtain degree. I don't know especially their effectiveness at all times, but y'know its not a complete `we are totally against this sort of thing', there is room for negotiation]

M: I don't think they are, I think theyre, I mean, firstly it depends on individuals in the council doesn't it... they haven't really got any money, theyre being really squeezed, so that affects time. So I think if people can do a lot of the legwork and say `this is what we propose, its not gonna cost you any more, can you just kind of agree to it?', I mean it's a bit simplified, but that kindof thing, not like `this is a lovely thing, but it will cost you more' or `heres a nice idea you've got to spend a lot of time trying to make it work', its like `it's a good idea, it wont cost you more can you be a bit, maybe , flexible in how you allow it to happen' I think that's , that's got to work for them. and then if theres, and then lots of things like that could happen couldn't they, where as someone who owns

land or commissions services they think lets be a bit relaxed, it might not cost them more

S: yeah I mean that's the thing, they need a couple of proof of concepts and then, in theory y'know, they have no reason not to, y'know, go ahead with these sorts of things... but we'll see. It sounds fantastic to be honest, yeah I'll have to get in contact with the rest of yur team by the sounds of it

M: well I think Julia's mainly at Hallam but is on maternity leave, but shes done loads on , her phd was looking at Portland works in Sheffield and that whole process, cos she was totally instrumental in that start. I mean she looked at it for her master's thesis at uni, and then since then made it happen in real life. Cristina's more, shes the main CLT person I 'spose at the moment and does a lot on housing. But there is a document now I'm gonna share with you that this CLT group has put together and sent it to the council, to kind of say 'this is kind of what we're up to, this is what it is'. So I'll send you that

10.2 REACH First Meeting Write up

16/8/18 REACH Homes Visit 1

"what I'm proposing is something that's just not happening at the moment. Everybody's just throwing their hands up and saying 'we need a solution to affordable housing'. The government's best efforts are just not... y'know, there's a lot of rhetoric and then I think there's a lot of actual wanting to do something about it or acknowledging that they've got to do something about it. But they just don't know how to do it. And because of the pound signs they're just completely focussed on the money. The whole industry is unfortunately..."

As I approached REACH Homes from the bustling fair taking place amidst the austere medley of neo-gothic features that comprises the town hall there is an intense feeling of familiarity that is quickly swept away. Many architectural gems, in operation as in aesthetics, are being swept aside; what particularly catches my attention is the block across from the eternally-abandoned Salvation Army Citadel on Cross Burgess Street. The family jewellers Morris Bywater, a business that occupied the site for as long as I am aware, has moved across the road; the shop fronts that give way vertically to decorative iron work and smart Victorian townhouses are boarded up - excepting La Biblioteka the independent book store that seems to have taken its opportunity to occupy the niche between waves of regeneration. The block is the site of Studio Polpo's proposed CLT that aims to keep the space permanently affordable for local businesses.

The procession makes its way lazily downhill through The Moor, which is undergoing its own process of 'revitalisation'. A sparkling new market hall and cinema complex makes the small Chinese restaurants, clearance & charity shops, and chippy's, tucked away behind side streets look outdated, and even grimy, by comparison. A BrightHouse, the rent-to-own company, still remains as a stark reminder of the areas not too distant economic decline. Indeed the area could still be defined as 'up-and-coming' in any estate agents brochure - the rent has not quite priced out the pawn brokers that sits next to the Costa Coffee, nor is the area attractive enough to find tenants for the lot next to the Ann Summers. The hulking and aptly named Moorfoot council building reminds the city of the council's continuing presence [insert employment figures in council] even in the current climate. It is a monument of power that steps upwards pyramidically from the bottom of The Moor, nostalgic of the hegemony of the welfare state - despite its 1970s/80s construction.

Crossing south under the ring road is a route well traversed for fans of Sheffield United; the green space that occupies the roundabout underpass serves as a welcome respite from the blocky, modernist, concrete machinations that have managed to cling to life in the midst of the creative destruction of The Moor. Emerging from the underpass the view would, in the not too distant past, have been dominated by Bramall Lane Stadium but it is being overshadowed by cranes, lift shafts, and cheap cladding systems in an area rebranding itself as Chinatown. Yet looking left the impressive bell tower of St. Mary's Church rises between the treeline. A haven in the city from both the encroaching sameness and the capital that birthed it, for St. Mary's, along with its religious function, is home to TimeBuilders, a time credit economy that enables community trading whilst removing the profit motive that makes capitalism distinctive from the exchange process.

The new developments give way to industrial hangovers, lone pubs, no doubt sustained by the match crowd dot the landscape and corrugated small-scale industries meekly hint at a more productive past. Although much of the industry may have disappeared the soot-stained; red brick terraces remain, giving an indication of the persistent economic demographic of the area. But even these ex-victorian slums seem eminently more appealing than the oppressive 70s/80s council housing, the lack of windows and features manifesting a quantity surveyor's wet dream and implies a lack of funding at the time of construction.

Making my way towards the city artery of the Queens Road the space explodes with greenery, partially I suspect as a noise attenuation strategy for the residents near the stadium, but it does not go unmissed in a city that fiercely defines itself as 'green'. Queens Road itself is a four lane arterial road for traffic coming from the south into the city centre; it contains many businesses typical of peripheral city locations: precarious car washes, storage facilities, car dealerships. Perhaps out of the ordinary stands the lone St. Wilfrid's Centre, renovated from ex-church property to provide a day centre for the homeless and socially isolated. My eyes however are drawn to the turquoise peaks of the Madina Masjid's twin minarets, arising from mustard tiles behind Hagglers Corner, the self-proclaimed "creative community of makers and doers, all residing under one roof" that emerged from a dream to turn an abandoned plot into a workshop. No sooner do my eyes glimpse these however than I find myself turning left and starting to climb out of the valley, crossing the bridge inhabited by the Sheaf river and train line.

To enter Heeley from this direction is to encounter a trident split in the road flanked by trees; having never been to this part of the city I found it a shocking contrast from the city periphery I had experienced moments earlier. Taking the right hand path the sign for REACH Homes, located at Heeley City Farm is clearly signposted and I found it easily, despite being unsure if I was in the farm at all. The farm has claimed three blocks that are subdivided roughly evenly by Alexandra Road and Richards Road - indicating the rows of terraced houses that used to occupy the sites. What first appeared as several small patches of grass quickly opened up to paddocks of animals and a once-terraced-now-detached house, the South Yorkshire Energy Centre - a proof of concept not-for-profit community advice centre on creating energy efficient housing. Adjacent to the house was a handcrafted structure made of two halves of a shipping container, which I recognised immediately from the photos as the base of operations for REACH Homes serving as prototype, office, and home for founder Jon. having arrived at REACH much earlier than anticipated I explored Heeley City Farm, finding a sophisticated community driven response to recycling, environmental management, dementia, and agriculture that feeds into a much wider network of community agriculture through Wortley Hall Walled Garden and others.

The small garden leading up to REACH was in full bloom, and a number of crops on the reclaimed wood decking were looking ripe for the picking. The structure of REACH is simple enough - two halves of a shipping container, one stepped back seemingly to create a more interesting facade and to stop the container doors from blocking the entrance. The overall effect is striking, being clad outside with insulation and render, without the large metal doors it would be hard to tell that a shipping container was used at all - it is a flat roofed bungalow with PV panels on top. With the container doors open, the whole front facade becomes a series of window frames, broken only by the steel

between the two container halves and the door.

I'd previously met Jon when he gave a presentation in Autumn 2016 at Workstation in Sheffield, he appeared as one of the guests for A Better Sheffield: DIY City, and was just getting REACH Homes off the ground, the container for the prototype arriving days after the talk. Convicted to change even then, he talked powerfully on the steps that must be made and how he was going to implement them. Even so it was with trepidation that I made my way up the decking, a feeling that was quickly disarmed by a warm smile from Jon through the window panes.

Once inside, the house - through its act of simply being - raises the absurdity of professionalised and abstracted labour in the construction industry. Small though it is, it is perfectly homely and designed to a far higher, and infinitely more personalised, standard than houses found on the glossy pages of estate agent brochures. The space resembles a studio apartment, I am greeted by a stylish kitchen of what look like reclaimed wood cupboards, with a lounge over to my right - laying claim to the glass facade, and a copper curtain rail with desk and raised bed behind. An alcove behind the kitchen hints at a bathroom. The high ceilings, large windows, and hardwood floor erases from my mind visions of dank shipping containers and is more reminiscent of a Nordic chalet. There are touches of story behind every object, a light fitting made from two drum cymbals, the beams that connect the two halves of the shipping containers together, the wood beading that holds the windows in place, and the small hook-on wooden ladder that provides access to the bed all hold their material stories of construction and use. Jon rises from his desk, shakes my hand and we make our re-introductions. I'm offered a seat on the sofa and a drink; and am brought a builders brew and some biscuits, Jon joins me.

We set to work.

The conversation is winding, every new strand brings up another tangent and we both struggle to stay on topic, taking it as a moment of humour when we realise our asides. The purpose of the meeting was for me to learn more about the project and establish some form of working relationship from which we could both learn and benefit from.

Jon makes his motives and ethos clear from the start.

"Really I'm making it up as I go along. Fortunately, what I'm making up seems to make sense".

From the completion of the prototype in [when??] the project seems to be moving fast, and Jon is a busy man proof reading articles, applying for funding, and arranging meetings with a member of the House of Lords. He argues that his proposal, to consider the social value of land over its financial value is simple enough, but we are so weighed down in the existing system of profit that it will take a big leap to get there. He puts the crisis of land ownership into clear terms; it's not just the "undeserving poor" anymore. "35% of people that the new resolution foundation report the other month said are never going to aspire to home ownership. Which is good if you're a landlord, cos you've got an income forever"

Jon laments.

"it's basically 12th century feudalism dressed up in 21st century clothing, with the

vener of democracy to make people think they've got a say, which they then don't listen to anyway, and even if, y'know, even if another government does get elected it still has to work on the same civil service and the same investors and the same lobbying groups, the petrochemical industry, the big builders."

He connects his fears with wider processes of Brexit, believing that the April "fire sale" will mean farmers losing their agricultural subsidies and going out of business.

"all that farmland will be up for grabs, and who's gonna buy it?"

"Well, we know who."

"Yeah, which is why they're gradually chipping away at the greenbelt and relaxing the restrictions on developing the greenbelt."

Jon explains a new release this morning of the garden cities institute with plans for 10-15 new London-centric cities.

"Go back to the view of the '50s of what garden cities should be like, Milton Keynes." Jon makes a gagging noise "How to translate a beautiful idyllic version of a modern country village into something that's more Metropolis. Fritz Lang [filmmaker, Metropolis] eat your heart out."

He worries about the state of the construction industry if these contracts go ahead, because it will just make the big companies bigger and has a distrust of bringing the SME's together.

"forcing SME's to band together just makes big companies - like the housing associations are being forced to do, and be more commercial and build houses to sell to finance the rest of their business model because they're losing stock through right to buy which is a completely f'kin farcical notion in the first place"

The commitment behind his alternative model comes from a complete distrust of the power of profit to solve problems.

"that's why it's so important that this works, because we can show a completely different model and a completely different way of making a success out of building houses that people actually want, where they want them, so community led, involving people in the design and the place where they're gonna be living. That gets round some of your more outside the box things your builders don't normally take account of like mental health and wellbeing, crime, antisocial behaviour. If you're building the right houses in the right places with the right things around them you can cut down on transport and unnecessary journeys, you can do all sorts."

Our conversation meanders into migration, global warming, and increasing populations with an acute awareness of the lack of government infrastructures to support these issues.

We move on to talking about my research and I explain my willingness to be involved; listening enthusiastically Jon outlined one area of potential expansion.

"We've got a potential site up on Fairfax Road at the moment with Manor Castle Development Trust which is about 65, 70 houses up there, which is a nice sort of size for a village community based around shared community space. So a community laundry, with some space above it, meeting room space - so you can use the heat from the dryers to heat the room, all the spare electric of the shared solar arrays across the whole estate goes to offset the cost of running the laundry, people use it as a place to interact, to get to know each other. The person running the laundry is the defacto caretaker for the whole estate."

His eyes are twinkling

"You get the right mix, obviously it's this chemistry of a sort of microcosm of society it's

about how people interact, you can't ever legislate for that, once you put the squishy bit in it complicates any system! I can see it as a blueprint on paper it looks great, sustainable drainage, beautiful plantings everywhere, fruit trees, vegetables, just like stuff you can help y'self to, stuff that everyone looks after, tended in common kind of stuff. You've got play equipment round the site for the kids and it's all self-contained and everybody looks out for each other."

He admits it isn't a magic wand solution but argues that building housing for people, by people can create change.

"it will change the way people approach certain kinds of houses, because they'll have a stake in it. You take some 16 year old straight out of school, virtually no qualifications, we can put them through the sustainable building academy, they can work on a house, they can go on and live in that house, they can afford to live in that house, even on minimum wage carrying on in a building job somewhere else, and because they've got a stake in that house, they're gonna look after it they're gonna care for about here they live."

Jon worked on the police force for 30 years, he believes no-one is irredeemable - he couldn't do his job if that was the case. He believes it is people's environments that shape them. He is currently looking to overturn the housing crisis through providing genuinely affordable housing and moving power away from big business and into the hands of people.

Our conversation takes another turn through Brexit via lorry drivers and bankers, but we steer it back to the building we are sat in.

"it's mostly upcycled, this build?"

"This is 84% were not gonna be able to do that at scale, well not to start with at least, cos those logistic supply chains and getting all those kinds of stuff sorted out... it's not gonna happen straight away. So we've costed up buying new and as environmentally friendly as possible, I wanna get away from using - cos there's a lot of recovered Kingspan sheeting on this, but anything petrochemical I want to try and stay away from. So we're looking at developing a straw bale panel system that bolts onto the wall"

We look round the room and he speaks candidly about different objects and their origins, salvaged from the ruins of capitalist society. All the wood is reclaimed, the bedheads are old pianos, the panelling in the shower is from the counter of an Indian takeaway, and the Kingspan came from the roof of the Madina Masjid when they were redoing the dome.

"I can see why it wouldn't necessarily work at scale"

"well there is enough waste material, it's just a case of scaling up so we've got enough to do. 9 houses isn't gonna be a problem for the first build. 600 a year is going to be a major problem. I think by the time were looking at doing that we'll have agreements in place from Kia and Veolia and Biffa, housing corporations, and people doing traditional building." I knew waste in the construction industry was a major problem, but Jon had the figures of the top of his head "25% of anything that goes onto a building site is junked basically. 100 million tonnes of building waste every year."

Jon's mate is looking to set up an app that will connect construction site QS' with the public for them to make bids on the surplus from the site.

"So in 3 weeks time there might be 100 sheets of plasterboard left, who wants them for £2 a sheet?"

I think Jon could be more ambitious than this and wonder what would happen if REACH undercut the waste contractors and set up their own and instead of building sites receiving money for their surplus they pay REACH to reuse it with a social conscience. I don't voice my opinion about it now but will keep it in mind for a later date once we are better acquainted.

We delve further into this idea of critique of waste which moves towards a critique of other parts of the construction industry.

"it is quite a difficult concept for people to grasp, its change on such a systemic level, how do you change the housing market, how does one person change the housing market, that's the only way its gonna happen. Cos the housing market doesn't want to change itself, it's got a nice equilibrium. They're very happy with the way things are, 220,000 houses a year and they're coining it in and getting £170 million pound bonuses, why would they want to change that?"

We start talking about the lack of construction that's taking place, despite the need for it. Jon thinks part of it is to do with the education.

"We're still training kids in same old techniques, where they're training them at all. Building is not an industry that young people want to go into these days, cos who wants to sign up to having 3 years of being out on a building site in the freezing cold over the winter getting the shit kicked out of yer and being forced to make the tea all the time when you're on an apprenticeship on about £4 a week?"

His solution seems like a work in progress, but it shows he wants to change this as well. "if we can offer work in an offsite factory where, ours isn't going to be pressing buttons it's going to be a lot more hands on but still basic stuff, three of us with a level 3 in joinery did this and it's not complicated"

We talk more about the design and construction, he explains that the solar panels provide 55KWH/PW and any surplus goes to the energy centre as per the agreement with Heeley City Farm for his plot. What is revealed is his critique of who has the knowledges to build, with minimal skills REACH built a shipping container house, and have learnt what to do for next time.

"the mechanical heat recovery ventilation system works really well... We did get a tiny bit of condensation and one of the things I would do differently is not putting the wooden surrounds around the window stuff cos we've reglazed all the recovered UPVC, so we've done that with the wood just to hold it in place that should be triple glazing. we've used Passivehaus principles [PHP] but it's not Passivhaus and we'd never get it certified because were using recycled stuff and it doesn't work with PHP you need to know the u values of everything and we'd have to measure each item individually and threes no way it'd work"

Although the use of shipping containers may illicit condescension from the architectural community, Jon's lack of exposure to this snobbery has served him well in finding a material that fits the bill. For him shipping containers do not represent uncomfortable memories of first year projects, but instead are a cheap; upcycled building material, that require minimal technopopular knowledge to work with, and that are not labour intensive to convert - all things that make the construction process easier for self-builders. But Jon goes further than this by explaining that containers already contain the sealed envelope necessary for Passivhaus standards. Unwittingly standing against another entrenched architectural faux pa, Jon explained how REACH Homes started from watching Grand Designs and wanting to build his own house with his then partner, because they couldn't afford anything on the market. What started as a Lego model on

the kitchen table quickly evolved.

"I costed this idea up with containers and was like 'that's less than 100 grand for a 3500 SqFt house with atriiums and a garage for Barry's Ferrari' he was 12 at the time, he still wants a Ferrari, he knows it's got to be an electric one though."

It seems to Jon that this is the point, it isn't about the glorification of the aesthetics of the material, it's about a good material that will do its job. That doesn't mean the prototype hasn't had its difficulties.

"cos we didn't know how long it was gonna stay we dint really get round to plumbing the loo in. So we've got a temporary solution at the moment and I have to wander up the road when necessary but I don't mind having an outside loo again, it's no particular hardship except when it's cold and wet in the winter but that's my problem, it's something we could've got round if we planned it better. It's like the insulation, we dint do the insulation underneath properly, it was all done in a bit of a rush. So what we shoulda done, cos the way these are built there's a series of metal fins almost across under the bottom which create a sort of space like that [Jon gestures a corrugated effect] and we just were gonna get old Kingspan and Rockwool and just all sorts 'n reconstitute it into a block of recycled insulation and just shove that under the bottom, yeah so we didn't do that properly. But the rest of the insulation build up in this is, it's just cobbled together really we've got... there's some insulation under the floor, on the actual underneath, then there's a vapour barrier, cos you don't know, this container was made in 1985 so its gone all round the world, you don't know what kind of things and stuff have been spilt on the wood and it's marine ply so it's not that absorbent but even so... So we put a thick vapour barrier across 50mm of recycled denim on the floor. The walls obviously it's all sprayed out with foam which counters condensation - which is the main issue with living in a container. Insulated plasterboard and there's another 7inches of earth wool on the ceiling and on the outside there's another 10 inches of Kingspan sheeting wrapped in DPM, it's not a permanent solution on the roof obviously but A: I wanted to see how the roof of the container actually worked in this kind of situation and B: that was the best I could come up with in terms of a design for the roof."

Enthusiastic as ever, these are seen as not mistakes, but areas to improve for the next time.

With time running short (we ended up talking for around two hours!) we agreed that a good starting point for my engagement would be to completely overhaul the website, it would acquaint me better with REACH whilst serving to improve their image for funding bids.

I left with a grin on my face and rebellious ideas racing round my head.

10.3 Director's Meeting, REACH

REACH Homes
Meeting 13/03/2019
6pm REACH Homes

Subject	Details	Action	Done
In attendance	Jon Johnson, Jonathan Yewdall, Sam Holden, Grace Apologies - Tim Jones		
Matters Arising: Insurance	- Jon found a good group who will provide for a reasonable price	Jon meeting on 27th	
Matters Arising: Multiple projects	- Using the construction location whilst we have it to construct several projects that will get the money rolling and allow us to get off the ground - Can use newsletter to advertise this		
Matters Arising: Strategy meeting	- Keep losing focus (mainly after castlebeck) need to refocus, look at 1 or 2 potential projects/funding combinations and drive forward with them	28/03/19 9:30am Aim to have all tasks on here completed	
Matters Arising: The matrix	- Produce a matrix with all available opportunities, funding, time/benefits, likelihood, existing contacts, etc,etc	Sam to create initial spreadsheet https://docs.google.com/spreadsheets/d/1zuonrUJUR1wY_kLhfxlphOU0l9yH9xaasH5_TXGF4Ls/edit#gid=0 All to comment/edit	Done SH
Matters Arising: prospectus	- Akin to the brochure but for professional clients		
Agenda: AGM Minutes	- Sorted, all agreed upon	No further action	
Agenda: EBS	- Not been signed off, waiting on Chris - Some slight wording changes in contract around gdpr but no cause for concern - No reply about planning	Jon to chase Sam to continue designs	

	<ul style="list-style-type: none"> - Formally recognise Castle Owen for their service 		
Agenda: Construction location	<ul style="list-style-type: none"> - Need to take into serious consideration - Two obvious options: <ol style="list-style-type: none"> 1. rent land with somewhere to secure tools, 2. ask one of the identified factory sites if we could use their land, issue is we may lose reduced rate grace period - Could look at Tata land? - Staff required - general labourer, leccy, plumber (if we build other houses on the site) 	<p>Jon to identify sites</p> <p>Jon to inquire RE Tata land</p>	
Agenda: funding	<ul style="list-style-type: none"> - National postcode lottery - Horizon 2020 - Chancellor has announced extra £3bil for aff housing, we could partner with a housing association to act as a contractor - Community power for change - Jonathan sent round an email that advised us to bid for land in rotherham - Sheff City Region - Comm led housing fund - Heeley GPs long term mental health funding 	<p>Email Jon Vickers</p> <p>Sam to send Jonathan details on SCR contact</p> <p>Sam to look at HCLF and start filling in</p>	<p>Done JY 14-3</p> <p>Done SH</p> <p>JY checked closure date and circulate d 14-3</p>
Agenda: opportunities	<ul style="list-style-type: none"> - Chesterfield monkey park, need more political clout - EBS - Heeley Dev trust - castleford - Potential collab with SCLT - Rotherham, see jonathan's email 07/03 	Jonathan to follow up with chesterfield council	
Next Meeting	<ul style="list-style-type: none"> • 28/03/19 • Agenda: <ol style="list-style-type: none"> 1. Matrix - decide which projects to pursue 2. Funding 3. opportunities 		
	<i>Please add any comments and amend or point out any errors or omissions</i>		

10.4 REACH Newsletter

Issue 1 - Winter 2018/19

REACH

COUNCIL SETBACK leads to a rethink in strategy.



Notices

SAVE THE DATE

REACH will hold its AGM on the 30th January, 6pm, in the private dining room of the Broadfield Ale House, 452 Abbeydale Road, Sheffield, S7 1FR

FINANCIAL ADVICE REQUIRED

following the departure of our Finance Director, REACH now seeks the services of an experienced financial services professional. This is a part-time voluntary role requiring only a few hours per month for now. Please email jon@reachhomes.org. We would like to thank Eric Hinchliffe for his contribution to the project.

MERRY CHRISTMAS

REACH Homes would like to wish all who support us a very merry Christmas and a peaceful new year. Watch this space!

REACH Homes will be looking further afield for our pilot development after Sheffield Council firmly backheeled plans for 9 groundbreaking affordable eco-homes on a derelict site at Castlebeck Avenue, Manor this morning.

Citing 'sufficient affordable homes and a need for a better social mix in the area'

Cllr Jack Scott (Transport & Infrastructure) and Deputy Leader Olivia Blake made it clear that our new and innovative offer is not compatible with the existing drive to gentrify the S2 area with executive homes well out of the price range of local people and to exacerbate the problems which have led to a waiting list of 33,000 people in Sheffield while 6,500 properties stand empty and thousands cannot afford the affordable housing on offer from traditional developers.

Undeterred, REACH will be exploring further other opportunities which we have been developing with Leeds, Manchester and Rotherham and various housing associations around the country. *'This is a major but temporary setback'* says founder Jon Johnson

'and while we are extremely disappointed that it has taken Sheffield over 9 months to come to this decision we see it as a chance to work with more progressive partners. This would have been a major win-win for Sheffield but we have other offers on the table and will actively pursue these in the New Year.'

Further details of REACH plans and information about forthcoming sites will be on our website as soon as they are available.

REACH Homes is a not-for-profit Community Interest Company

which aims to revolutionise the UK's housing market by offering a range of homes at truly affordable prices – a one-bedroom property similar to Jon's prototype can be constructed for just £35,000, and 2- and 3-bedroom units will also be available at prices well below the current definition of 'affordability'.

In other words, REACH Homes will be open to the widest possible range of buyers whilst also offering both local authorities and housing associations viable alternatives to the current home-building market, and at considerably less cost.

10.5 EBS Build - Various Photos

Thursday 1/8 Finish frame
* Find particular
tree frame
for 'A'

Fri 2/8 Prep
trunk for
plan.

Sat 3/8 Cut
trunk for
Stair ins
32" x 8' x 2"
X 18
(fasten in)

Sun

Mon More cut halves.
Weld frames
Weld top lip.

Tue

Wed

Thurs Foam
SPRAY!



