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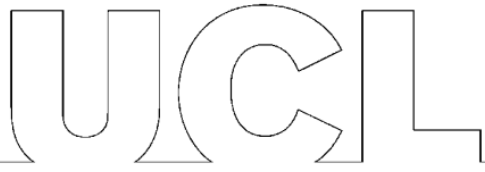
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Environmentally Conscious Development Actors: Reconciling
Individual Ideology within Corporate Structures

A London Context

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Abstract

This study explores the role of London's environmentally conscious development actors within the construction and development industry. Through the use of semi-structured interviews and questionnaires, this research seeks to investigate the extent to which environmentally conscious development actors experience conflict between individual ideology and corporate gain, how these competing aims are reconciled, and the impact of their coexistence on the construction and development industry on real development outcomes. With the impact of individual and collective action on environmental vulnerabilities becoming a critical concern, intervention at the national level, and also at the micro-level within everyday society, is required. Existing literature on this topic has typically investigated the impact of environmental degradation and the motivations and behaviours of environmentally conscious individuals, however there has been very limited research into the impact and changes that individuals can make within an organisation in order to address environmental concerns. Despite competing motivations to protect and enhance the environment against primarily monetary considerations, the environmentally conscious development actors associated with this study have demonstrated an ability to employ mechanisms within their professional practice to guide and encourage pro-environmental behaviours in light of challenges faced. Consequently, these individuals have been able to adapt and encourage change within the organisations where they work, resulting in significant environmental benefits to real development outcomes.

1 Introduction

"Action of man may embellish the earth, but it may also disfigure it; according to the manner and social condition of any nation, it contributes either to the degradation or glorification of nature". (Élisée Reclus, 1873:522).

Recent findings suggest that the population of London is projected to increase by 70,000 people per year, reaching an estimated total of 10.8 million by 2041 (Mayor of London, 2019). This unprecedented population growth places pressure on London's land, housing, infrastructure and the environment. As a result, London faces "*one of the biggest challenges of our times*" (Mayor of London, 2019:1).

Accordingly, the impact of individual and collective action on environmental vulnerabilities has become a critical concern requiring intervention at the national level and also at the micro-level, within everyday society. Within the context of a rapidly degrading environment, the Green Economy has developed as a response. Defined by the United Nations (UN) Environment Programme as "*low carbon, resource efficient and socially inclusive*" (UN, 2019), the Green Economy depends on public and private investment into such activities in order to reduce carbon emissions and pollution, enhance energy and resource efficiencies and safeguard biodiversity and ecosystems (UN, 2019).

The role of planning and development actors within the built environment industry have a direct impact and stimulus on the Green Economy and act as key influencers within which environmental measures are delivered as part of a development scheme. Yet, within this industry, there are clear competing pressures between environmentally conscious actors and their strategy to reconcile their ideology with the expectation and aims of the corporate organisations within which they work.

1.1 Research Question, Aim and Objectives

This study seeks to explore the extent to which environmentally conscious development actors experience conflict between individual ideology and corporate gain; how these competing aims are reconciled; and the impact of their coexistence on the construction and development industry on real development outcomes. Employing London as a case study, those actors considered to be 'environmentally conscious' will be considered, exploring their experience and motivations within the built environment sector. Accordingly, the research question and aim informing this study is as follows:

Research Question: How do environmentally conscious development actors experience conflicting pressures between individual ideology and corporate gain within an organisation and how are these competing aims reconciled in real development outcomes?

Research Aim: This study aims to explore the extent to which environmentally conscious development actors experience conflicting aims between individual ideology and corporate gain and how these competing priorities are reconciled. This will be investigated through the motivations of these development actors and their behaviours within the context of a corporate setting.

Four objectives will guide the structure of this study and act as critical methodological steps in addressing the research question.

Objective 1: Locate environmentally conscious development actors and identify individual ideologies.

Objective 2: Explore the attributes and motivations required of these individuals in the context of corporate structures.

Objective 3: Investigate competing aims for the pursuit of individual ideologies versus commercial priorities.

Objective 4: Highlight attempts for reconciliation between competing pressures in real development outcomes.

1.2   Research Contribution

Through an exploration of development actors and their motivations to reconcile conflicting aims within a corporate setting, this study seeks to demonstrate the vital role that individuals can play by acting in an environmentally conscious way in order to promote sustainable development and support the green economy. Despite the prevalence of 'typical' behaviours, as frequently explored in academic literature, these individuals champion the green agenda notwithstanding significant corporate agendas including revenue and profit generation. Within this dichotomy of interests, a range of considerations are investigated, acknowledging a convoluted dilemma between the individual's inner ideological self and their outer "corporately responsible" self.

Within the context of wider debates and existing literature, this study unearths the struggle between contrasting motivations and seeks to examine reconciliation strategies that can be applied within everyday working practice in order to advance towards a greener built environment.

2 Literature Review

2.1 Introduction

There is no denying the impact of the construction and development industry on environmental vulnerabilities on a global scale. Within the context of London, the continuous transformation and intensification of the use of land to produce buildings (Reed et al, 2015) has resulted in unsustainable levels of resource consumption and ecological destruction (Wilmott Dixon, 2010, Reed et al, 2015). In light of these findings, sustainable business practices are increasingly employed by the construction and development industry, which Cramer (2002) suggests reflects a transformation in changing 'pro-environment' social attitudes.

Despite a vast body of academic literature on the concept of sustainable development and pro-environmental business practices, little research has been conducted in relation to the individuals pursuing environmental motivations and the competing pressures to reconcile personal ideologies in light of the expectations and aims of corporate organisations within which they operate. Moreover, existing academic literature, including authors such as Cramer (2002:99), imply that where pro-environmental initiatives have been employed, there is a direct link with financial profitability. This review of literature seeks to demonstrate that this view is miscalculated and does not take into account the complex and competing priorities considered by pro-environmental development actors and the strategies employed to reconcile conflicting aspirations.

Within the UK and specifically a London context, the role of policy, legislation and education are frequently idealised as the solution for assuring environmental consideration and protection in the construction and development industry (see Bogner, 2010, Ballantyne et al, 2010 and Gunningham et al, 1998). The extent, however, to which the role of organisations and individuals within them pursue environmental protection and enhancements successfully employ and promote those policy and educational initiatives put in place to safeguard the environment remains largely unexplored.

The following chapter recounts the principle debates and considers a range of diverging perspectives before highlighting gaps in existing literature and areas for further research. This chapter demonstrates the extent to which existing literature fails to fully recognise the significant contribution of environmentally conscious development actors within the construction and development industry in protecting the environment, notwithstanding significant influencing factors impacting motivations and behaviours.

2.2   Climate Change and the Built Environment

"Climate change is often said to herald the anthropocene, where humans become active participants in the remaking of global geology." (Goodman, 2017:1).

The construction and development industry is reportedly one of the *"least sustainable industries in the world"* (Wilmott Dixon, 2010:2), contributing to the depletion of approximately 50% of non-renewable resources globally (Wilmott Dixon, 2010). Teo et al (2001) contest that within the UK alone, the construction and development industry makes up 50% of overall landfill volumes, demonstrating an industry wide critical issue, which must be addressed. Pinto et al (1994) and White et al (1995) suggest that waste produced by the construction and development industry has a residual value and therefore could be reduced if so desired, improving environmental conditions, however this has historically been met by external influencing pressures which prioritise low cost and efficient building techniques. Teo et al explain *"waste management is difficult in the construction industry due to the unique nature of each project, the hostility and unpredictability of the production environment, the fragmented nature of the project organisations used to procure buildings, and the intense cost and time pressures that characterise many construction projects"* *(2001:742)*. The responsibility of the construction and development industry to reduce its environmental impact is therefore complex and entwined with wider commercial considerations.

This view is support by Craven et al (1994) and Johnston et al (1995) who consider the unsustainable nature of the construction and development industry to be a direct result of instabilities faced. Yet in light of a rapidly changing climate due to global warming, pollution and resource consumption, a new generation and movement has arguably emerged, seeking the adoption of more sustainable practices at both the micro, personal level and within business practices. This call for corporate social responsibility reflects a cultural shift, placing pressure on the construction and development industry towards a 'Green Economy' (see 1.1 for definition), focusing on enhancing renewable energies, reducing emissions and pollution and protecting biodiversity and ecosystems. Cramer (2002) surmises, *"Sustainable business practice are gradually becoming more and more widespread. This is a trend that reflects changing social attitudes towards the responsibilities held by firms towards the societies in which they operate"* (2002:99), which suggests a social awakening and attitude adjustment by the organisation, setting a boundary and focus for environmental change to occur. However, existing literature, including Craven et al (1994), Johnston et al (1995) and Cramer (2002) neglect the role that individuals play within these organisations in pursuing change, seeking benefits beyond set regulations (see 2.3 below) and exploring green economy initiatives.

Whilst at face value, the green economy appears to be a practical and advantageous response within the construction and development industry towards environmental protection, some critics consider the movement to have simply become a "buzz" word; a remastered concept of sustainable development as established in 1987 by the World Commission on Environment and Development (WCED) as a strategy that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (UN, 1987:37). Brand (2012) contests that the green economy is an oxymoron, which *"intends to bundle different, partly contradictory, interests and strategies, and gives them a certain legitimacy and coherence".* In the same vein, 'sustainable development' received considerable criticisms ranging from its alleged manipulation to suit different agendas (Rydin, 2003) to fundamental definitional discrepancies as discussed by Lele, (1991).

What becomes apparent when considering accounts of the green economy, is the macro scale upon which the concept is analysed, and the extent to which it has become embedded within the role of the state. For example, the European Environment Agency explain that the green economy *"involves a mixture of measures ranging from economic instruments such as taxes, subsides and trading schemes, through regulatory policies, including the setting of standards"* (2016:93). Whist policy mechanisms are certainly vital in securing baseline environmental protection and provisions, there are noteworthy shortcomings in the consideration of 'the individual' in driving 'green' economic activities within an organisation and personal investments made within a corporate setting in changing behaviours. An absence of these individuals would undoubtedly hinder the green economy as the key actors who further the initiative at the grassroots level. Further research and consideration of these individuals is therefore crucial in understanding the changes that are implemented within organisations in light of corporate pressures.

2.3   Policy Requirements

In seeking to address the environmental impacts posed by the construction and development industry, a number of legislative acts and key policy documents have been published by central government in England. Rydin (2003) considers the most significant regulatory measure to be the introduction of Environmental Impact Assessment (EIA) under the Town and Country Planning (Environmental Impact Assessment) Regulations 2018 (previously the European Union 'Environmental Impact Assessment Directive'). The Government state that the requirement of an EIA is to:

"Protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into

account in the decision making process" (Ministry of Housing, Communities & Local Government, 2019).

The EIA directive sets a precedent for in depth scrutiny, consideration and prevention of significant environmental impacts within qualifying schemes. Similarly, in considering development of all scales, chapters 14 and 15 of the National Planning Policy Framework (2019) seek to meet the challenge of climate change, flooding and costal change, and to conserve and enhance the natural environment respectively, setting out overarching policies to abide to during the development process. This is further reflected at the regional level, within chapter 5, which provides London's response to climate change, setting out a range of policies in order to create a city *"that becomes a world leader in improving the environment locally and globally"* (Mayor of London, 2016:176).

Within the construction and development industry, the provision of national, regional and local policy requirements set duties for organisations to follow. These duties are legal requirements and influence the nature of development that can occur. Newman et al consider the role of planning policy to act as an *"interface between market and public interest"* (2002:4). Within a corporate setting, there remains variation to the degree of application of certain policies and regulations. For example, the Mayor of London enables the provision of a "cash in lieu" contribution, where developments cannot fully achieve the zero-carbon target required under emerging policy S12 (minimising greenhouse gas emissions) (Mayor of London, 2019). The ability to meet zero-carbon targets often has a direct impact on feasibility and profitability of a development, objectives which are led by an appointed development team. The role of a pro-environmental development actor can therefore substantially and materially alter the course and impact of a development on environmental outcomes through sound advice and direction. Existing literature however has failed to make this connection and consider the importance of individual development actors in both achieving and going beyond policy through education and leadership, demonstrating a motivation beyond baseline requirements.

2.4   The Emergence of Environmentally Conscious Development Actors

In attempting to define and understand the role of an environmentally conscious development actors, an initial acknowledgement of the multi-faceted and complex nature of the task is required. There is no definitive or widely accepted description which captures the role. Instead, there is a diverse range of opinion on what is considered to be an environmentally conscious individual ranging from "eco-preneurs" (Gibbs, 2009:63) and "green entrepreneurs" (Sagiv et al, 2007:71) to "advocacy planners" (Davidoff, 1965, Feld et al, 2010:3).

In discussing "eco-preneurs", Gibbs considers individuals to be *"the vanguard of a shift to a new form of… development that can help to address fears over global warming, climate change and their associated negative environmental impacts"* (2009:63). Correspondingly, Sagiv et al provide a more descriptive definition, suggesting that "green entrepreneurs" experience mixed emotions, whose motivations comprise a mix between green, ethical and social considerations (2007:71). Collectively, these definitions encompass the underlying advocacy planning paradigm, comprising development actors who seek to champion and aid vulnerable causes, particularly when considered in a construction and development context.

Whilst useful in providing a basic understanding of the role and motivations attributed to an environmentally conscious individual, many definitions including those above fail to consider the fluidity of external influencing forces including changing corporate pressures and personal dependencies such as job security. Accordingly, this study considers environmentally conscious development actors to comprise:

"Pro-environmental advocates who seek to employ sustainable and environmental measures within everyday practice despite corporate pressures which may seek to prioritise other considerations (e.g. economic gain)". (Staddon, 2019).

In considering environmentally conscious development actors, there is often an accepted criterion of behaviours that constitute pro-environmentalism. Simon et al attribute these behaviours to develop from differing working styles, knowledge sources and valuation methodologies, resulting in *"development goals that shape the actions of each real estate actor"* (2002:250).

Kollmuss et al (2002) adjectively describe pro-environmental behaviour to encompass models of empathy, altruism and prosocial behaviours, therefore exhibiting a form of 'selflessness' in order to champion environmental protection. This viewpoint is built upon the consideration of prosocial behaviour as a *"voluntary intentional behaviour that results in benefits for another"* (Eisenberg et al, 1987:92). Simon et al (2002), Kollmuss et al (2002) and Eisenberg et al (1987) however, do not explore the underlying motivations and intention behind such behaviours, thus failing to fully investigative how such behaviours emerge. An alternative narrative is offered by Nurul Diyana et al (2013), who consider Social Cognitive Theory key in determining the influence of an individual's predisposition with external influencing social factors. Accordingly, Nurul Diyana et al identify three fundamental motivations promoting pro-environmental behaviours: instinctive desire, need or drive to satisfy, aspirations for satisfaction or reward and personal fulfilment in a professional capacity. These motivations are shaped and mutated due to external influencing factors, however the extent to which pro-environmental behaviours prevail could arguably be led by a combination of these motivations.

Within the context of corporate organisations, eco-preneurship (see also eco-preneurs in section 3.2) is considered to be a reflection of business operation and leadership that contradicts popular perceptions of mainstream contemporary business operation, focused on profit creation. (Gibbs, 2009). Post et al (1994) contest that the drivers and motivations promoting eco-preneurship behaviours are compliance based (such as government regulation), market driven (including industry incentives) and value driven (for example consumer demand). An alternative view however, is provide by Hart (1995), who suggests that an exclusively internal strategy for achieving sustainable development and sustainable business practices (e.g. through 'eco-preneurs') cannot be successful without *"working with host governments and businesses to build appropriate infrastructure, develop human resources and nurture competitiveness"* (Hart, 1995:1004). Whilst it is accepted that in order to achieve widespread sustainable development and environmental protection at a macro scale, collaborative action is required, Hart assumes the sustainability agenda and environmental goals to be a pre-requisite, rather than an evolving movement which requires the input of individuals within those organisations to champion.

Discussions within existing literature have sought to explore the stimulus for motivations, however a pivotal consideration remains unexplored – the pursuit of pro-environmentalism notwithstanding economic gain as an initial pre-determined motivation. The drivers set out by Post et al (1994) ultimately centre around economic gain. Whilst pro-environmental behaviour has been proven to be advantageous in the context of the green economy and ecological modernisation, the motivations and drivers behind these behaviours are not invariably profit driven or economically led, as demonstrated within literature relating to the competing aims and ideologies faced by environmentally conscious development actors within a corporate setting (see Whyte et al, 2011, Sagiv et al, 2007, Cramer, 2002 and section 3.4).

2.5 Individual Ideology Versus Commercial Priorities – Competing Aims

"Actors working in particular organisational frameworks can... be regarded as 'organisational centaurs: part human and part organisation" (Ahrne, 1994:250).

As an environmentally conscious development actor employed within an organisation, challenges can arise in relation to pursuing personal ideologies within the wider context of corporate aims and objectives. A number of authors, including Ahrne (1994) (see above), Simon et al (2002) and Chaffin (1998) consider development actors to experience a *"never ending paradox of moral complexity"* (Chaffin, 1998:viii) comprising diverse interests and value extraction. It must therefore

be questioned, how does an environmentally conscious development actor seek to maintain their personal ideologies despite influencing pressures?

When considering the dichotomy of motivations in a corporate setting, Gondal et al (2005) reflect that individuals are required to exert a degree of professionalism, however, this does not automatically result in their personal "*beliefs, assumptions and goals*" (2005:1227) being quashed. Gonal et al (2005) conclude that policies or narratives are not solely determined by an individual's expert knowledge of their field, but also one's perceptions and values. This suggests that the 'personal' and 'professional' self cannot be automatically assumed to reconcile, and that decisions made within a corporate or organisational setting will be influenced by both. In considering the role of the organisation in which ideological conflicts are experienced, Schnieder (1987) contests that organisations must be viewed as *"situations containing patterned behaviours, as environments that are characterised by the coordinated activities of interdependent parts, including interdependent people"* (1987:438). This statement, however, wholly disregards the agency of individuals and their personal beliefs, suggesting that personal behaviours and characteristics are 'dependent' on others within an organisation and the organisation itself, failing to recognise the impact and change that can occur as a result personal ideology and motivations.

Sagiv et al (2007) explore the methods used by individuals in order to maintain and advance individual ideology in light of influencing pressures. They provide a conceptual view based on personal value: self-enhancement versus self-transcendence. Self-enhancement, Sagiv et al (2007) explain, centres around self-interest and personal gain. For example, in furthering the delivery of environmentally sustainable developments, the development actor may become distinguished in their field, thus 'enhancing' their career prospects. Alternatively, self-transcendence focuses on "*benevolence values*" (Sagiv et al, 2007:184), acting on behalf of others in order to serve the 'greater good'. Roccas (2003) and Gondal et al (2005) advance this view in light of organisational structures and argue that those who adopt self-enhancement values are more susceptible to the overarching corporate goals of their organisation. In attempting to understand the competing aims posed within a corporate setting however, the value conflicts set out by Sagiv et al (2007), Roccas (2003) and Gondal et al (2005) should be viewed on a spectrum rather than opposing, fixed points.

Within an organisation, significant financial gains can be secured by implementing environmental changes, particularly when in line with cultural shifts, as explored in section 2.2. Simon et al (2002) discuss how the property development comprises contrasting and competing commercial businesses, which *"share a stake in the property market but embody profoundly different interests"* (248). Yet, by virtue of developing a highly environmental development scheme,

construction and procurement costs can also be elevated. In understanding the role of development actors and competing priorities faced, existing literature has focus on the motivations of these individuals, particularly with regard to personal gain, however, little research has attempted to explore the mechanisms for achieving environmental change, in spite of the overall potential financial rewards or risks available to the organisation in which they work.

2.6   Strategies for Reconciliation and Impact on the Green Economy

By comprehensively reviewing existing literature, it is clear that within the context of wider environmental debates, attempts to analyse the crucial role played by individuals in furthering the environmental agenda has been somewhat overlooked. The responsibility of environmentally conscious individuals as 'educators' and 'environmental pioneers' within organisations is consistently viewed within existing literature as a motivation for personal gain. Taking into account the attitudes of individuals seeking to change corporate norms, there has been no systematic attempt to demonstrate strategies for reconciliation in real development outcomes, and the ensuring beneficial impact on the green economy, despite influencing restraints.

This study seeks to address a gap in existing literature, contributing to a complex debate surrounding the construction and development industry and impact on the environment. In light of significant corporate barriers, conflicting priorities and motivations, the changes that can be implemented by individuals within organisations guide the industry and seek to avoid development outcomes solely based on revenue return.

3 Methodology

3.1 Introduction

In order to address the four objectives set out in Chapter One of this study, a clearly structured qualitative methodological approach was employed. A purposive sampling technique was chosen in order to address objective 1, whilst interviews and questionnaires were conducted with participants identified within objective 1 to address objectives 2, 3 and 4. This methodological approach to data collection enables the inquiry of a social or human problem through an analytical "*complex, holistic picture*" (Srivastava et al, 2009:73, see also Denzin et al, 1994), resulting in the ability to fully interact with research participants in order to understand and interpret their conflicting aims and motivations within their organisational structure.

3.2 Research Strategy

Previous studies within the areas of environmental awareness within the built environment have traditionally employed a qualitative approach, comprising extensive telephone and questionnaire surveys (Walker, 1998), aimed at "*determining the attitudes of key property actors to environmental issues*" (Simon, 2002:247). Due to the complex nature of actor motivations, this study follows a multi-method qualitative approach, comprising semi-structured interviews and questionnaires. The semi-structured interviews and questionnaires uncover clearly conflicted professionals, attempting to reconcile environmental ideologies within the context of wider corporate aims. The results from this qualitative approach were then triangulated and analysed, demonstrating a largely undiscovered research area and critical findings.

Sample

In order to address research objective 1 ("locate environmentally conscious development actors and identify individual ideologies"), a purposive sampling technique was selected (Oliver, 2006) for this study. This technique was suitable due to the prevailing characteristics of participants which informed the research; namely that participants were considered environmentally conscious development actors, as required by Objective 1 of this study.

A systematic selection process was devised in order to locate environmentally conscious development actors. First, a pro-environmental event by a large, London-based independent centre for development actors was identified. The selected centre provides a programme of events which focus on topics including London's built environment and environmental issues. A relevant event focusing on environmental concerns within London was attended, during which a list of delegates was circulated to the room of attendees. The attendees were then reviewed based on their job title and employer, and a sample were selected to approach, in order to

conduct the chosen research methods. The selected sample was chosen in an attempt to promote diversity and therefore gain a holistic understanding of the research topic. For example, a mix of ages, professions (e.g. architect vs developer vs ecological consultant) and sectors (e.g. private vs public) were chosen. All details of the location and this event will remain anonymous due to ethical considerations, as explored later in this chapter (see 4.4).

3.3 Data Collection Methods

The chosen data collection methods included semi-structured interviews and questionnaires. These methods were identified not only due to the quality and in-depth nature of findings that could be obtained, but also due to their complimentary attributes. The use of questionnaires allows large amounts of data to be collected, resulting in the ability to cover a wider geographic area in an in-expensive manner. Questionnaires, however, do not provide the *"depth and richness"* (York University, 2019:1-2) of interviews, in which the interviewer explores and probes thoughts and feelings expressed during a conversation. The combination of these two methods therefore provides a robust data collection strategy, accounting both for a sufficient volume of data to allow data patterns to emerge and a comprehensive understanding of interviewee opinions and emotions.

Method 1: Semi-Structured Interviews

Semi-structured in-depth interviews provide a flexible and fluid framework, enabling ideas, opinions and discussion to arise naturally (Mason, in Lewis-Beck et al, 2004). The use of semi-structured interviews within this study was considered the most appropriate method, allowing an open dialogue to occur. Ensuring a fluid discussion was key in addressing research objectives 2 (explore the attributes and motivations required of these individuals in the context of corporate structures), 3 (investigate competing aims for the pursuit of individual ideologies versus commercial priorities) and 4 (highlight attempts for reconciliation between competing pressures in real development outcomes), allowing information to be extracted from participants in an organic, conversational way. The method further ensured that participants were not inclined to respond in a manner that had been framed by the interviewer (Bryman, 2006), therefore ensuring that all motivations and strategies for reconciliation expressed by the chosen development actors were representative of their personal experiences.

A total of ten interviews were conducted. Table 1 sets out a summary of characteristics:

Table 1: Interviewee Characteristics

Respondent	Age	Occupation	Sector	Date Interviewed	Interview Location
A	20-30	Developer	Private	30/05/2019	Public Square (London)
B	30-40	Energy	NGO	06/06/2019	Café (London
C	50-60	Ecologist	Private	07/07/2019	Café (London)
D	20-30	Planner	Public	18/06/2019	Library (London)
E	20-30	Energy	Private	10/06/2019	Restaurant (London)
F	40-50	Architect	Private	04/06/2019	Café (London)
G	50-60	Flooding	Public	30/05/2019	Café (London)
H	20-30	Architect	Private	19/06/2019	Café (London)
I	20-30	Developer	Private	10/06/2019	Library (London)
J	40-50	Planner	Private	04/06/2019	Café (London)

Prior to the interviews, a topic guide was drafted, comprising suggested broad themes to help shape conversations relating to personal ideologies and motivations, conflicts experienced and methods for reconciliation (Chase and Walker, 2013). The interviews were arranged for a period of one-hour and were recorded with the permission of the interviewees. Central London locations such as cafes were chosen to conduct the interviews, acting as a neutral, safe space where participants could freely express their opinions, eradicating external pressures (Valentine, 2005).

Following the interviews, transcripts were coded and analysed in order to highlight common trends, patterns and meaning from a social constructivist standpoint. This position recognised that in coding results, a 'co-constructed reality' (Charmaz, 2000) would emerge, whereby the researcher's own outlook was acknowledged.

Method 2: Questionnaires

Questionnaires were employed within this study. Questionnaires enabled large amounts of data to be collected, whilst reducing ambiguity in responses due to clearly structured questions (Johnston et al, 2000). A total of 50 questionnaires were circulated to identified development actors. The data collected was transformed into quantifiable figures, presented as graphics including graphs and tables, illustrating distinctions in opinion and allowing for direct comparisons to be made between respondents. The use of questionnaires in this study allowed an insight into participants opinions at a more macro level, furthering research objectives 2, 3 and 4 and laying a foundation for statistical presentation of the data. The questionnaire template can be located at Appendix A.

3.4 Ethical Considerations

Given the nature of this study, comprising the conflicting and complex relationship between individual ideology and corporate structures, due consideration to ethical considerations was of the upmost importance. The ideologies and opinions of interviewees and respondents directly relate to the sector and organisation in which they are employed. Care therefore was taken to ensure that any feelings, concerns, or diverging opinions to their employer will not result in disciplinary action, and the participant is safeguarded through anonymity.

In order to ensure that participants did not experience any stress or discomfort, and to conduct a partial study, questions were posed in an unbiased and sympathetic manner with all results kept confidential (Bryman, 2006, Longhurst, 2010). Accordingly, an ethics statement was provided to participants, and written consent secured before questioning (see Appendix B). In addition, a risk assessment was completed prior to commencing any research (see Appendix C). All data collected was securely stored on a password encrypted private laptop.

3.5 Limitations

In devising the structure of the methodological approach utilised for this study, qualitative, semi-structured interviews and questionnaires were most appropriate for obtaining in-depth, emotive responses. Nevertheless, qualitative research is time consuming, given the need to collect, analyse and interpret responses (McLeod, 2017).

Ideally, in conducting research, this study would have drawn from a sample of no less than 100 environmentally conscious development actors, in order to obtain a more representative review of the sector. Due to a lack of human resources and time constraints, a larger sample size was not viable. The sample was therefore reduced, thereby assuring the quality of responses obtained.

Although resources were limited, meaning that additional sampling could not be undertaken, this did not adversely impact the quality of the research. Given the qualitative nature of this study, interviews and questionnaires undertaken provided valuable data, which highlighted emerging patterns and trends relating to the topic. Whilst additional sampling would have therefore improved the study, the quality and reoccurring themes within responses received are unlikely to have changed significantly.

4 Results, Analysis and Discussion

This Chapter sets out an analysis of results following the qualitative method collection. The results have been divided into five key findings which emerged from the study. These findings were led by the research objectives as set out within Chapter One of this study.

Key Findings

I.   There is a recognition of the often-detrimental impact of the construction and development industry on environmental vulnerabilities. This recognition acts as a key determining factor in motivating environmentally conscious development actors.

II.   Environmentally conscious development actors experience difficulties in balancing individual and corporate priorities, with financial considerations often taking precedence, however, individuals are able to employ behaviours in order to reconcile these conflicts.

III.   Mechanisms employed in order to protect and enhance the environment often go beyond government requirements, with corporate education playing a key role.

IV.   Environmental practices employed within a corporate setting result in benefits for the organisation by virtue. It is the recognition and focus of these advantageous effects that can result in a corporate shift to environmental consideration.

V.   The impact of environmentally conscious development actors within construction and development organisations has a palpable impact on real development outcomes at the micro scale, however collective action is required for substantial results.

4.1 Presentation of Results

In order to provide a comprehensive review and in-depth analysis of results, discussions and statements from interviewees and questionnaire recipients have been organised by topic area (Anderson, 2010). Due to the volume of questionnaire results, these are largely presented as generalised statistics (for example, "X number of people considered themselves to be environmentally conscious"). Feelings, motivations and opinions are largely derived from the in-depth interviews undertaken, with interviewees identified as per the attributed label (A-J) as set out in Table 1.
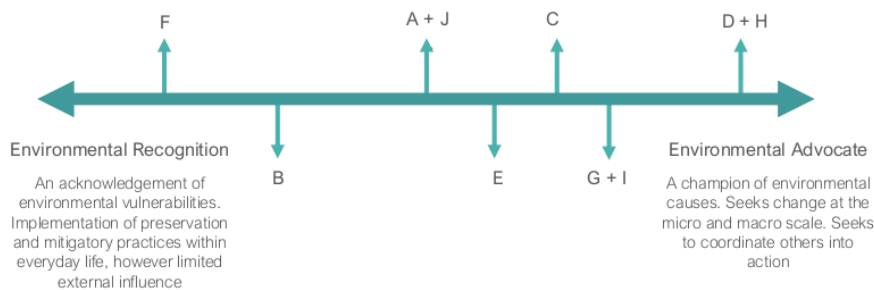
4.2   Findings

I.   There is a recognition of the often-detrimental impact of the construction and development industry on environmental vulnerabilities. This recognition acts as a key determining factor in motivating environmentally conscious development actors.

Emergence of Environmentalism

When asked whether participants considered themselves to be environmentally conscious, 100% of respondents expressed environmental tendencies, of which many communicated an appetite to improve their environmental commitment and promote environmental causes. It was, however, clear from interviews undertaken that the degree to which participants considered themselves to be environmentally conscious varied and could be plotted on a continuum, as demonstrated in Figure 1.

Figure 1: Continuum of Environmental Behaviour

Environmental Recognition

An acknowledgement of environmental vulnerabilities. Implementation of preservation and mitigatory practices within everyday life, however limited external influence

Environmental Advocate

A champion of environmental causes. Seeks change at the micro and macro scale. Seeks to coordinate others into action

Key

Letter = Respondent (See Table 1)

Figure 1 highlights the differing scales to which environmentalism, or considering oneself to be environmentally conscious can differ significantly. As discussed by Buizer et al (2011), Wu et al (2006) and Gibson et al (2000), scale acts as a "*spatial, temporal, quantitative or analytical [construct]… used to measure and study any phenomenon*" (Buizer et al, 2011:3).

When exploring the evolution of environmental behaviours, it was clear that the immediate environment in which participants live had a direct impact on the emergence and degree of their environmental tendencies, with 67% of participants considering either formal education (e.g. university) or current affairs (e.g. the impact of global warming) to have influenced their

behaviour. Sagiv et al (2007) suggest that "*personal value priorities are a product of individuals' unique social experience and distinct heredity*" (2007:183). It is the experiences of individuals both within education and everyday life that has shaped their understanding and interest in the environment.

Interviewee G explained that having chosen to study geography at University, they were taught about the devastating effects of phenomena such as global warming, and particularly the ensuing impacts including climate change and flooding. It was therefore the direct impact on people's lives around the world that resulted in the realisation that action needed to be taken. Interviewee G continued: "*It made me realise that I wanted to go into a profession where I could play a part in reducing these devastating consequences*".

Similarly, Interviewee B explained:

"*Although I initially 'fell' into this career, the role of the environment within current affairs, and continuous media representation of the environment has certainly made me act. Particularly when you have certain renowned Politicians claiming that climate change is 'fake news'*".

The emergence of environmentally conscious individuals therefore appears to have a direct correlation with the environment within which they immerse themselves and has motivated them to make a change within their lives both personally and professionally. This has been previously highlighted by Ajzen et al (1980), demonstrating the link between situation-specific awareness and specific behaviours.

Environmental Concern

Working within the industry, there was a widespread recognition of the direct impact of construction and development on environmental vulnerabilities by participants. Notably, three key areas of concern that were most commonly highlighted included:

- Climate Change
- Habitat Protection
- Green Infrastructure

Figure 2 sets out the overall level of concern based on questionnaire and interviewee responses. Whilst it should be noted that the areas of sustainable or environmental concern included above is not exhaustive, it seeks to demonstrate a number of the areas where immediate action was considered to be crucial.

Figure 2: Areas of Environemental Concern

- Habitat Protection
- Renewable Energy
- Flood Risk Management
- Air Quality Management
- Green Infrastructure
- Low Carbon Economy
- Climate Change
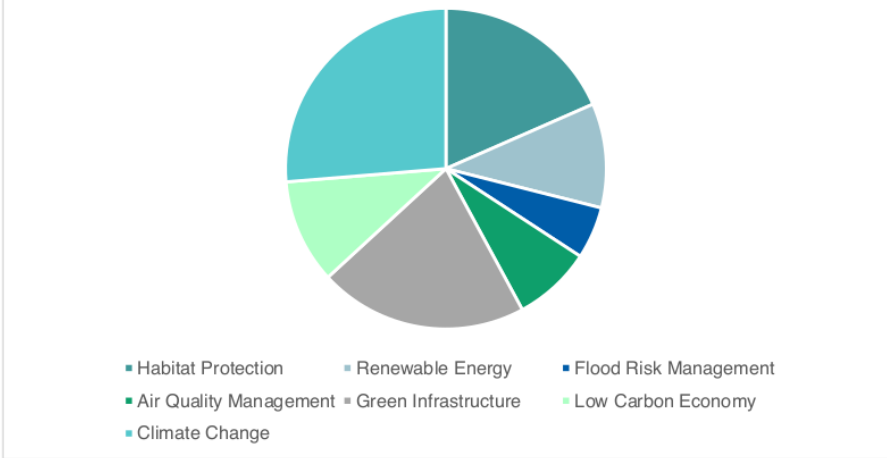
Despite a recognition of specific areas of the environment which are being impacted by the industry, there was also a general awareness of the impact at a more macro scale. For example, Interviewee H explained:

"*There is not enough being done within the industry to either avoid or mitigate the impact of construction. I recently learnt that the construction industry is contributing to 50% of all climate change. That is staggering when considered as just one sector.*"

This recognition by participant H and others was pursued by a commitment to initiate change above the bare minimum. Despite statistical evidence of the detrimental impact of the industry, there was an overwhelming urge to be socially responsible and act against general behavioural norms within the industry, despite instabilities within the construction and development industry highlighted by Craven et al (1994) and Johnston et al (1995) such as economic considerations.

Motivated Development Actors

During interviews with participants A – J, it became clear that whilst the end goal of participants in seeking environmental protection were aligned, the motivations for achieving these goals varied. Nurul Diyana et al consider motivation to involve "*factors which incite and direct an individual's action*" (2013:915), led by individual motives, including need or drive, satisfaction or reward and arousal. Taking these motives into account, interviewees could be grouped accordingly as set out in Table 2. It should be noted that these groups are fluid, and

that the motivations identified represent the principal impetus, however for some, a mix of motivations were experienced.

Table 2: Interviewee Motivations

Respondent	Motivation	Commentary
A	Need / Drive	"I feel a commitment to protect the environment"
B	Need / Drive	"There are certain regulations that have to be met. Although I do try to improve on these"
C	Satisfaction / Reward	"By virtue of encouraging environmentalism in a professional capacity, it also results in benefits for my company"
D	Satisfaction / Reward	"There is an opportunity to become renowned for protecting and enhancing the environment, which can only be a good thing"
E	Need / Drive	"If we don't act then the consequences could be catastrophic"
F	Arousal	"It's for future generations, but it ultimately also makes me feel good and positive too"
G	Need / Drive	"Acting environmentally, or at least trying to where possible is now ingrained in my behaviour"
H	Need / Drive	"I want to be part of a new generation coming forward who consider environmental protection as second nature"
I	Satisfaction / Reward	"There are so many wider benefits that can be procured from being environmentally friendly"
J	Need / Drive	"It has become second nature to consider the environment, personally and professionally"

Whilst there were clearly-diverging motivations between interviewee participants, the impact and role of individuals collectively can help to ignite, drive and encourage sustainable and environmental practices within organisations. This has been led by an initial recognition of environmental vulnerabilities, with all interviewees ultimately seeking to mitigate and alter the existing detrimental behaviours of the construction and development industry despite diverging interests and motivations.

II. Environmentally conscious development actors experience difficulties in balancing individual and corporate priorities, with financial considerations often taking precedent, however, individuals are able to employ behaviours in order to reconcile these conflicts.

Conflicting Ideologies

The role of an environmentally conscious development actor within a professional capacity is inherently complex, involving an array of both internal and external influences, seeking to adapt and manipulate development considerations. Key considerations were found to include, design, feasibility, legislation and regulation, cost and profit. As aptly summarised by Cadman (1991:2), the development process "*involves the combination of various inputs in order to achieve an output or product*".

In total, 83% of questionnaire responses and 100% of interviewees considered that they experienced competing conflicts within their career when attempting to balance personal ideology with the wider aims and objectives of the organisation within which they work. Despite a commitment to meet baseline policy requirements, interviewee participants discussed how there are commonly opportunities to improve the environmental credentials of development schemes, however within a market led by capital returns and facing significant targets such as affordable housing requirements, wider corporate aims often override environmental ideologies. Interviewee J discussed:

"*I am certainly dedicated to promoting sustainable and environmental initiatives where possible, whether it be maximising green roofs, advising on additional solar panels or delivering an energy efficient building. However, ultimately, I am led by my client, whether they be a developer or fund. They pay my fees, and so if they want to seek to reduce costs and maximise profit or focus on delivering additional affordable housing units in lieu of additional solar panels, then I have to do as instructed*".

Research results identified a clear power struggle between personal ideologies and what was considered to be 'right' within an industry and market that is clearly led by a variety of competing motivations. As aptly summarised by Form in 1954, "*the image of a free and unorganised market in which individuals compete impersonally must be abandoned. The reason for this is that the land market is highly organised and dominated by a number of interacting organisations*" (1954:317). This has led to a dichotomy both within and outside an organisation.

Financial Influence

As previously explored, the role of finance, capital and profit carry significant weight when attempting to employ and improve the environmental credentials of a development scheme. Interviewee J, a Planner within the private sector summarised the extent to which their client,

a developer, may override additional environmental improvements due to cost and profit. Evidence from this research has found that this pattern is seemingly a trickle-down effect. When interviewing Interviewee A, a Developer, they explained that the financial entity that backs development projects prioritises capital returns over environmental responsibility. Interviewee A continued to note: "*If I were to work for an environmentally responsible fund that would be wiling to comprise returns for environmental credentials, it would make for greener decisions*".

When questioned as to the key overriding influence prioritised over environmental considerations, 74% of questionnaire and interviewee respondents considered financial incentives to take precedent. There was a widespread recognition of the inherent behaviour within the construction and development industry seeking capital returns above social responsibility, including environmental consideration. Environmentally conscious development actors are caught in a dilemma, seeking to uphold their own values whilst caught in a mutually conflicting situation, where the introduction of environmental initiatives is dependent on set conditions, primarily, financial returns.

Yet despite an acknowledgment from interviewee participants of a clearly complex web of intertwined priorities and desire outcomes, all interviewee participants demonstrated a distinct understanding of the situation and recognised their ability and role within the industry to employ mechanisms in order to seek environmental benefits despite pressures faced, as explored in theme III.
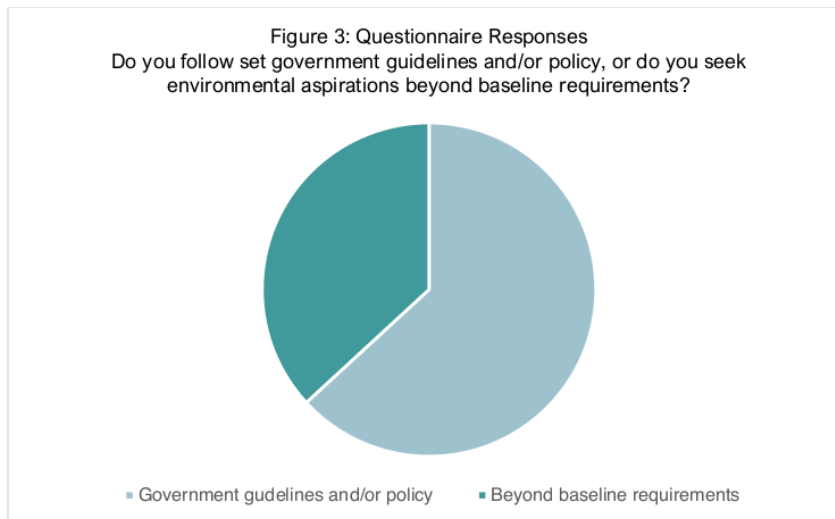
III.   Mechanisms employed in order to protect and enhance the environment often go beyond government requirements, with corporate education playing a key role.

Policy Requirements

Within the construction and development industry, there are a number of policy frameworks and guidance, which set out Government legislation and regulation within the UK. For example, the National Planning Policy Framework (2018), Local Plans and the Building Regulations 2010 set out a number of environmental targets that by law should be met. When questioned as to whether participants sought to meet or exceed baseline requirements, over 60% confirmed that where possible, they would seek to go beyond government requirements and/or guidelines. Figure 3 sets out responses.

In order to implement these improvements, Interviewee I explained the importance of awareness and being armed with up-to-date information, both in relation to government

policy and technological advancements. Through this bank of knowledge, environmentally conscious development actors are able to consider and discuss measures with clients or project teams that will help to achieve client or planning objectives within the context of improved sustainability.

Figure 3: Questionnaire Responses
Do you follow set government guidelines and/or policy, or do you seek environmental aspirations beyond baseline requirements?

- Government gudelines and/or policy - Beyond baseline requirements

Interviewee participants frequently emphasised the importance of highlighting policy requirements and environmental initiatives that could be sought early on during feasibility discussions with clients or applicants. Through early, proactive engagement, environmental initiatives beyond those baseline requirements sought by Government could be achieved. Handfield et al (2001) and Magnusson (2003) both consider that if environmental targets and goals are formulated at an early stage by management level (e.g. client, developer), then these targets will be addressed and employed in the same way as other technical specifications. This was reiterated by Interviewee C:

"Before a scheme has even been developed, if we can sit down with our client and inform them of requirements that need to be met, in addition to advising on further environmental improvements that could be sought, then our client can consider the costs associated at an early stage and factor them into their cost forecast. It's all about getting ideas on the table before they can be ruled out at a later stage when considerations such as programme and build cost take precedent".

Manipulation Techniques

The role of manipulation and persuasion techniques was raised as a further mechanism employed in order to seek environmental protection and improvements within the construction and development industry.

As developers within the industry, Interviewees A and I discussed the methods implemented in order to secure environmental improvements whilst advertising the associated benefits. Interviewee A confirmed that by encouraging market research into the likely type of buyer in a given neighbourhood, a market focus can be devised for the area, promoting 'green communities' and 'green housing'.

Interviewee I:

"I implement practices for marketing purposes. If 50% of a new estate is required to have solar panels, we will put them on all dwellings to show our green credentials. This creates a unique selling point and sets us apart from similar housebuilders within the local area".

Interviewees A and I have created a clearly defined strategy for seeking to highlight and optimise the potential financial benefits that could ensue from implementing environmental initiatives. Whilst the interviewees confirmed that these mechanisms did not always override financial incentives, they assisted in building a case for the inclusion of green practises within an organisation focused on capital returns. This was re-iterated by a number of interviewees, who within a professional capacity, employ manipulation techniques in varying forms Interviewee F for example, discussed the process of sourcing sustainable construction materials when designing buildings. Working within the cost parameters that are set, Interviewee F confirmed that when pitching a proposed materials sample to their client, they will initially identify a highly sustainable and environmentally friendly material, however, when it comes to pitching the proposed material, emphasis is also placed on the aesthetics and durability of said material, highlighting the associated longevity and low maintenance costs. Interviewee F explained, *"Primarily, it's a balance between staying true to your design code and aspirations for a building, for example, being highly sustainable, whilst ensuring client sign-off, which often requires emphasis on other benefits that can be obtained".*

Through the use of manipulation techniques, environmentally conscious development actors are able to push for further environmental improvements during the construction and development process, often without the client or end-user being aware of the additional benefits that have been secured. These techniques create a 'win-win' situation, whereby cost

considerations are taken into account and are equally weighted with environmental initiatives, resulting in an equilibrium strategy.

The Role of Education

When considering methods implemented in order to champion sustainability and environmental awareness, participants discussed the vital role of education and training within an organisation. Research undertaken by McGraw Hill Construction in 2012 suggested that 84% of respondents considered that different skills and/or training was required when working on green projects (2012:43). Responses from participants of this study were consistent with those findings presented by McGraw Hill Construction, and suggested that when attempting to improve the environmental credentials of a project, or employ environmental behaviours, a differing set of skills were required, primarily focused on client management.

Accordingly, it was recognised by interviewee participants that in order to encourage environmentalism and influence others to act, education and training are required as a prerequisite, both internally within an organisation and externally. In order to address this, participants discussed the use of training sessions, setting out environmental initiatives that should be identified and could be employed within a development scheme, how to successfully advise on these matters and client management to ensure that the benefits of these initiatives are recognised. Externally, Interviewee C (Ecologist), E (Energy Consultant) and G (Flood Officer) clarified their commitment to holding Continuing Professional Development (CPD) sessions within the workplace by visiting offices and providing free training sessions directly relating to their areas of expertise. Interviewee C commented:

"Where possible, I try to visit other offices both within the construction and development industry but also anything associated, such as design companies. It provides me with an opportunity to really emphasise where ecological mitigation and protection could be sought. I try to set out simple measures that they can adopt both within a personal and professional capacity, as every little helps".

Interviewee E confirmed that training and educational sessions provide a crucial opportunity to change both individual and collective ways of thinking on a topic. During these sessions, the importance of implementing sustainable and environmental practices can be highlighted and an attempt to change the mind-set of an organisation is made.

Crucially, participants perceived the use of education and training sessions as providing an opportunity to change the mindset of a group of individuals. By focusing on a group context, slowly the culture of an organisation and attitudes towards environmental protection, mitigation and enhancement begins to change, which when considered on a macro scale, would have a significant and palpable impact.

IV.   Environmental practices employed within a corporate setting result in benefits for the organisation by virtue. It is the recognition and focus of these advantageous effects that can result in a corporate shift to environmental consideration.

Corporate Social Responsibility

As previously set out in part III of this Chapter, the use of manipulation techniques by participants provides an opportunity for environmental improvements whilst masked behind strategy focusing on the associated benefits, for example, the installation of solar panels demonstrating green credentials and creating a USP for the developer. This theme regularly emerged when considering the advantageous effects that could be sought for an organisation in acting environmentally consciously.

Cramer (2002) suggests that the emergence of sustainable business practices reflects a trend towards social responsibility as a result of changing social attitudes (2002:99). The implementation of manipulation techniques set out in part III enables by virtue the emergence of a form of corporate social responsibility. Interviewee I explains:

"I can encourage and push us as a company to employ more sustainable practices on site. This then feeds into our marketing campaign, so that other departments can see that we are gaining marketing and corporate responsibility benefits from demonstrating greener credentials".

This method suggests that the role of an individual in seeking environmental benefits can assist in altering the corporate or organisation behavioural norm towards environmental consideration. This not only provides advantageous effects with regard to sustainability and the environment but publicises shared values between the organisation and the end user.

Added Value

In considering returns on capital and profit, participants acknowledged the role of monetary incentives. There is a clear competing imbalance between implementing environmental

initiatives and end profit, as implied by Gibbs (2009). Interviewee participants reflected upon the role of added value. Interviewee H commented on frequent discussions held with clients and how the design process is commonly led by the value that can be obtained from a proposal. Interviewee H confirmed that initiatives such as green and blue mitigation on land (the inclusion of vegetation and water) are often overridden as they limit the development capacity of a site and therefore site value. Interviewee H suggests that there is a balance to be made between cost/profit and impact on sales. If a client can promote a site as having environmental credentials (e.g. all units having solar panels), whilst the cost of the environmental initiative may increase built costs, the dwellings will sell faster, meaning Return On Capital Employed (ROCE) would be more efficient.

By emphasising the emanating financial benefits that can be achieved, the culmination of environmental initiatives and design proposals can in fact seek to elevate sales and act as a mechanism to promote and facilitate sales, thereby providing a financial incentive and added value. Interviewee participants therefore demonstrated a successful and practical approach in balancing and harmonising competing interests within the construction and development industry, emanating in environmental benefits.

Corporate Environmentalism

When questioned, questionnaire respondents and interviewee participants considered that an organisation's cultural change would be required in order to successfully implement environmental initiatives within the everyday practice of their organisation, a total of 67% considered a holistic change would be required. When exploring this finding with interviewee participants, it was discovered that where this corporate/organisational change has occurred, it has been led by financial incentives. Interviewee D, a Planner within the public sector concluded:

"The public sector can be different, for us, it's about promoting sustainability and environmental considerations internally and emphasising that by requesting additional initiatives from applicants that this can be beneficial for them in the long run. I often use examples of environmentally friendly developments which have been a huge success and garnered both an esteemed development in addition to financial rewards. Officer's shouldn't be afraid to do this".

Interviewee F similarly explained that a corporate cultural change requires alignment at all levels. By demonstrating the benefits both financially and socially that can result due to being more environmentally conscious, change can and have been achieved. The role of the

interviewee participants, in seeking to highlight the advantageous effects of employing environmental initiatives, both in terms of corporate social responsibility and financial returns as a result of added value have clearly assisted in creating an awareness within organisations, altering attitudes and behaviours both internally and externally.

V.   The impact of environmentally conscious development actors within construction and development organisations has a palpable impact in real development outcomes at the micro scale, however collective action is required for substantial results.

Real Development Outcomes

The role of environmentally conscious development actors on the construction and development industry has an influential impact on both other development actors and development outcomes. Gibbs (2009) suggests that environmentally conscious development actors seek to address "*environmental causes, employee-friendly working conditions, [have] an interest in wider social issues than bottom-line profits and a concern for the longer-term implications of their business activities*" (2009:64). These behavioural traits and characteristics result in development schemes which complement the natural environment and encourage sustainability. When discussing the real development outcomes of interviewee participants as a result of their environmental motivations, and behaviours and practices implemented, a variety of outcomes at the micro scale were identified, as set out in Table 2.

Table 2: Real Development Outcomes

Respondent	Action	Outcome
A	Introduction of solar panels on all units within residential development schemes	Additional renewable energy infrastructure sales and energy efficiency savings
F	Prioritising the design of new buildings to reflect the 'passive house' standard (ultra-low energy buildings that require little heating or cooling)	Reduction in the ecological footprint of the built environment and encouraging the use of environmentally friendly, sustainable construction materials
J	Discussions with clients at an early stage to maximise green infrastructure including a large green roof within a commercial development	Creation of habitats for plant and animal species whilst promoting human well-being that is derived from a healthy environment

As demonstrated within Table 2, the role of environmentally conscious development actors has accumulated clear environmental benefits and contributions to the green economy,

seeking to encourage new ways of thinking whilst "*improv[ing] human-wellbeing and social equity... significantly reducing environmental risks and ecological scarcities*" (UN Environment, 2019:1).

The 'real development outcomes' set out within Table 2 further signify the palpable impact that environmentally conscious development actors and their underlying behaviours and motivations has on the construction and development industry, resulting in undeniable advances to green agenda. Yet, notwithstanding perceptible outcomes, as set out in Table 2, additional, significant benefits can and have been achieved as a result of environmentally conscious development actors, including cultural transformation and inciting behavioural changes in others. The resultant benefits are therefore two-fold:

1. Physical and distinguishable environmental protection and improvements; and
2. Influential behaviour and action which ensures a continued commitment to the environmental agenda.

Collective Action

Despite substantial contributions to the construction and development industry in environmental terms, the findings presented following discussions with research participants suggest that whilst an individual can lead change within an organisation, in order to reduce the destructive impact of construction and development on environmental vulnerabilities, action at the macro level is required. This requires more environmentally conscious individuals who are dedicated to altering behaviours and an industry wide recognition and adoption of environmental practices.

Interviewee C: "It is vital that we have environmental champions, who's impact is significant, however in order to mitigate the impacts of the industry as a whole, more needs to be done across the board".

The research conducted within this study has exposed a group of forward thinking, socially responsible and driven individuals who pursue environmental protection and enhancements where possible. This work was undertaken within the context of a sector which can be argued to have traditionally focused on economic gain. The participants of this study highlighted the crucial role that these individuals are having within the sector, and, as suggested by Rao et al (2000), have created a social movement which is enforcing a new cultural change, resulting in the emergence of new organisational structures. Through the collective role of these

individuals, organisational change will continue to occur, gradually altering accepted behaviours and norms and encouraging a holistic environmental agenda.

5   Summary and Conclusions

"Individuals [are] the vanguard of a shift to a new form of capitalist development that can help to directly address fears over global warming, climate change and their associated negative environmental impacts" (Gibbs, 2009:64).

5.1   The Study

This study has sought to explore the extent to which environmentally conscious development actors experience conflict between individual ideology and corporate gain, how these competing aims are reconciled, and the impact of their coexistence on the construction and development industry in real development outcomes.

Accordingly, the research has attempted to address the following question:

How do environmentally conscious development actors experience conflicting pressures between individual ideology and corporate gain within an organisation and how are these competing aims reconciled in real development outcomes?

As has been demonstrated in Chapter 2 of this study, existing literature on the topic has typically investigated the impact of environmental degradation and the motivations and behaviours of environmentally conscious individuals, however there has been very limited research into the impact and changes that individuals can make within an organisation in order to address environmental concerns. This study has aimed to address a significant gap in existing literature, analysing the behaviours, expectations and competing pressures on environmentally conscious development actors, and the extent to which individual action at the micro scale can not only influence the organisations in which they work, but can result in pro-environmental outcomes in real development terms.

Conflicting Pressures

The study of environmentally conscious development actors in London has highlighted compelling conflicting pressures, in an attempt to balance individual, pro-environmental ideologies with the outcomes desired by the organisation or client for who they work. As previously citied in work by Ahrne (1994), Simon et al (2002) and Chaffin (1998), development actors are considered to experience a *"never ending paradox of moral complexity"* (Chaffin, 1998:viii). Questionnaire and interviewee responses demonstrated a power struggle and dilemma reconciling individual motivations to protect and enhance the environment against primarily monetary considerations, including capital return and profit. Yet, despite ideological difficulties posed, these development actors were able to implement mechanisms and actions within their professional practice in order

to guide and encourage pro-environmental behaviours in light of the challenges faced. Methods for reconciliation primarily focused on persuasion tactics including the use of early engagement, added value/benefit, training and education.

Real Development Outcomes

The role of environmentally conscious development actors within the construction and development industry is vital to securing continued environmental benefits above and beyond baseline requirements set by Government. As a result of the dedication and commitment of these individuals to the environmental agenda, additional sustainable and environmental benefits are being secured within development schemes, including the provision of solar panels on all units within a residential estate, the promotion of low-carbon passive houses and an increase in green and blue infrastructure within development schemes. However, beyond the physical benefits secured, the role of environmentally conscious development actors themselves ensures a continued commitment to the environmental agenda despite both internal and external influencing factors. By virtue, these actions contribute towards the green economy and produce advantageous outcomes socially, politically and economically for both the organisation in which they work and the global community.

5.2 Reflection

Whilst this study demonstrates that the role of individual environmentally conscious development actors has an advantageous and palpable impact on environmental considerations and ensuing benefits for the organisations and clients for whom they work, policy changes can seek to support these individuals and ensure further environmental commitment from organisations. Primarily, more stringent policies and legislation are required in order to enhance environmental policies and ensure that monetary concerns do not outweigh 'green' policies. This should particularly be considered in light of Brexit and the application or removal of EU environmental directives within UK law.

5.3 Limitations

Within the context of a case study approach, the results of this study have been generalised and focused specifically on those development actors working in London. Whilst the feelings and opinions of participants differ depending on their city or location, as discussed in Chapter 4, Part I of this study, the immediate environment in which participants live and their experiences of that area (including education, media representation etc) can impact values and priorities. It is therefore recommended that future studies consider differing regions within the UK or other 'world cities', perhaps employing a comparative study in order to identify any variations.

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Appendix

A: Questionnaire Template

B: Ethics Statement

C: Risk Assessment

Appendix A: Questionnaire Template

Environmentally Conscious Development Actors: Reconciling Individual Ideology within Corporate Structures

You have been identified as an environmentally conscious individual having attended New London Architecture's event, *"Sustainable cities – Vancouver and London".*

This study seeks to explore the extent to which environmentally conscious development actors experience competing priorities between individual ideology and corporate gain, how these competing aims are reconciled, and the impact of their coexistence on real development outcomes in the wider context of the green economy.

Please circle / highlight the answer relevant to you.

1. **Do you work in the private or public sector?**

   - Private
   - Public

2. **Generally speaking, do you consider yourself to be an environmentally conscious development actor?**

   - Yes
   - No
   - Sometimes

3. **If you consider yourself to be environmentally conscious, would you consider your ideologies to be strong, medium or weak?**

   - Strong – I consider the environment in all of my work
   - Medium – I take a balanced view, considering the environment in my work where relevant
   - Weak. – I do not regularly consider the environment in my work

4. **What area of sustainability or environmental concern is considered critical to you? (E.g. biodiversity protection/enhancement, renewable energy)**

   - Habitat protection
   - Renewable energy
   - Flood risk mitigation
   - Air quality management
   - Green infrastructure
   - Low carbon economy
   - Climate change

   Please comment if not listed above:

5. **Do you consider the construction and development industry to be implementing sufficient practices in order to safeguard against the environmental vulnerability/ies you circled above?**

   - Yes
   - No

6. **Do you implement practices within your professional role in order to encourage sustainability and/or pro-environmental behaviours among others (e.g. prompting colleagues or clients to behave in a particular way)?**

   - Yes
   - No
   - Sometimes

7. **If yes, what practices / actions do you implement?**

   Please comment:

8. **Do these practices follow set government guidelines and/or policy, or do you seek environmental aspirations beyond baseline requirements?**

   - Government guidelines and/or policy
   - Beyond baseline requirements

9. **Do you consider it difficult to balance the often conflicting aims of corporate gain (e.g. profit) and environmental ideology?**

   - Yes
   - No

10. **Which drivers of corporate aims / priorities often override environmental protection and/or mitigation? (e.g. profit/cost or efficiency-driven)**

    Please comment:

11. **Do corporate aims override personal environmental ideologies within a professional capacity?**

    - Yes
    - No

12. **What actions do you implement (if any) in order to achieve an equilibrium and reconcile personal environmental aims?**

    Please comment:

13. **Do you consider that initiatives are / could be successfully implemented within your organisation/company in order to move towards a more green economy?**

    Definition: "An inclusive green economy is an alternative to today's dominant economic model, which exacerbates inequalities, encourages waste, triggers resource scarcities, and generates widespread threats to the environment and human health. Over the past decade, the concept of the green economy has emerged as a strategic priority for many governments." (UN Environment, 2019)

    - Yes
    - No

14. **Do you consider that this transition would require a corporate culture change?**

    - Yes
    - No

15. **Do you consider that your own actions (at work) contribute in a positive way to the green economy? If so, how?**

    - Yes
    - No

    Please comment:

UCL

Please provide any additional observations you have here:

Appendix B: Ethics Statement

Research Consent Form

Research Title: Environmentally Conscious Development Actors: Reconciling Individual Ideology within Corporate Structures

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This dissertation is submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Spatial Planning at University College London.

I understand that data collected as part of this questionnaire and/or interview will be solely used for the purposes of this research and that all results will be anonymous and kept confidential.

I understand that should I wish to exclude my results from this study following completion of the questionnaire and/or interview, I must state this in writing to the author, Chloe Staddon, prior to publication (publication date: 02/09/2019).

On this basis, I agree to partake in this study and for my results to be used in line with the statements above.

Name:

Signed:

Dated:

Appendix C: Risk Assessment

RISK ASSESSMENT FORM
FIELD / LOCATION WORK

≜UCL

The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form
http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf

DEPARTMENT/SECTION: Bartlett School of Planning (MSc Spatial Planning)
LOCATION(S): London
PERSONS COVERED BY THE RISK ASSESSMENT: Author / interviewer (Chloe Staddon), study participants (interviewees)

This study seeks to explore the extent to which environmentally conscious development actors experience competing conflict between individual ideology and corporate gain, how these competing aims are reconciled, and the impact of their reconciliation on real development outcomes in the wider context of the green economy. Accordingly, fieldwork will comprise primary data collection, conducting interviews and questionnaires.

Consider, in turn, each hazard (white on black). If **NO** hazard exists select **NO** and move to next hazard section.
If a hazard does exist select **YES** and assess the risks that could arise from that hazard in the risk assessment box.
Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.

ENVIRONMENT	**The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard**
e.g. location, climate, terrain, neighbourhood, in outside organizations, pollution, animals.	YES: Low risk

The study location is London. Risk is therefore considered to be low, however risks include adverse weather, transport safety and individual 'lone' data collection.

Weather: Data collection is anticipated to occur during summer months. It is therefore likely that high temperatures could occur. Whilst data collection (e.g. interviews) will take place indoors, when traveling to these locations water, sun cream and snacks will be packed and appropriate clothing and footwear worn.

Transport: It may be necessary to travel across London in order to collect data. Public transport including the tube network and buses will be used. |

An Oyster card will always be carried, loaded with sufficient funds to travel. City Mapper will also be downloaded to a personal phone in order to ensure safe and efficient travel to data collection locations. In addition, when travelling across London, additional time will always be factored into journey times to ensure a safe, calm journey.

Individual 'lone' data collection: The data collected will be obtained by Chloe Staddon only, the author of the dissertation. When interviewing participants, there is low a risk of inappropriate behaviour from unknown participants. In order to avoid such instances, all participants will be approached and 'vetted' prior to meeting. When interviewing participants, family members and friends will be aware of the agreed meeting location and time, including the proposed method of travel to and from the meeting place. Interviews and meetings with participants will always be held in a corporate office or public place during working hours.

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☐ work abroad incorporates Foreign Office advice
- ☒ participants have been trained and given all necessary information
- ☐ only accredited centres are used for rural field work
- ☒ participants will wear appropriate clothing and footwear for the specified environment
- ☐ trained leaders accompany the trip
- ☐ refuge is available
- ☐ work in outside organisations is subject to their having satisfactory H&S procedures in place
- ☒ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

As above.

EMERGENCIES	Where emergencies may arise use space below to identify and assess any risks
e.g. fire, accidents	Examples of risk: loss of property, loss of life

YES: Low risk

The study will take place in corporate offices or public spaces including cafes and/or restaurants. Risk is considered to be low, however risks include loss of property and safeguarding for general medical and fire emergencies.

Loss of property: Due to data collection occurring in 'outside' locations, including corporate offices or public spaces, there is a low risk of property loss or theft. In order to ensure that property, including a laptop to take notes when collecting data is stored safely, all items will be transported in a zip rucksack. When in use, items will be kept in sight at all times.

Medical and fire emergencies: Whilst there is a low risk of medical or fire emergencies occurring, events can sometimes occur spontaneously. Numbers for relevant emergency lines such as '999' will be known and a mobile phone always on hand.

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☐ participants have registered with LOCATE at http://www.fco.gov.uk/en/travel-and-living-abroad/
- ☐ fire fighting equipment is carried on the trip and participants know how to use it
- ☒ contact numbers for emergency services are known to all participants
- ☒ participants have means of contacting emergency services
- ☒ participants have been trained and given all necessary information
- ☐ a plan for rescue has been formulated, all parties understand the procedure
- ☐ the plan for rescue /emergency has a reciprocal element
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

As above.

FIELDWORK   1   May 2010

EQUIPMENT	Is equipment used?	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. clothing, outboard motors.	Examples of risk: inappropriate, failure, insufficient training to use or repair, injury. Is the risk high / medium / low ?		

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☐ the departmental written Arrangement for equipment is followed
- ☐ participants have been provided with any necessary equipment appropriate for the work
- ☐ all equipment has been inspected, before issue, by a competent person
- ☐ all users have been advised of correct use
- ☐ special equipment is only issued to persons trained in its use by a competent person
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

LONE WORKING	Is lone working a possibility?	YES	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks

e.g. alone or in isolation
lone interviews.

Individual 'lone' data collection: The data collected will be obtained by Chloe Staddon only, the author of the dissertation. When interviewing participants, there is low a risk of inappropriate behaviour from unknown participants. In order to avoid such instances, all participants will be approached and 'vetted' prior to meeting. When interviewing participants, family members and friends will be aware of the agreed meeting location and time, including the proposed method of travel to and from the meeting place. Interviews and meetings with participants will always be held in a corporate office or public place during working hours.

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☐ the departmental written Arrangement for lone/out of hours working for field work is followed
- ☐ lone or isolated working is not allowed

☒ location, route and expected time of return of lone workers is logged daily before work commences

☒ all workers have the means of raising an alarm in the event of an emergency, e.g. phone, flare, whistle

☒ all workers are fully familiar with emergency procedures

☒ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

Family members and friends will be aware of the agreed meeting location and time, including the proposed method of travel to and from the meeting place.

ILL HEALTH	The possibility of ill health always represents a safety hazard. Use space below to identify and assess any risks associated with this Hazard.
e.g. accident, illness, personal attack, special personal considerations or vulnerabilities.	Examples of risk: injury, asthma, allergies. Is the risk high / medium / low? YES: Low risk Whilst collecting data in London, there is a low risk of accident, illness or attack. Illness: The data collector (Chloe Staddon) suffers from mild asthma and occasional migraines. Appropriate medication including Ventolin inhalers and Immigran tablets will be carried at all times. In addition, the Uber app will be downloaded should for any reason illness occur and I need to go home. Accident/attack: Whilst the potential for accidents/attacks is considered to be low given the corporate / public space environment in which data will be collected, emergency telephone numbers will be known and a mobile phone carried at all times.

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

☐	an appropriate number of trained first-aiders and first aid kits are present on the field trip
☐	all participants have had the necessary inoculations/ carry appropriate prophylactics
☐	participants have been advised of the physical demands of the trip and are deemed to be physically suited
☐	participants have been adequate advice on harmful plants, animals and substances they may encounter
☒	participants who require medication have advised the leader of this and carry sufficient medication for their needs
☒	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

As above.

TRANSPORT	Will transport be required	NO		Move to next hazard
		YES	X	Use space below to identify and assess

	any risks
e.g. hired vehicles	YES: Low risk Transport: It may be necessary to travel across London in order to collect data. Public transport including the tube network and buses will be used. An Oyster card will always be carried, loaded with sufficient funds to travel. City Mapper will also be downloaded to a personal phone in order to ensure safe and efficient travel to data collection locations. In addition, when travelling across London, additional time will always be factored into journey times to ensure a safe, calm journey.

CONTROL MEASURES	**Indicate which procedures are in place to control the identified risk**

- ☒ only public transport will be used
- ☐ the vehicle will be hired from a reputable supplier
- ☐ transport must be properly maintained in compliance with relevant national regulations
- ☐ drivers comply with UCL Policy on Drivers http://www.ucl.ac.uk/hr/docs/college_drivers.php
- ☐ drivers have been trained and hold the appropriate licence
- ☐ there will be more than one driver to prevent driver/operator fatigue, and there will be adequate rest periods
- ☐ sufficient spare parts carried to meet foreseeable emergencies
- ☒ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

As above.

DEALING WITH THE PUBLIC	**Will people be dealing with public**	**YES**	**If 'No' move to next hazard** **If 'Yes' use space below to identify and assess any risks**
e.g. interviews, observing	YES: Low risk The data collection methods proposed will include interviews and questionnaires (/surveys). Whilst classed as 'members of the public', participants will be identified using a specific strategy related to the topic area. It is considered that interaction with the public would therefore be low risk given that participants are previously identified as a result of their		

profession.

Interviews will be conducted in a professional and unbiased manner so as to reduce risk.

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☒ all participants are trained in interviewing techniques
- ☐ interviews are contracted out to a third party
- ☐ advice and support from local groups has been sought
- ☐ participants do not wear clothes that might cause offence or attract unwanted attention
- ☒ interviews are conducted at neutral locations or where neither party could be at risk
- ☒ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

As above.

WORKING ON OR NEAR WATER	Will people work on or near water?	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. rivers, marshland, sea.	Examples of risk: drowning, malaria, hepatitis A, parasites. Is the risk high / medium / low?		

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☐ lone working on or near water will not be allowed
- ☐ coastguard information is understood; all work takes place outside those times when tides could prove a threat
- ☐ all participants are competent swimmers
- ☐ participants always wear adequate protective equipment, e.g. buoyancy aids, wellingtons
- ☐ boat is operated by a competent person
- ☐ all boats are equipped with an alternative means of propulsion e.g. oars
- ☐ participants have received any appropriate inoculations

☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

MANUAL HANDLING (MH)	Do MH activities take place?	NO	If 'No' move to next hazard
			If 'Yes' use space below to identify and assess any risks
e.g. lifting, carrying, moving large or heavy equipment, physical unsuitability for the task.	Examples of risk: strain, cuts, broken bones. Is the risk high / medium / low?		

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

☐ the departmental written Arrangement for MH is followed
☐ the supervisor has attended a MH risk assessment course
☐ all tasks are within reasonable limits, persons physically unsuited to the MH task are prohibited from such activities
☐ all persons performing MH tasks are adequately trained
☐ equipment components will be assembled on site
☐ any MH task outside the competence of staff will be done by contractors
☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

SUBSTANCES	Will participants work with substances	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. plants, chemical, biohazard, waste	Examples of risk: ill health - poisoning, infection, illness, burns, cuts. Is the risk high / medium / low?		

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- ☐ the departmental written Arrangements for dealing with hazardous substances and waste are followed
- ☐ all participants are given information, training and protective equipment for hazardous substances they may encounter
- ☐ participants who have allergies have advised the leader of this and carry sufficient medication for their needs
- ☐ waste is disposed of in a responsible manner
- ☐ suitable containers are provided for hazardous waste
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

OTHER HAZARDS	Have you identified any other hazards?	YES	If 'No' move to next section If 'Yes' use space below to identify and assess any risks
i.e. any other hazards must be noted and assessed here.	Hazard: Interviews and questionnaires within a corporate environment Risk: is the risk	LOW	

The nature of the study focuses on the role of individuals within a professional context, and explores the extent to which personal motivations and ideologies may clash with the corporate aims and objectives in the environment within which they work.

Sensitivity and discretion therefore needs to be employed when interviewing participants in this context to ensure that participants do not feel threatened that their opinions and views will have a negative impact on their professional career, and therefore act in a defensive or threatening manner.

CONTROL	Give details of control measures in place to control the identified risks

MEASURES

Necessary steps will be taken to ensure that questions posed are neutral in nature, and do not exert bias or lead the participant to find themselves in an uncomfortable situation.

A statement will be read at the beginning of each interview and included within the questionnaires, confirming the anonymity of the study.

| Have you identified any risks that are not adequately controlled? | NO | ☒ | Move to Declaration |
| | YES | ☐ | Use space below to identify the risk and what action was taken |

Is this project subject to the UCL requirements on the ethics of Non-NHS Human Research?	NO

If yes, please state your Project ID Number [   ]

For more information, please refer to: http://ethics.grad.ucl.ac.uk/

DECLARATION

The work will be reassessed whenever there is a significant change and at least annually. Those participating in the work have read the assessment.

Select the appropriate statement:

☐ I the undersigned have assessed the activity and associated risks and declare that there is no significant residual risk

☒ I the undersigned have assessed the activity and associated risks and declare that the risk will be controlled by the method(s) listed above

NAME OF SUPERVISOR Jung Won Son

** SUPERVISOR APPROVAL TO BE CONFIRMED VIA E-MAIL **

FIELDWORK   5   May 2010