PRECARIOUS ENTITLEMENT TO PUBLIC SPACE & UTILITY CYCLING IN DUBLIN: A GROUNDED THEORY STUDY

A thesis presented to Dublin City University for the Degree of Doctor in Philosophy

Ву

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Declaration

I hereby certify that this material, which I now submit for assessment

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Precarious Entitlement to Public Space & Utility Cycling in Dublin: A Grounded Theory Study

Robert Egan

ABSTRACT

Reports on the safety of cycling and research investigating factors thought to impinge on cycling risk and safety are often complex, insufficient and, at times, contradictory and inconclusive. Amongst this ambiguous understanding of matters of risk and safety in relation to cycling, the provisional aim of this study was to explore how cyclists themselves deal with matters of risk in the context of Dublin. Classical grounded theory methodology was employed over the course of the study. Data collection involved 28 qualitative interviews which took place simultaneously with data analysis, in which grounded theory procedures were adhered to; namely, open coding, selective coding, memoing, theoretical sampling, and theoretical saturation. Emerging from data collection and analysis, it was conceptualised that dealing with conditions of 'precarious entitlement' to public space is a main concern of utility cyclists in Dublin. That is, cyclists in Dublin perceive an entitlement to public space that is precarious to exercise as a cyclist in practice. In order to negotiate such conditions, cyclists in Dublin can engage in 'privatising vulnerability'. Namely, they can make their vulnerability a matter of personal rather than shared responsibility, prioritising their perceived safety over matters of entitlement, responsibility and fairness through particular modes of action. Furthermore, cyclists in Dublin can engage in practices of 'provoking responsibility', in which both subtle and conspicuous actions are taken in order to provoke a sense of responsibility in other public space users to respect a cyclist's entitlement to public space and vulnerability within conditions of precarious entitlement. This theory reveals a new form of structural vulnerability, a 'state of nature within a state of civilisation' and a problem of accessibility to public space. Moreover, it conceptualises modes of action in an urban context that involve social withdrawal, submission, and individualisation in public space, as well as active and ongoing negotiation between citizens of life in common and recognition, alongside efforts to appropriate and produce public space.

Chapter 1:

An Overview of the Thesis

1. Introduction to the Study

In this study, I employed a classical grounded theory methodology (Glaser and Strauss, 1967) with the provisional interest of exploring how utility cyclists deal with matters of risk. However, as grounded theory places emphasis on fostering a position of relative openness in beginning a given study - thereby allowing for an emergence of the participant's main concern, as opposed to a potential forcing of a researcher's preconceived theoretical ideas (Glaser and Strauss, 1967) - such an interest with risk was merely a disposable 'sensitising concept' in order to enrich data collection in the early stages. Indeed, what emerged from the research process of data collection and analysis was a theory of 'precarious entitlement', in which cyclists in Dublin were conceptualised to negotiate conditions of 'precarious entitlement' to public space by engaging in practices of 'privatising vulnerability' and 'provoking responsibility' in others to respect their entitlement to, and vulnerability in, public space. In this brief chapter, I will provide a basic overview of the background and rationale for the study, the aim and emergent theory of 'precarious entitlement', the methodology and research ethics of the study, an outline of the chapters to follow, and a brief conclusion in order to transition to the introductory chapter.

2. Background & Rationale

Widespread utility cycling in cities is beneficial from a variety of perspectives. There is evidence that increased utility cycling can benefit economies (e.g., Deenihan and Caulfield, 2014; Fishman, Schepers and Maria Kamphuis, 2015) but, more importantly, the environment (Lindsay, Macmillan and Woodward, 2011; Rojas-Rueda *et al.*, 2011) and public health, through increasing levels of physical activity and lowering local air pollution (e.g., Pucher *et al.*, 2010; Oja *et al.*, 2011; Rojas-Rueda *et al.*, 2011; Deenihan and Caulfield, 2014; Tainio *et al.*, 2016). Indeed, there has been has been policy produced to cultivate the growth of cycling in Ireland (Smarter Travel, 2009). However, although there is evidence that rates of ridership are increasing (Central Statistics Office, 2017a), they remain far below the policy aspiration of 10% of total journeys as articulated in the *National Cycle Policy* (Smarter Travel, 2009). As noted by the OECD (2013), one barrier to cycling uptake is when cycling is thought to be more dangerous than alternative modes of transport. Indeed, a study by Lawson *et al.* (2013) strongly

suggests that this is the case in Ireland, with cyclist participants perceiving cycling as less safe than other modes of transport. Further research has also demonstrated a lack of segregated cycling provision in Ireland compared to Copenhagen — a city with comparatively high rates of ridership (Conway *et al.*, 2019). Research in the UK suggests that the lack of such infrastructure, among other factors, significantly impacts the perceived safety of cycling, thus rendering such a lack of infrastructure a barrier to the widespread adoption of cycling (Aldred, 2016).

On top of these considerations regarding ridership and barriers to its growth, across a wide variety of contexts, cyclists face unequal risks of road crash-related injury and fatality relative to drivers, public transport users and pedestrians (OECD, 2013). This appears to be the case in an Irish context also (Road Safety Authority, 2018a), although explicit estimates of relative risk do not yet appear to have been made. Irrespective of fatalities, however, the recording of cyclist injury rates has been neglected with annual reports focusing on fatalities only (e.g., Road Safety Authority, 2018a). Even following a report regarding injuries in 2012 produced by the Road Safety Authority (2014), there is evidence that this isolated report likely underestimates rates of cyclist injury to a high degree in light of data gathered from Irish emergency departments presented by Foley et al. (2016) and, more recently, Tommy Broughan TD (2018).

Therefore, cyclists in Ireland experience both perceived risk and objective risk to their safety as a category of road user. In light of the risks of injury and fatality associated with cycling, different interventions have been explored and investigated, such as the use of cycle helmets (e.g., Olivier and Creighton, 2017), cycle training (e.g., Richmond *et al.*, 2014), and the effects of different forms of infrastructure (Mulvaney *et al.*, 2015) on the likelihood of sustaining various forms of injury or fatality. However, despite the substantial scope of research into matters of cycling safety and risk, the effectiveness of particular interventions is complex to interpret and, in many cases, requires further research (e.g., Thompson *et al.*, 2017). Thus, cycling in Ireland is below policy aspiration (Smarter Travel, 2009), is perceived as relatively unsafe (Lawson *et al.*, 2013), is objectively unsafe relative to other popular modes of transport (OECD, 2013), and the impact of various interventions and mechanisms relating to the safety of cycling has not, for the most part, been conclusively ascertained.

3. Aim & Emergent Theory

Having established the difficulties and ambiguities with perceived risk, objective risk, and interventions and mechanisms to mitigate risk in relation to utility cycling, the proposed project began with a curiosity regarding how utility cyclists *themselves* deal with matters of risk in Dublin. 'Risk', then, was employed as a 'sensitising concept' at the beginning of the study to be used as a potentially fruitful, albeit provisional and partial, starting point for data collection and analysis. It helped to define the problem area (the starting point for the study) but not the problem (the first organising feature of the study) which had to emerge from the early stages of data collection and analysis (Glaser, 1998). Although the problem area was, then, loosely predefined, the aim of the study overall was to theorise the main concern of utility cyclists in Dublin and the process by which they deal with or resolve this concern. In this way, the specific aims of this study reflect the general aims of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Glaser, 1998). In order to achieve this aim, then, a diverse group of voluntary participants who engaged in regular utility cycling across Dublin were recruited to take part in semi-structured interviews.

My conceptualisation of the main concern of utility cyclists in Dublin and how they resolve this concern makes up a large part of the body of this thesis to follow. In the early stages of data collection and analysis, what emerged as a main concern and 'core category' to which all other concepts relate was that of 'precarious entitlement'. This was the problem that I had conceptualised utility cyclists in Dublin were acting to resolve; namely, cyclists in Dublin must negotiate conditions of 'precarious entitlement' to public space, in which they have an entitlement to occupy and transit public space that is – due to various factors – precarious and unreliable to exercise in practice. Since this concept was positioned as the category of core importance, the theory, then, including the ways of dealing with the main concern of 'precarious entitlement', has been posited as a theory of 'precarious entitlement'.

Having conceptualised the main concern of cyclists in Dublin, subsequent data collection and analysis, then, was led with the emergent aim of theorising *how* utility cyclists in Dublin resolve the issue of precarious entitlement. Accordingly, first, cyclists were conceptualised to negotiate precarious entitlement by making their vulnerability emerging from conditions of precarious entitlement a personal, as opposed to social or political responsibility, through various modes of action (i.e. by 'privatising vulnerability).

Second, cyclists in Dublin were conceptualised to 'provoke responsibility' in other public space/road users in light of precarious entitlement, compelling these users to respect their entitlement to public space and vulnerability in such space due to conditions of precarious entitlement. Accordingly, I began with a general aim and problem area, and, having identified the main concern, continued with an emergent aim of theorising how this main concern was dealt with.

4. Methodology & Research Ethics

Grounded theory research involves the generation of theory via a systematic process of data collection and analysis. Most crucially, grounded theory involves the production of concepts that are 'grounded' in data collected from the research area. In this way, the concepts of a given grounded theory must 'fit' the data and be 'relevant' to laypersons in the field of research. Thus, grounded theory research is orientated toward the generation of theory that *emerges* from systematic processes of data collection and analysis as opposed to theory that is *forced* upon particular empirical phenomena. However, grounded theory is not a representation of data gathered from a research area but, rather, an abstract conceptualisation of various patterns across a given set of data. 'Abstraction', then, is the goal over 'description' (Glaser and Strauss, 1967; Glaser, 1978; Glaser, 1998).

One begins a grounded theory study with a particular empirical area of research often referred to as the "general problem area" (Glaser, 1978, p.44). As mentioned in the preceding section, this study began in the problem area of utility cycling in Dublin with a curiosity regarding how cyclists deal with matters of risk. This acts as a provisional starting point for the study from which one can identify and conceptualise the 'main concern' of participants in the problem area via an analysis of patterns in the data. The problem area does not involve a body of theoretical assumptions but is, rather, a tentative point of departure for 'discovery' that can help facilitate fruitful data collection in the early stages of the study (Glaser and Strauss, 1967). Thus, one enters the problem area "without knowing the problem" (Glaser, 1998, p.122).

In grounded theory, data collection and analysis are carried out in a back and forth manner. To begin, during the first phase of the study – which can be termed the 'open coding' phase – 'discovery' of the main concern of the group in the problem area and their process of resolving this concern are the purposes of data collection and analysis.

Having collected initial data from the problem area, the researcher compares data incidents in order to identify and 'code' patterns across all of the data collected, using the procedure of 'memoing' to abstractly reflect and refine conceptual codes emerging from the researcher's comparative analysis. There is an effort, then, to conceptualise patterns of data incidents, eventually leading to a conceptualisation of the main concern and core process of its resolution in the problem area (Glaser and Strauss, 1967).

The second phase of the study involves selective coding of data, as opposed to open coding. This means that data is coded selectively for the purpose of conceptually developing to the greatest extent the core category and related categories of the study. Data collection, accordingly, is driven by 'theoretical sampling' in which data is strategically collected in order to achieve via comparative analysis 'theoretical saturation' of the 'core category' and related categories of the theory. Namely, a point of 'saturation' is considered to be reached when data collection no longer significantly facilitates the development of further conceptual variations relating to the core and related categories; that is, the existing categories adequately 'fit' and 'work' with the data across a large body of diverse patterns of incidents (Glaser and Strauss, 1967).

Data collection for this study involved 28 qualitative interviews in total with men and women who regularly engage in utility cycling in Dublin in which open questions, problem area related questions regarding matters of 'risk', and – toward the selective coding phase – conceptually driven questions were asked. These participants involved themselves voluntarily, were free to withdraw from the study at any stage and efforts were made to ensure informed consent and respect their confidentiality and anonymity in participation. Furthermore, measures were taken to mitigate participant vulnerability, such as the preparation and use of 'risk management questions' in the case that a participant recalled a traumatic event they had experienced when cycling in the past which caused them distress (Appendix C).

5. Chapter Outline

Following this overview chapter, seven chapters remain. First, in Chapter 2, I introduce the theory of 'precarious entitlement' by examining research evidence relevant to the 'problem area' of utility cycling and risk. More particularly, I, first, provide an overview of the societal impacts of widespread cycling and risks of cycling and, second, critically explore research relating to various factors thought to influence cycling safety and risk.

This is done in order to set up a point of entry for the theory. Following this, in Chapter 3, I delineate and critically discuss the classical grounded theory methodological approach adopted for this study, my application of its elements, my approach to qualitative interview data collection, and, lastly, the ethical considerations maintained throughout the conduct of this study. Chapter 4, then, deals with the 'core category' of the study: precarious entitlement. In this chapter, I describe the general category and its three properties - insecure space, spatial disregard, and police neglect - using choice excerpts from the interview data gathered in order to demonstrate the 'fit' of the concepts and their analytic origins. Next, in Chapter 5 and 6, I outline the sub-core categories of the study: privatising vulnerability and provoking responsibility, respectively. Similar to Chapter 4, the general categories are abstractly defined and their variations are delineated, with back and forth reference to, and in discussion with, data collected via qualitative interviews from the substantive area. In Chapter 7, I explore and speculate on the potential contributions the theory can make to the field of cycling research and policy and beyond, considering a broad variety of areas of social and philosophical theory and inquiry, ranging from urban mobility to citizenship. Lastly, in the final chapter - Chapter 8 - I conclude the thesis by evaluating the quality of the theory overall, considering both general qualitative standards for high quality research and the criteria for 'good' classical grounded theory.

6. Conclusion

To conclude, in this section, I have looked to provide an overview of the thesis that will follow, describing the background and rationale for the study, the aim and emergent theory of the study, the study methodology and its research ethics, and, finally, the following chapters of the thesis.

Chapter 2:

Introducing the Problem Area

1. Introduction: the 'Problem Area'

Every grounded theory study must start with a "general problem area" (Glaser, 1978, p.44). This 'problem area' usually involves some types of provisional concepts in order to provide a useful starting point for data collection. These concepts do not provide, however, a "preconceived theoretical framework" (Glaser and Strauss, 1967, p.45), as, in grounded theory, one enters the problem area with a view to discover the problem that participants are dealing with (Glaser and Strauss, 1967). My problem area was captured by the question "how do utility cyclists in Dublin deal with risk?" This problem area incorporated the provisional concept of 'risk' without a specific theory.

In introducing this 'problem area', I aim to introduce the starting point for data collection in this study rather than the grounded theory itself – the end product of the study. This introduction, then, demonstrates research knowledge of my 'problem area' prior to data collection and analysis. Such knowledge is expected of a PhD candidate. Second, this introduction provides an interesting point of entry for the emergent grounded theory of 'precarious entitlement'.

Accordingly, the following introduction has been divided into a number of sections. In the first section, 'Utility Cycling & Society', I examine research evidence regarding the societal impact of widespread utility cycling. In doing this, I hope to provide an analysis of utility cycling primarily from the point of view of public health, however, at the same time giving some attention to economic and environmental benefits. This focus on the public health implications of utility cycling will be focused upon as these are most central to the problem area which is framed on the basis of a curiosity with utility cycling and risk in Dublin. The economic and environmental benefits of cycling, then, are comparatively less relevant to such an area but will be briefly mentioned in order to provide a general overview of the implications of widespread utility cycling for society. In the second section, entitled 'Overview of Utility Cycling & Risk', I will outline and discuss general matters of risk and how they relate to utility cycling, focusing on matters of road crash risk and air pollution in particular. Importantly, in this section, I will look at the outcomes of various safety-related interventions. These outcomes will be framed approximately as they appear in the cited articles and reviews. Accordingly, in some sections I will speak of 'collisions' or 'crashes' (e.g., Hagel et al., 2014) whereas in others I will discuss 'accidents' (e.g., Lahrmann et al., 2018) as is consistent with definitions appearing in the referenced material. Next, in the third section entitled 'Utility Cycling and Risk: Key Issues', I will investigate what I have identified as some of the major areas of investigation in the research area pertaining to matters of utility cycling and risk. Having examined the significance of widespread cycling for a given society (primarily from a public health perspective), the risks associated with utility cycling, and the major topics of research in relation to utility cycling and risk, I will, lastly, introduce 'precarious entitlement'. With the preceding background discussion in mind, I will propose that this theory can make a novel contribution to the 'problem area' that was the starting point for this study.

2. Utility Cycling & Society

From a societal perspective, there are a myriad of potential benefits stemming from the widespread use of a cycle as a mode of transport. Such advantages of increased 'utility cycling' include possible improvements in the economy (Sælensminde, 2004; Lindsay, Macmillan and Woodward, 2011; Deenihan and Caulfield, 2014; Fishman, Schepers and Maria Kamphuis, 2015), the environment (Lindsay, Macmillan and Woodward, 2011; Rojas-Rueda *et al.*, 2011) and public health (Jeroen Johan de Hartog *et al.*, 2010; Pucher *et al.*, 2010; Lindsay, Macmillan and Woodward, 2011; Oja *et al.*, 2011; Rojas-Rueda *et al.*, 2011; Deenihan and Caulfield, 2014; Kelly *et al.*, 2014; Fishman, Schepers and Maria Kamphuis, 2015; Götschi, Garrard and Giles-Corti, 2016; Tainio *et al.*, 2016).

As noted by Götschi, Garrard and Giles-Corti (2016), the primary factor explored in relation to the health benefits of utility cycling is physical activity. On the other hand, the main influences investigated in the literature on the possible negative health effects of utility cycling are the risk of a crash and the risk of higher air pollution inhalation (compared to drivers or other road users). Two different methods are chiefly used in assessing the health effects of cycling: the first method is via epidemiological research, the second via health impact modelling (Götschi, Garrard and Giles-Corti, 2016). I will incorporate both types of studies into this review section.

There is significant epidemiological evidence that indicates an inverse relationship between cycling levels and all-cause mortality. The Danish longitudinal study of Anderson *et al.* (2000) reported that those who cycled to work were 28% less likely to die of any cause between the two points of data collection (14.5 years) compared to participants that did not cycle to work. This calculation controlled for the influences of physical activity undertaken during the participants' leisure time, body mass index,

levels of blood lipids, smoking, blood pressure, age, sex and educational attainment. The estimates were statistically significant for men but not women. Nevertheless, male participants made the majority of the sample: there were 6171 men and 783 women for estimates pertaining to this particular variable.

In contrast to the findings of Anderson *et al.* (2000), Matthews *et al.* (2007) reported a statistically significant inverse relationship between utility cycling and all-cause mortality for women. Using data from the Shanghai Women's Health Study conducted between 1997 and 2004, this estimate was controlled for a wide variety of confounding factors such as certain chronic medical conditions (e.g. diabetes and hypertension). The estimate was made with data from a much larger sample of female participants. Interestingly, in this longitudinal study the inverse relationship between walking as a means of transport and risk of premature mortality did not prove statistically significant, unlike utility cycling.

Aggregating bodies of epidemiological research, the systematic reviews of Oja *et al.* (2011) and Kelly *et al.* (2014) reported decreases in mortality associated with utility cycling. Incorporating a meta-analysis, Kelly *et al.* (2014) estimated that with a standard dose of cycling (defined by them as 11.25 MET.hours per week in terms of physical activity) the risk of all-cause mortality is reduced by 10% (OR: 0.9, CI: 0.94 – 0.87) adjusted for the effects of physical activity beyond cycling itself. The degree to which a dose of cycling produces a particular response in terms of its effects on all-cause mortality (i.e. the dose-response relationship) was greatest in those in the first category of cycling physical activity exposure: 0.1 to 11.5 MET.hours per week. The two exposure categories above this, consequently, exhibited a decreased beneficial effect, suggesting a non-linear dose-response relationship.

Oja *et al.* (2011) noted a lack of randomised controlled trials for testing the relationship between cycling exposure and various cause mortality. Nevertheless, based on the longitudinal studies reviewed, an inverse dose-response relationship between cycling exposure and all-cause mortality and cardiovascular disease mortality in adults was reported. Founded on this review, such a relationship was also evident for cardiovascular disease and colon cancer risk and the prevalence of overweight and obesity. On the other hand, they reported a direct dose-response relationship between cycling exposure and cardiovascular and cardiorespiratory fitness. Thus, cycling exposure demonstrated – in some studies reviewed – not only preventative health benefits (e.g. lower risk of premature mortality) but also fitness benefits.

Unlike the longitudinal studies of Matthews *et al.* (2007) and Anderson *et al.* (2000) which mainly investigated the effects of cycling on all-cause mortality, Pucher *et al.* (2010) investigated the effects of cycling on the prevalence of obesity and diabetes. In an internationally comprehensive study comprising of data from 14 countries, the countries with higher rates of cycling exhibited higher rates of physical activity to the recommended dose, and lower rates of adult obesity and diabetes. These relationships were statistically significant and were prevalent for self-reported obesity levels in comparisons between nations, states and cities and between states and cities for diabetes and physical activity levels.

Numerous health impact modelling studies across various contexts also support an inverse relationship between utility cycling exposure and all-cause mortality. Tainio *et al.* (2016), Lindsay, Macmillan and Woodward (2011), Rojas-Rueda *et al.* (2011) and Jeroen Johan de Hartog *et al.* (2010) estimated the balance of health benefits versus health costs for cycling using statistical modelling techniques applied to particular situations/contexts. Lindsay, Macmillan and Woodward (2011), Rojas-Rueda *et al.* (2011) and Jeroen Johan de Hartog *et al.* (2010) compared the health balance of cycling with driving whereas Tainio *et al.* (2016) focused on the effects of varying levels of exposure to physical activity and air pollution on all-cause mortality. In estimating the health effects of cycling, all four studies employed the variables of physical activity and air pollution; Lindsay, Macmillan and Woodward (2011), Rojas-Rueda *et al.* (2011) and Jeroen Johan de Hartog *et al.* (2010) additionally included risk of a fatal traffic incident as a variable.

Having identified that cyclists, compared with drivers, inhale greater volumes of air pollution and are also at a greater risk of a fatal traffic incident, it was estimated by both Rojas-Rueda *et al.* (2011) and Jeroen Johan de Hartog *et al.* (2010) that the potential health gains of physical activity from cycling outweighed the potential health losses. Rojas-Rueda *et al.* (2011) reported 12.46 fewer deaths per year in those who cycle compared to those who drive as a result of increased physical activity from cycling. Jeroen Johan de Hartog *et al.* (2010) presented their results in a different manner, claiming that the health benefits of cycling on all-cause mortality were nine times greater than the health costs. Therefore, in both studies, the beneficial health effects of physical activity on all-cause mortality significantly trumped the increased health risks of harm air pollution and fatal traffic incidents faced by cyclists. Rojas-Rueda *et al.* (2011) added that those who cycled in their study (roughly 200,000 individuals) contributed to

approximately a 9 million kilogram reduction in annual carbon dioxide emissions compared to if these cyclists had chosen to drive instead.

Similar to the findings of Rojas-Rueda *et al.* (2011) and Jeroen Johan de Hartog *et al.* (2010), Lindsay, Macmillan and Woodward (2011) reported that, in terms of its effects on mortality, cycling was more beneficial than costly. More specifically, in swapping 5% of kilometres travelled by vehicles in New Zealand to cycling using modelling techniques, it was estimated that, annually, there would be 116 fewer deaths due to the positive health effects of increased physical activity with five added deaths from collisions. Although, contrary to the Rojas-Rueda *et al.* (2011) and Jeroen Johan de Hartog *et al.* (2010) reports on the health effects of air pollution, Lindsay, Macmillan and Woodward (2011) reported a beneficial effect from cycling as a result of decreased local air pollution. Namely, it was calculated that the shift of modes would result in six fewer deaths annually (Lindsay, Macmillan and Woodward, 2011). Overall, using a value of life economic tool, the 5% shift from light motor vehicle to cycle would result in a \$200 million saving per year. In addition, it was approximated that this shift would reduce harmful carbon emissions generated by the consumption of fuel by vehicles by 0.4%.

Tainio *et al.* (2016) proclaimed that the health benefits of cycling brought about by physical activity were greater than its health costs; however, for Tainio *et al.* (2016), these health costs were measured solely through exposure to air pollution and did not include risk of fatal traffic incident, which was included in the other three studies (Jeroen Johan de Hartog *et al.*, 2010; Lindsay, Macmillan and Woodward, 2011; Rojas-Rueda *et al.*, 2011). Tainio *et al.* (2016) calculated that, in terms of exposure to air pollution, the health costs of air pollution would only outweigh the health benefits of physical activity from cycling for those whose cycle far beyond average levels in areas of extremely high air pollution. Thus, the authors concluded that, in the vast majority of contexts, the health benefit of cycling physical activity on all-cause mortality are greater than the health risk of air pollution.

Lastly, Mueller *et al.* (2015) carried out a systematic review of health impact assessment studies that estimated the health impact of swapping motorised modes of transportation for active travel modes (i.e. cycling and walking) based on an estimate incorporating the health benefits and risks. Including 30 studies, similar to the aforementioned studies (e.g. Lindsay, Macmillan and Woodward, 2011; Tainio *et al.*, 2016), it was reported that the health benefits of active travel (from increased levels of physical activity, primarily) relative to motorised travel far exceeded the health risks (from increased risk of road incidents and air pollution intake).

It is clear, then, from this brief review of seminal research investigating the public health and societal implications of utility cycling that there are, on balance, much greater overall risks to oneself in choosing *not* to cycle if one leads a sedentary lifestyle compared to choosing to cycle – at least in the contexts explored. Phrased another way, the health benefits of cycling far outweigh the health and safety risks of cycling. From a public health perspective of 'utility cycling and risk', then, utility cycling is not a 'risky' activity and is, on the contrary, a promising activity for health promotion.

3. Overview of Utility Cycling & Risk

i. Road Crash

As I have argued in the previous section, the health benefits of utility cycling trump its primary health risks, namely, road crash-related (RCR) injury and air pollution inhalation. Nevertheless, relative to car occupants, cyclists are still vulnerable road users. In other words, cyclists, alike with pedestrians, are more vulnerable to physical harm following a road crash in comparison to car occupants due to their relative lack of protection (OECD, 2013). This inequality of risk, then, is peculiarly pertaining to the cyclist's vulnerability to harmful consequences following a road crash. As the OECD (2013) point out, RCR injuries can result from collision with another road user (i.e. a vehicle, cyclist or pedestrian) or from single bicycle crashes (i.e. collisions with an obstacle or falling off one's bicycle). In terms of injury severity, cyclists fare worst following collisions with cars or other vehicles due to the disparity between the cyclist and vehicle in their respective mass and velocity (OECD, 2013).

In terms of total RCR fatalities across Europe, cyclists account for 8% of the death toll. This is a small fraction in comparison to car occupants, which account for 47% of RCR fatalities (European Commission, 2018). Nevertheless, across many European countries cycling is a secondary mode of transport; for example, even in the Netherlands – arguably the main cycling country of the world – cycling makes up 9% of the total distance travelled by members of the population (Statistics Netherlands, 2016). With this in mind, one must judge the risk of cycling in comparison to, rather than in isolation from, other modes. This 'relative risk' can only be calculated when there is data available on the relative exposures of a population in using a particular mode.

According to the most recent census data for Ireland, 1.7% of journeys in Ireland are made via cycling (Central Statistics Office, 2017a). Although this figure has most likely

grown over the past number of years (National Transport Authority and Dublin City Council, 2018) cyclists nevertheless account for roughly 6% of total road user fatalities (i.e. 9 in 2018) (Road Safety Authority, 2018a). Compiling various studies across different international contexts, the OECD (2013) commented on how the relative risk of cycling in a particular context can be calculated by employing different exposure variables. For example, relative risk can be calculated by using data on the number of trips taken, the distances travelled or the durations of travel for individuals using different modes combined with the data on the prevalence of road crash-related (RCR) injuries and fatalities for this particular mode. In this way, relative risk can be presented in a way that estimates the likelihood of RCR injury or fatality per a unit of exposure (e.g. a cyclist may have five times the likelihood of a RCR injury or fatality per billion kilometres travelled compared to a driver in a particular context).

Using slightly different outcome variables (e.g. fatality only or fatality and injury) and exposure variables (e.g. per billion kilometres of travel, per billion minutes of travel) the relative risk estimates produced using data from a number of OECD countries including the UK, US, Switzerland and New Zealand demonstrated a consistently higher risk of RCR casualties per unit of exposure for cyclists in comparison to car occupants. Depending on the various estimates presented and the outcome exposure variables employed, across a number of countries cyclists annually faced over 10 times the risk of RCR casualties compared to drivers. Other estimates included were lower than this but still presented a higher relative risk of RCR casualties for cyclists compared to car occupants. Thus, there is strong evidence that, relative to car occupants, cyclists are at a considerably higher risk of RCR casualties across a wide range of contexts (OECD, 2013).

Within an Irish context, there currently does not appear to be any relative risk estimates for cyclists RCR casualties by the national Road Safety Authority (2018a). Instead, the effects of road safety interventions are assessed via total RCR fatalities per annum. The data used to compile these statistics originate from police reports of road crashes. Importantly, the number of fatalities used to evaluate progress on road safety measures do not take into account data regarding the numbers of people using a particular mode of transport; rather, the Road Safety Authority (2013) (henceforth RSA) has made targets based on the total population of Ireland (i.e. 25 fatalities or less per one million people). Thus, mode specific fatalities may increase or fluctuate from one year to the next and it is impossible to annually determine whether these fatalities are merely an artefact of increased use of a particular mode (and, consequently, increased

exposure in some form with the level of RCR casualty remaining stable) or increased risk of RCR casualty for a particular mode due to other factors.

In a recent independent analysis, Castro, Kalmeier and Gotschi (2018) however, have calculated an exposure adjusted fatality rate for cyclists in Ireland by dividing annual fatality numbers by annual travel distance exposure. Based on data gathered between 2005 and 2015, per 100 million kilometres of cycling exposure it was estimated that 1.8% of cyclists would be involved in fatal incidents with a high degree of reliability. This adjusted fatality rate was slightly lower than that of the United Kingdom: 2.1%. Beyond calculating the individual exposure adjusted fatality rates for cyclists and for other road users, Scholes et al. (2018) have raised the issue of third party risks being considered and incorporated into risk estimates. Namely, it is argued that fatality rates are often presented and estimated in an individualised fashion, thereby neglecting the fatality causing impact particular mode uses can have on third party road users. Using UK crash data and exposure data from 2005 to 2013, Scholes et al. (2018) estimated fatality rates per million hours for both male and female cyclists were higher than for male and female drivers, even when adjusted for associated third party fatalities, which were much higher for drivers. However, these rates could not be adjusted to remove motorway exposure for drivers, which is much safer than other driving spaces and is a space that cyclists cannot use. Nevertheless, this study expands how fatality rates ought to be measured and considered by drawing attention to the question of associated third party fatalities related with mode of travel.

Irrespective of cyclist fatalities, there is a dearth of up-to-date data regarding cyclist RCR injuries that do not result in death both at a European level (European Commission, 2018) and at an Irish level, with annual reports primarily focusing on RCR fatalities only (e.g. RSA, 2018a). Injury data could provide more insight into the state of road safety for cyclists for a given year. Pooling together police report data regarding minor and major cyclist RCR injuries, the RSA (2014) compiled a report on cyclist injuries in Ireland due to a 59% increase in reported RCR injuries between 2011 and 2012, with a total of 630 reported injuries (either minor or serious) in 2012. These injuries made up 8% of all RCR injuries nationwide that year. 53% of these injuries took place in Dublin and accounted for 17% of total injuries within this county. 80% of these injuries were reportedly caused by collision with a car and 10% from collision with a heavy goods vehicle. These findings demonstrate the wide prevalence of cyclist injuries that are left unreported in annual RSA reports (e.g. RSA, 2018a). Furthermore, since no injury data has been made available since 2012 (RSA, 2014), one cannot assess patterns of injury following the

increase in cycling over the past number of years (Central Statistics Office, 2017a; National Transport Authority and Dublin City Council, 2018).

Even with the police report injury data available (RSA, 2014), there is recent evidence to suggest that a high number of cyclist injuries in Ireland go unreported, thus leaving cycling RCR injuries highly underestimated. In 2018, politician Tommy Broughan (Tommy Broughan TD, 2018) released data of hospital discharges of injured pedal cyclists from acute hospitals. Figures from 2016 indicated that there were 1336 discharges across the departments in total. More comprehensively, in a relatively recent study undertaken by Foley et al. (2016), data were collected regarding cycling injuries from a Dublin emergency department. Analysis of this data revealed that there were 534 patients presenting to this emergency department alone with cycling-related injuries over the course of 2014. 71.2% of these patients were male and their mean age was 36.6 years old. In contrast to the RSA (2014) report on cyclist injuries in which the vast majority of reported injuries derived from collisions with cars or heavy goods vehicles, the minority of injuries in this study resulted from a collision with a motorised vehicle (14.8%). Instead, the majority of injuries were reportedly a result of falling off one's bicycle (74.1%) (i.e. a form of single bicycle crash). The remainder of injuries were reportedly a result of collisions with either pedestrians (7.9%) or other cyclists (3.2%). 30.3% percent of patient injuries involved a fracture of some kind; 75.3% percent of these were located on the upper limbs. 51.7% percent of patients sustained a soft tissue injury but did not require further treatment. 15% of patients sustained a head injury with 84% of this group diagnosed with concussion. Likewise, the work of Short and Caulfield (2016) demonstrated vast underreporting of cyclist injuries due to the RSA's (2014) reliance on police injury data. Rather than using solely hospital data like Tommy Broughan TD (2018) and Foley et al. (2016), however, Short and Caulfield (2016) gathered data from three sources: police records, hospital records and 'Injuries Board' records up to 2011 significantly older than the data used by Tommy Broughan TD (2018) and Foley et al. (2016). Nevertheless, Short and Caulfield uncovered a vast number of (mainly minor) injuries documented by the Injuries Board that are not recorded in police or hospital records: for 2011, there were 16,332 injuries recorded by the Injuries Board nationwide, compared to 7,708 by police and 4,458 by hospital departments.

Focusing on Foley *et al.* (2016) in particular, considering the RSA nationwide figure for cyclist injuries in 2012 was 630 (RSA, 2014), this high number (534) and wide range of injuries yielded from a single emergency department in Dublin demonstrates a grave underreporting of cycling injuries through relying exclusively on police reports (Foley *et*

al., 2016). As mentioned by Foley et al. (2016), if all hospital data in Ireland were aggregated concerning cycling injuries the number of cycling injuries reported by the RSA (2014) would be much greater – a proposition supported by the release of larger figures by Tommy Broughan TD (2018). Furthermore, since the minority of injuries in this study were a result of single bicycle crashes – contrary to the RSA (2014) in which the majority involved collisions with cars – this further supports the claim that cycling injuries are highly underestimated. In this way, the state of cycling safety in Ireland is currently unclear as there are numerous data issues regarding cycling exposure and the cycling injuries making it difficult to assess, first, the relative risk of cycling and, second, the true prevalence of cycling injury. Indeed, the work of Short and Caulfield (2016) points toward the need to expand the sources of data collection drawn upon in assessing the safety of cycling and the effectiveness of cycle policies.

Separate from the recorded prevalence of cycling crashes, there is evidence that cyclists in both Ireland and the UK regularly experience a sense of being in danger (Lawson et al., 2013; Aldred and Crosweller, 2015; Aldred, 2016; Aldred and Goodman, 2018). Aldred and Crosweller (2015) conducted a study across the UK in which utility cyclists completed survey questionnaires following a day in which they cycled. Over the two-week period of data collection, more than half of the 1532 respondents reported experiencing a very scary (24.5%) or very annoying incident (50.5%) on their day of survey completion, 85.2% of which involved another road user of which 70% were in motor vehicles. The two main incident types pertaining to these experiences were, firstly, the blocking of the cyclist's way on the road and, secondly, the experience of unsafe passing manoeuvres that generally involved passing perceived as too close - an example of what can be experienced as a 'near miss' for a given cyclist: an incident that could potentially result in a crash or collision. Aldred and Goodman (2018) have argued for data on perceived 'near-misses' and related non-injury incidents to be incorporated in cycle policy measures. In Ireland, then, Lawson et al. (2013) collected fixed survey responses from 1732 Dublin cyclists concerning their perceptions of cycling safety. 98% of these cyclists considered themselves to be competent or highly skilled at cycling yet, at the same time, the majority of respondents considered cycling to be less safe than driving.

Overall, the work of Aldred and Crosweller (2015), then, demonstrates the experience of danger is commonplace to cyclists in the UK and the work of Lawson *et al.* (2013), relatedly, illustrates the widespread perception of cycling as a more dangerous mode of transport compared to driving in Ireland's capital. In this way, alongside the prevalence

of cyclist road crashes, these studies collectively example that there is also a high prevalence of negative risk perceptions amongst cyclists relating to the possibility of being involved in a road crash. The risk of a road crash then is rendered 'real' in two ways: first, based on statistical crash and injury records, and second, from the point of view of cyclists.

ii. Air Pollution

Aside from the immediate risks of cycling that result from road collisions or single bicycle crashes, there are also less conspicuous risks, namely, the risks that derive from air pollution exposure. It has already been established in the previous section of this literature review that the health benefits of physical activity from cycling trump in almost all cases the health risks from the intake of air pollution (e.g. Tainio *et al.*, 2016), nevertheless, air pollution exposure still poses a health risk to cyclists. As outlined by the OECD (2013), cyclists are exposed to a variety of pollutants when cycling that can cause harm. The most harmful of these pollutants are those dispersed from motorised vehicles, including particulate matter below 2.5 microns in diameter (PM2.5) and ultrafine particular matter (UFP). Exposure to these types of pollutants has been linked with increased risk of cardiovascular disease, respiratory disease, lung cancer and premature mortality in a dose-response manner (i.e. the greater the dose, the greater the increase in risk) (OECD, 2013).

In a review of research pertaining to urban cyclists' intake and uptake of air pollution, Bigazzi and Figliozzi (2014) outlined a number of key aspects that bear on cyclist intake and uptake. Firstly, one must consider the cyclists' exposure to air pollution. The pollutants that the cyclist is exposed to can vary in concentration. This is called *exposure concentration*. Bigazzi and Figliozzi (2014) identified 42 studies that included data on exposure concentrations measured via a bicycle. A number of the studies gathered data that enabled a comparison of exposure concentrations between different modes (e.g. bicycles and cars) along the same travelling routes or journeys. Many of these studies reported relatively lower exposure concentrations for cyclists in comparison to motorists, particularly when cyclists were segregated from motorised traffic. However, other studies included reported no significant variation in exposure concentration between modes, higher exposure concentration for cyclists or inconsistent results overall. Thus, the findings of the studies do not appear to be uniform. Bigazzi and

Figliozzi (2014) also comment how these model comparisons are not always particularly useful as, in reality, different road users do not always use the same routes at the same time for the same duration; that is, cyclists, for example, may choose different routes from motorists, travel for less time and at different times of the day due to their type of mode. In this way, mode comparison studies do not always provide a particularly representative picture of cyclists' exposure concentration within a particular context.

Factors that affect cyclist exposure concentrations include wind and separation from motorised traffic, which includes the use of segregated cycling facilities and cycling in low traffic due to either the time of day or the route travelled. There is plentiful evidence that both wind and separation reduce exposure concentrations for cyclists. Studies that have investigated the influence of proximity (and thus, degree of separation) from motorised traffic have not been specific about the degree of traffic volume and traffic speed among other things. Therefore, there is evidence that separation from motorised traffic is a significant factor in reducing cyclist exposure concentrations, however, detailed characteristics of the motorised traffic at the time of data collection across the studies have been scarce, thus preventing a more in-depth understanding of how factors to do with motorised traffic influence exposure concentrations.

Exposure concentration, then, is one element explored in cycling air pollution studies. Another element is pollutant *intake dose*. This term refers to the volume of pollutants (i.e. the dose) that are taken into a cyclist's lungs via respiration (i.e. the physiological process of intake). This differs from studies focusing on exposure concentration as it allows for factors specific to the cyclist that may impact their pollutant intake dose within a given zone of exposure. 19 of the studies included in the review of Bigazzi and Figliozzi (2014) measured cyclist pollutant intake doses. Importantly, the majority of these studies attributed fixed rates of respiration to cyclists in determining their intake doses in a given environment. Thus, only a minority of studies accounted for possible variation in respiration rates for cyclists for or during given routes of travel, which provides more accurate and detailed results than fixed rate studies. Nevertheless, it was reported that cyclists have higher intake doses of pollution as a result of their comparatively higher rate of respiration to drivers (2 - 5 times).

More recently, de Nazelle, Bode and Orjuela (2017) released a quantitative review of air pollution exposures across various European cities between different modes, including Dublin and cities in the United Kingdom. Unlike Bigazzi and Figliozzi (2014), data recording the various forms of air pollution exposures between cities were

synthesised to produce generalised estimates of the exposures between the travel modes (i.e. walking, cycling, bus, and car). On average, pedestrians were the least exposed to various pollutants, including PM2.5, whereas car drivers were the most exposed. Cyclists and people transporting by bus, then, were similar in their exposure levels. Indeed, it is acknowledged in this study that ventilation rates are not accounted for, unlike the review of Bigazzi and Figliozzi (2014). Therefore, since the exposure rates between cyclists and bus users are roughly the same, yet the ventilation rates can certainly be assumed dissimilar, it is reasonable to argue that this study provides further evidence for the higher level of pollutant intake for cyclists compared at least to bus users and most likely car users also.

Lastly, there is recent evidence that perceived exposure to air pollution can influence cyclist behaviour (Zhao et al., 2018). In this study, data were collected from Beijing residents recruited from various locations across the city who had engaged in cycling regularly via survey questionnaires (N: 307). Behaviour was measured through questions regarding trip distance, and trip duration for the purposes of commuting, shopping and recreation. Along with this, questions regarding socio-demographics, perceived health, perceived air pollution, housing area, and infrastructural conditions were all included. Using a pre-conceived theoretical model of planned behaviour to interpret the results of data analysis, Zhao et al. (2018) reported that visibly polluted conditions could lead to potential cyclists transitioning to the use of other modes, particularly motorised modes, to avoid air pollution exposure. In particular, public transport was more frequently utilised in these cases as opposed to transport by car. It was also found that individuals that have less access to transport and finance were more inclined to continue cycling in comparison to high-income individuals, especially those over 30 years old, females, and living in the suburbs of the city. Accordingly, this study demonstrates a potentially high level of variation of air pollution exposures between those with transport and financial disadvantages compared with others advantaged in such areas. This adds a new dimension to the consideration of exposures and pollutant intakes that goes beyond inter-mode comparison to incorporate inter-group comparison based on particular factors such as socio-demographic background.

4. Utility Cycling & Risk: Key Issues

i. Helmet Use

a) Protective Effects

When one thinks of cycling safety, what springs to mind or, at least, what is brought to one's attention in public discourse, is the use or non-use of cycle safety equipment, most notably the cycle helmet. In a recent conference, the Irish Association of Garda Sergeants and Inspectors voted in favour of mandating the use of cycle helmets and high visibility clothing as a means to improve the safety of cyclists following what has been regarded as an increase in the danger of using this mode. This measure, it is proposed, is necessary due to the extreme danger of Irish roads for cyclists (Lally, 2017). Such discourse and suggestions are typical within public debates about cycling safety in Ireland. But, what evidence is there for such claims and recommendations?

Cycle helmets are a form of safety equipment in which extensive research has been carried out enquiring into the effect of their use on the risk of sustaining various types of injuries (Attewell, Glase and McFadden, 2001; Thompson, Rivara and Thompson, 2010; Elvik, 2011; Olivier and Creighton, 2017). Relatedly, correct and incorrect helmet use (Lee *et al.*, 2009; Yu and Denison 2018) and the effects of helmet legislation on helmet uptake and head injury (Macpherson and Spinks, 2007) have also been investigated.

In relation to the effects of helmet use, some of the major injury outcomes that have been examined include head injury (Attewell, Glase and McFadden, 2001; Macpherson and Spinks, 2007; Lee *et al.*, 2009; Elvik, 2011; Thompson, Rivara and Thompson, 2010; Olivier and Creighton, 2017), facial injury (Atwelle, Glase and McFadden, 2001; Thompson, Rivara and Thompson, 2010; Elvik, 2011; Olivier and Creighton, 2017), neck injury (Atwelle, Glase and McFadden, 2001; Elvik, 2011; Olivier and Creighton, 2017) and fatal injury (Atwelle, Glase and McFadden 2001; Macpherson and Spinks, 2007; Elvik, 2011; Olivier and Creighton, 2017). There are considerable variations in how these terms are defined between papers.

The systematic reviews and meta-analyses of Olivier and Creighton (2017), Elvik (2011), Thompson, Rivara and Thompson (2010), Attewell, Glase and McFadden (2001) reported a protective effect of helmet use against injury, though to different extents for different injury outcomes. A foundational meta-analysis on the subject, the paper presented by Attewell, Glase and McFadden (2001) comprised of 16 studies. Three of these studies were based on retrospective self-reports by cyclists, while the rest

gathered their data from cyclist presentations at emergency departments. Following this work, Thompson, Rivara and Thompson (2010) produced a systematic review and meta-analysis that incorporated five case-control studies. Data for all of these studies were gathered from cyclist presentations at hospital. Originally published in 1999 in the Cochrane review, it was last updated in 2010, adding one study to the original review and analysis.

In response to the work of Attewell, Glase and McFadden (2001), Elvik (2011) updated and re-analysed their meta-analysis, citing time-trend and publication bias in the original work, which rendered its results possibly misleading. Four new studies were added to the original 16 studies included in the paper by Attewell, Glase and McFadden (2001) in the re-analysis by Elvik (2011).

Lastly, Olivier and Creighton (2017), in a comprehensive systematic review and meta-analysis, located 43 relevant studies and included 40 of these studies for meta-analysis. For all of these studies, all injury data were medically verified: data were collected from cyclist presentations at emergency departments or hospitals, coroner reports or emergency/trauma databases.

All papers reported a protective effect of cycle helmets for head injury, although the number of studies used and odds ratios varied: 60% (Attewell, Glase and McFadden, 2001), 69% (Thompson, Rivara and Thompson 2010), and 51% for Olivier and Creighton (2017). Therefore, Olivier and Creighton's (2017) estimate was lower than those of both Attewell, Glase and McFadden (2001) and Thompson, Rivara and Thompson (2010) but was based on at least twice as many studies. However, unlike Attewell, Glase and McFadden (2001) which included three studies using self-report measures for head injury outcomes, Olivier and Creighton (2017) solely included studies with data that were medically verified. The remaining paper produced by Elvik (2011), then, adjusting for publication bias on the studies included by Attewell, Glase and McFadden (2001) in addition to including estimates from four newer studies , an even more conservative protective effect was estimated at 42% (0.58, 0.45 – 0.75), which is, by a wide margin, the lowest estimated effect across all four papers.

Brain injury was another key outcome measure for helmet use across the papers, in which protective effects were reported across all studies, but with substantial variation: 58% (Attewell, Glase and McFadden, 2001) 69% and 74% for *severe* brain injury (Thompson, Rivara and Thompson 2010). In contrast to the low number of studies in the analyses of both Attewell, Glase and McFadden (2001) and Thompson, Rivara and Thompson (2010), Olivier and Creighton (2017) incorporated 36 studies into their OR

estimate for helmet use and brain injury. Their paper reported a reduced odds of brain injury (referred to as 'severe head injury') of 69% (0.31, 0.25 – 0.37) - the same OR as Thompson, Rivara and Thompson (2010).

Contrary to the positive protective results for helmet use on head and brain injuries, the meta-analyses of Attewell, Glase and McFadden (2001), Elvik (2011) and Olivier and Creighton (2017) all indicate that helmet use does not protect against neck injury and possibly increases the likelihood of neck injury, although, in the case of Attewell, Glase and McFadden (2001) and Elvik (2011), few studies were used, and the data were generally of poor quality (i.e. self-report). Olivier and Creighton (2017), on the other hand, incorporated 11 studies which were all based on high quality medically verified injury data. Overall, helmet use was estimated to increase the odds of neck injury by 36% (Attewell, Glase and McFadden, 2001), 32% (Elvik, 2011), and 4% (Olivier and Creighton, 2017). In this case, the review by Olivier and Creighton (2017) ought to be interpreted as the most reliable estimate so far on the effects of helmet use and neck injury due to the superior quantity and quality of the data used which indicates that helmet use has more or less no effect on the occurrence of neck injury. Helmet use and the odds of facial injury, likewise, was investigated and, despite minor variations in results, the evidence suggests that helmet use is associated with a mild protective effect for facial injury in general, reducing the odds by 65% (Thompson, Rivara and Thompson 2011), 47% (Attewell, Glase and McFadden, 2001),17% (Elvik, 2011), and—once again using medically verified data—33% (Olivier and Creighton, 2017).

The last salient outcome variable investigated in the seminal helmet use research literature is fatal injury. In the three papers that estimated the summary odds ratio, all reported a powerful protective effect (Attewell, Glase and McFadden, 2001; Elvik, 2011; Olivier and Creighton, 2017): 73% (Attewell, Glase and McFadden, 2001); 77% (Elvik, 2011), 65% (Olivier and Creighton, 2017). The results of Olivier and Creighton (2017) are somewhat different than the results of Attewell, Glase and McFadden (2001) and Elvik (2011) as they did not incorporate fatal injury data in general but fatal injuries which had to have involved a head injury also. It is unclear how many studies incorporated in the estimates of Attewell, Glase and McFadden (2001) and Elvik (2011) involve fatalities without head injury. Thus, it is important to take this into account when interpreting their results, as helmets do not physically protect against fatality caused by bodily injuries. Nevertheless, altogether, the three papers indicate a similar powerful effect of helmet use in protecting against fatal injury.

Lastly, a recent meta-analysis was conducted by Høye (2018a) once again examining the effects of cycle helmet use on rider injuries in an attempt to replicate the findings of Olivier and Creighton (2017). In this study, 15 studies were added to the earlier analysis conducted by Olivier and Creighton (2017) rendering the total number of studies included 55. Overall, the meta-analysis yielded statistically significant results that cycle helmet use reduced head injury by 48%, serious head injury by 60%, fatal head injury by 71%, and traumatic brain injury by 53%. Other than a small reduction in protective effect of helmet use on serious head injury, the results are strikingly similar to the findings of Olivier and Creighton's (2017) original meta-analysis. Additionally, there is evidence from this analysis that cycle helmets have a greater protective effect in the case of single crashes compared to crashes that involve collisions with motorised vehicles.

The various findings discussed, then, overall provide convincing evidence that the use of cycle helmets decreases the possibility of head injury, brain injury and facial injury resulting from collision. However, as I will explore later, there are other important considerations to be made in relation to the safety effects of mandating the use of cycle helmets that stand independent of voluntary use. In this way, the suggestion that wearing cycle helmets is prudent stands as a reasonable position whereas a recommendation to make such use compulsory could produce very different consequences. Indeed, it is important to note that the call for cyclists to use safety equipment can neglect the role of the cycle environment and the influence of other road users. An excellent example of such discourse was demonstrated by the Dublin Fire Brigade in response to a collision incident between a cyclist and taxi driver in which the cyclist suffered a leg injury. In tweeting about this incident, instead of focusing on other potential factors that may have potentially contributed to this incident (e.g. road infrastructure, driver behaviour), and despite the end result being a leg injury rather than head injury, the recommendation by the fire brigade was made towards cyclists: "Remember to always wear a helmet" (Ginty, 2016). Indeed, in an insightful study, Bíl et al. (2018) reported from data gathered from the autopsy reports of 119 cyclists who were involved in crashes in the Czech Republic. In 37% of these fatal incidents, a cycle helmet would have most likely prevented fatal consequences, leaving the use of a cycle helmet likely pointless in the remaining 63% of incidents. This demonstrates the grave limitations of cycle helmets as a protective measure in potentially fatal traffic incidents.

b) Risk Compensation

Despite examining the evidence for the protective effect of cycle helmets in the case of crash or collision, what has not yet been explored is research relating to the use of a cycle helmet on the *probability* of crash or collision. Most notably, the influential theory of 'risk compensation' (Adams, 1995) is relevant in considering the effects of protective equipment – in this case cycle helmets – on the behaviour of those potentially protected by it and those perceiving another as being protected by it. In this way, it is hypothesised that one adapts their behaviour to compensate for the decreased perceived risk of harm by engaging in potentially risky behaviours that would not be practiced without the perceived safety provided by the protective equipment being used.

One strand of research investigates the effect of cycle helmet use on driver passing distance as a means to discover patterns of passing behaviour influenced by the use or non-use of cycle helmets. Most notably, Walker (2007) looked to, among other things, find out how the use of a cycle helmet affected the distance with which drivers overtook cyclists. Walker cycled on a common urban bicycle regularly throughout May and June 2006 in two English cities wearing casual clothing and a white helmet. He used concealed equipment to measure the distance given by overtaking drivers. At different points of his journeys, Walker removed his cycle helmet. In total, using data from 2320 recorded overtaking incidents, the author reported a statistically significant decrease in overtaking proximities when wearing helmets compared to cycling without a helmet. Overall, then, "the rider is more likely to experience particularly tight passing events when wearing a helmet" (Walker 2007, p.423). This finding calls into question how the use of cycle helmets affects the likelihood of being involved in a cycle motor-vehicle collision. However, reanalysing the data used in the Walker (2007) study, Olivier and Walter (2013) found that the use of helmet as a variable was of secondary importance in terms of its negative effects on observing the recommended one metre passing distance compared to the variables of kerb distance, road characteristics and traffic type. Accordingly, this reanalysis suggests that risk compensation does not occur to any significant degree in passing cyclists who are not wearing helmets, but, instead, factors such as distance from the kerb when cycling play a significant role in increasing passing distances.

Another body of research has investigated potential risk compensation behaviour amongst cyclists wearing helmets, in which it is hypothesised that the potential safety effect of wearing a cycle helmet may be undermined by a reduced perception of risk, resulting in riskier behaviour (for example, cycling faster when wearing a helmet) (Phillips et al., 2011). A recent number of accumulating publications, however, suggest that risk compensation behaviour is an unlikely outcome of wearing a helmet whilst cycling (Fyri et al., 2018; Radun et al., 2018a) at least in the form of increased speed (Schleinitz, Petzoldt and Geglert, 2018). Most recently, there has been a systematic review on risky behaviour toward and amongst cyclists in relation to helmet use in which 23 studies were included and qualitatively assessed (Esmaeilikia et al., 2019). Out of these 23 studies only two were found to report a risk compensation process, with three reporting mixed findings and the remaining 18 finding no significant associations. Accordingly, Esmaeilikia et al. (2019) conclude from this review that there is insufficient evidence to support any relationship between helmet use and risky behaviour. Indeed, on the contrary, 10 studies were found to report safer behaviour amongst cyclists wearing helmets; thus suggesting a greater protective effect of helmet use than previously thought, beyond the physical protection a helmet may provide (Esmaeilikia et al., 2019). Nevertheless the authors of this review are cautious to recommend mandatory cycle helmet legislation on these grounds (Esmaeilikia et al., 2019); as we will explore, even if - individually speaking - it may be considered wise to wear a cycle helmet from a safety point of view, mandating such use should not be considered an unproblematic common-sense extension of such a perspective, devoid of potentially negative health and safety outcomes.

c) Helmet Use Interventions

Separate from the research conducted on the safety effectiveness of cycle helmet use, then, there is significant research on particular interventions aimed at increasing helmet use (Macpherson and Spinks, 2007; Royal, Kendrick and Coleman, 2007; Karkhaneh *et al.*, 2006; Spinks *et al.*, 2005). A systematic review by Spinks *et al.* (2005) reviewed the effectiveness of specific interventions to promote helmet use amongst youth across various nations including the USA, Canada, Sweden and the UK. This included an assessment of non-legislative interventions (i.e. free helmet provision, reduced cost

helmet provision, educational interventions) specifically at a community level, but, additionally, an assessment of the effects of mandatory helmet use.

Altogether, the interventions assessed across studies were reported as effective in increasing helmet use and reducing cycling head injury in the population of interest; many of the studies employed a combination of interventions, therefore it is difficult to ascertain the relative effectiveness of different interventions (e.g. provision of cycle helmets/mandating cycle helmets). Lastly, much like the studies reviewed in Royal, Kendrick and Coleman (2007), most of the studies in the review of Spinks *et al.* (2005) did not examine in depth the duration of intervention effects; however, Spinks *et al.* (2005) claim that three of the studies reviewed took place over the duration of six years and, collectively, these long-term interventions increased helmet wearing from 5.5 percent to nearly 60 percent. This suggests the possibility of long-term behaviour change as a result of these interventions.

The relevance of findings from the reviews of Royal, Kendrick and Coleman (2007) and Spinks *et al.* (2005) are limited to individuals who are 18 years and younger and are particularly applicable to the effects of non-legislative interventions. In contrast, the systematic reviews of Karkhaneh *et al.* (2006) and Macpherson and Spinks (2007) focused on legislative interventions to increase helmet use in particular which included not only children but also adult participants. More specifically, Karkhaneh *et al.* (2006) aimed to assess the impact legislative interventions had on helmet use only whereas Macpherson and Spinks (2007) looked to investigate not only the effects of legislative interventions helmet use but also their effects on the occurrence of head injuries and potentially negative side-effects (e.g. lower levels of cycle ridership). Importantly, none the studies across both systematic reviews (Macpherson and Spinks, 2007; Karkhaneh *et al.*, 2006) included studies that measured potentially negative side-effects of legislative interventions – namely, the effects of legislation on bicycle use. In this way, the effects of legislation on rates of cycle ridership could not be determined.

In all of the studies reviewed by Karkhaneh *et al.* (2006), helmet legislation increased helmet use to greatly differing extents. The biggest increases were observed amongst the studies that started with low levels of helmet use and applied legislation to all ages rather than just younger people. In terms of interpreting these results, it is important to consider that the studies included by Karkhaneh *et al.* (2006), contrary to the studies included by Macpherson and Spinks (2007), did not involve equivalent controls, hence the conclusions that can be made from this weaker form of evidence must be

considered with greater caution as a variety of factors can confound the findings of such studies which the use of a control can alleviate.

Alike to the findings of Karkhaneh *et al.* (2006), Macpherson and Spinks (2007) reported that, across the study findings, helmet legislation was associated not only with increased helmet use but also decreased bicycle-related fatality and head injury. Three of the six studies reviewed imparted that helmet legislation increased helmet use from 45 to 84 percent among cyclists observed. In relation to legislation and head injury, two studies included in the review reported statistically significant decreases in head injury and one reported a non-statistically significant decrease in head injury. Lastly, one of the six studies included detailed a statistically significant decrease in cycle related mortality. However, this study did not include data specifying if these fatalities were a result of head injury, therefore one cannot know if they were influenced by lack of helmet use or not.

More recently, Høye (2018b) conducted a systematic review and meta-analysis investigating the effects of mandatory cycle helmet legislation. Including 21 studies in a meta-analysis on the effects of such legislation on injury outcomes, Høye (2018b) reported 35% statistically significant reduced odds of serious head injury for child and adult cyclists subject to mandatory helmet use laws. Reviewing a number of helmet legislation studies to investigate a concern that mandatory helmet wearing may deter members of the public from cycling, such as Radun *et al.* (2018b), Høye (2018b) concludes that cycle helmet legislation does not appear to have any large or particularly long term effect on rates of ridership. Indeed, in a recent systematic review, Oliver, Esmaeilikia and Grzebieta (2018) have tentatively indicated that existing evidence does not suggest that mandatory helmet laws decrease rates of cycle ridership, although data is lacking to make this claim with confidence. Accordingly, there does not appear to be any major empirical indications that mandatory cycle helmet legislation is a major deterrent for cycling in isolation from other factors (e.g. inappropriate cycle infrastructure).

Høye (2018b) comments that helmets are most beneficial in the case of single bicycle crashes as opposed to motor vehicle collisons; thus, advocating for mandatory helmet use does not mean advocating for a neglect of the conditions necessary for safe cycling since cycle-friendly infrastructure does not, according to Høye (2018b), have a significant impact on reducing single bicycle crashes. In this way, to improve cycle safety, Høye (2018b) calls for improved infrastructure for cyclists to reduce the likelihood of collision with motor vehicles, with helmet legislation as a supplementary, rather than

central, measure to reduce injury outcomes. This seems like a balanced statement, although, judging by the scarcity of high quality data in judging the impact of mandatory helmet laws on cycling rates of ridership (e.g. Oliver, Esmaeilikia and Grzebieta, 2018) perhaps it is hasty to implement such laws in the name of safety in locations where infrastructure may still leave a lot to be desired. In light of the major health benefits of widespread cycling relative to the risks previously elaborated (e.g. Jeroen Johan de Hartog *et al.*, 2010), any intervention that may deter individuals from obtaining such benefit from engaging in cycling may be seen as prioritising a narrower concern with public safety over a more pressing concern with public health.

ii. Visibility Aid Use

Visibility aids are another form of cycle equipment that have been investigated empirically relating to utility cycling and risk and, along with the cycle helmet, are frequently referred to as a key component of cycle safety in Irish public discourse. Indeed, in a poll by the journal.ie 75% of respondents voted in favour of mandatory high visibility and helmet use for cyclists (Hosford, 2017).

A systematic review implemented by Kwan and Mapstone (2009) aimed to primarily quantify the impact that visibility aids have on pedestrian and cycle-motor vehicle collisions and injuries and to which extent different visibility aids influence such outcomes. This review limited inclusion to randomised controlled trials and controlled before and after trials. Interestingly, for this primary objective, no studies were found to meet inclusion. This indicates a lack of high-quality research examining the safety effectiveness of this type of equipment. Hence, the secondary objectives were pursued instead: to quantify the effect the impact of visibility aids on driver detection and recognition responses and the extent to which different visibility aids influence such outcomes.

For the secondary objectives, 35 studies were identified and included in the review. All of these studies that involved human participants comprised of participants of 17 years or older. Within these studies there were 42 randomised controlled trials in total, six of which were laboratory-based and 36 of which were road-based. Of the trials, 12 were carried out with bicycles. However, arguably, visibility aids tested on pedestrians and target materials still provide some level of evidence for the effectiveness of visibility aids

in general, regardless of use; hence, the results of the separate trials may still bear on drivers' reaction, detection and recognition of cyclists who use visibility aids.

Summarising the results, including findings from visibility aid trials with pedestrians and target materials, Kwan and Mapstone (2009) claim that, collectively, visibility aids appear to improve the reaction, detection and recognition of drivers. Trial results evidenced that both fluorescent and non-fluorescent colours improved driver detection and recognition during the day; during the night, red and yellow retroreflective materials, flashing lights and lamps improved detection and recognition. Thus, there is evidence that visibility aids improve the visibility of cyclists as well as pedestrians. Yet, as Kwan and Mapstone (2009) note, this does not mean that drivers will make evasive manoeuvres having detected/recognised a cyclist or pedestrian that wears a visibility aids. Therefore, "increased conspicuity" (Kwan and Mapstone, 2009, p.14) does not guarantee that drivers will take action to prevent collision, and, since the review did not identify studies that investigated the relationship between visibility aid use and road collisions/injury, the safety effects of visibility aids cannot be directly commented upon based on the research reviewed.

However, following this systematic review, separate studies have examined the impact of visibility aid use on road collisions (Hagel *et al.*, 2014; Miller *et al.*, 2017). Hagel *et al.* (2014), firstly, conducted a Canadian case-control study using emergency department data on cyclist injuries over two years to assess the impact of visibility aid use on vehicle collision-related injuries. Cyclists for this study were of any age. The case group for Hagel *et al.* (2014) were cyclists injured via a motor vehicle collision (n=278); the control group, on the other hand, were cyclists injured without such a collision (n=2403).

Likewise, Miller et al. (2017) conducted a case-control study, although, in contrast to Hagel et al. (2014), this study took place in the United Kingdom and involved participants over 16 years of age. For Miller et al. (2017) the case group comprised of cyclists who were involved in a collision crash that resulted in injury (n=76) – this collision crash, unlike Hagel et al. (2014), did not necessarily have to occur with a motor vehicle. The control group, then, were cyclists who were matched to the case group by time of travel, weekday and area of travel (n=272). This control group was selected prospectively whereas the case group was selected retrospectively (Miller et al., 2017).

Both studies reported mixed results regarding the effectiveness of visibility aids in reducing road collision injuries (Hagel *et al.*, 2014; Miller *et al.*, 2017). Hagel *et al.* (2014), investigating the impact of various types of visibility aids, imparted that there

were both positive and negative links with their use and the risk of motor vehicle collision dependent on the time of use and lighting conditions. In this study, the vast majority of cases and controls were cycling during daylight. With adjustment for confounding factors, it was estimated that white or bright upper body clothing decreased the likelihood of motor-vehicle collision by 48% (0.52, 0.28 – 0.95) and 23% (0.67, 0.49 – 0.92) respectively under these lighting conditions.

Under dark conditions, then, in which a minority of cases and controls cycled, crude odd ratio estimates were made first due to the lack of cases required to make adjusted estimates. A wide variety of visibility materials increased the likelihood of a bicycle motor-vehicle collision occurring: reflective clothing (2.05, 1.01 - 4.18), reflective apparel of any kind (2.55, 1.29 - 5.04), red/orange/yellow (versus black), upper body clothing (4.15, 1.17 - 14.8), fluorescent clothing (3.09, 1.07 - 8.94), headlight use (3.09, 1.48 - 6.44), and tail light use (5.28, 2.12 - 13.12). Hagel et al. (2014) adjusted these crude odds ratios using a technique to fill in missing values due to the small number of cases that made a normal adjusted odds ratio impossible to estimate. Thus, they estimated instead what are known as 'imputed adjusted odds ratios'. Based on these imputed adjustments, only two of the six visibility aid estimates were statistically significant: red/orange/yellow front upper body clothing (4.11, 1.06 - 15.99) and tail light use (2.54, 1.06 – 6.07). As it can be seen amongst all of these imputed adjusted estimates, the confidence intervals for each estimate are noticeably broad. This means that the estimates are less precise than an estimate with a 95 percent confidence interval with a narrower range. In this way, it is fair to claim that these estimates count as evidence for the use of these two types of visibility aids increasing the likelihood of a bicycle motor-vehicle collision during night time conditions; however, the specific extent of this increase is ambiguous due to their wide confidence intervals.

Miller et al. (2017), alternative to Hagel et al. (2014), did not produce adjusted odds ratios for various types of visibility aids – these various types were similar to those found in Hagel et al. (2014). Instead, an adjusted odds ratio was estimated by aggregating data for the different types of visibility aids reportedly used and then adjusting for confounding factors (e.g. age, gender, route length, route risk). This estimate showed a statistically significant increase in the likelihood of a collision crash with the use of any visibility aid (2.43, 1.06 - 5.59). There is no significant evidence across the studies that they reviewed indicating that visibility aid use reduced the risk of a collision crash for cyclists (motor-vehicle related or otherwise).

A more recent study by Lahrmann et al. (2018), however, reported a significant safety effect for the use of visibility aids, namely, yellow jacket visibility aids, employing a randomised controlled trial design with 6793 cyclist participants from Denmark. Lahrmann et al. (2018) split participants into two groups in which, over the course of one year, one group of participants would wear a yellow high visibility jacket whilst cycling (test group) whilst the other half wore their usual cycle clothing (control group). Accidents, then, would be self-reported over the course of this year. Lahrmann et al. (2018) reported 47% fewer multiparty accidents for the high visibility wearing test group compared to the control grip. Accordingly, this finding suggests that high visibility clothing - in this case, a yellow high visibility jacket - can potentially greatly reduce multiparty accidents for cyclists. This finding greatly contrasts with the neutral and potentially negative effects reported by Miller et al. (2017), importantly, however, Lahrmann et al. (2018) note that the extreme safety impact may related to reporting bias from participants, who were not blinded, in which the vast majority from both the test and control group believed that high visibility clothing would greatly reduce their probability of multiparty accident. This could consequently influence reporting since participants may have wanted to confirm their own hypothesis regarding the effectiveness of high visibility clothing, thus potentially reducing their report rates. Nevertheless, this report bias does not mean that one must discount the results overall but, instead, interpret them with caution. Accordingly, one can reasonably claim from this study that visibility aids were found to have a very substantial effect in reducing the likelihood of being involved in a multiparty accident as a cyclist, despite the likelihood of some degree of reporting bias, the extent of which is difficult to fully determine.

Accordingly, following this brief review of a number noteworthy studies on the safety effects of high visibility aids on the likelihood of being involved in a multiparty/collision accident as a cyclist, the evidence is conflicting; with Kwan and Mapstone (2009) reporting improved reaction, detection and recognition from drivers in response to high visibility material (however, Kwan and Mapstone could not estimate the effects of high visibility on injury likelihoods), Hagel *et al.* (2014) and Lahrmann *et al.* (2018) reporting a positive safety effect, and, in contrast, then, Miller *et al.* (2017) reporting no reduced likelihood of collision, but, instead, an increased likelihood of collision crash when using a visibility aid cycling. Since Lahrmann *et al.* (2018) employed a randomised controlled design to investigate the effect of visibility aid use on the risk of multiparty accident – the first of its kind to date – the balance of evidence appears to tip in the favour of a likely protective effect of using visibility aids. Nevertheless, this claim is by no means

definitive, with more studies needed. Furthermore, even if it was concluded that high visibility use was effective in reducing cycling accidents, evidence suggests that mandating high visibility clothing has no effect in reducing the sum total and proportion of cycling crashes (Prati, 2018), once again rendering the effectiveness of another supposed cycling safety intervention ambiguous.

iii. Cyclist Conduct

I have discussed so far the impact of both cycle equipment use and promotion on cyclist safety as well as the potential effects the use of equipment can have on the conduct of both cyclists themselves and other road users, examining research emerging from a theory of 'risk compensation'. In this section, I will examine a number of studies relating to the impact of a cyclist's conduct on various risks. In the Irish media, the conduct of cyclists is a topic of fierce debate in relation to risk. Some argue for tougher enforcement for what often termed as 'reckless' and 'irresponsible' behaviour on the part of cyclists whereas others argue that infrastructure and rules are designed with motorists in mind and thus are poorly suited to cyclists. A recent article in the Irish Times online illustrates both views in which the author, in light of a recent cyclist fatality, claims that although cycling can be dangerous, some cyclists need to be more compliant road users and that a "crackdown" may be required in order to achieve this; whilst, at the same time, improved infrastructure is badly needed as cyclists are "victims of this lack of investment" (Ahlstrom, 2016). The introduction of various fixed notice charges for cyclists for various traffic offences demonstrates an approach to cyclist safety that focuses on improving cyclist compliance with the rules of the road (Citizens Information, 2018). An important question, then, must be how does cycling conduct influence cyclist safety?

There is limited research investigating the effect of cyclist compliance with the rules of the road and the impact this has on cyclist safety. However, studies conducted across a variety of contexts present varied results. In a Czech study aggregating cyclist motor-vehicle collision injury police report data between 1995 – 2007, out of 5428 accidents – 4460 serious injuries and 968 fatal – in 57% of cases the driver was considered at fault and in 43% of cases the cyclist was considered at fault (Bíl, Bílová and Müller 2010). Schramm, Rakotonirainy, and Haworth (2008) drew upon 1312 police reported cycle accidents from 2000 – 2005 in Queensland, Australia. The authors reported that, similar

to Bíl, Bílová and Müller (2010), cyclists were at fault in a minority of cases (30.3%), with motorists at fault in 63.6% of accidents. Furthermore, only 23.3% of cyclists 17 or older were at fault in terms of total accidents, the remaining percentage accounted for by cyclists less than 17 years of age. In this way, there is evidence that, in these contexts at least, cyclists are no more non-compliant than drivers in the case of accidents causing serious injury or fatality. Indeed, for fatalities in particular, drivers were over one and a half times more likely to be at fault. Thus, the consequences of driver fault appear to be considerably worse than those of cyclist fault (Bíl, Bílová and Müller 2010). Contrastingly, though, Kim *et al.* (2007) using data on 2934 police reported accidents recorded between 1997 to 2002 from South Carolina, USA, reported that cyclist fault was associated with greater injury severity than driver fault. There appears, then, conflicting evidence on the impact of cyclist compliance on serious injury or fatality resulting from motor vehicle collisions, but, the studies discussed broadly indicate that cyclists are less likely to be at fault but still play a role in serious motor vehicle - cyclist collisions.

One could argue that cyclist conduct is influenced by the degree to which a cyclist is equipped with the skills to cycle in a way that is considered by some (e.g. a national road safety or cycling authority) to be 'safe' on the road. 'Cycle training' is an intervention designed to develop such skills. More specifically, cycle training aims to reduce cycle injuries through developing the knowledge and skills necessary for compliant cycling practice in addition to enhancing one's management of a cycle. Richmond *et al.* (2014) conducted a systematic review of the studies investigating the effects of bicycle skills training interventions on the prevalence of cycling injuries.

This review was limited to children and young people only (up to 18 years old) and 25 studies were included. Three notable study outcomes from training interventions were measured: injury (mainly self-reported), behaviour and knowledge. Seven of the 25 studies investigated the effects of cycle training interventions on injury frequency and severity. Across all of these studies, no statistically significant effect was found for bicycle skills training and cycle injury. 13 studies looked into the impact of cycle training on cycling behaviour – primarily judged by the ability to perform certain manoeuvres on a bicycle. Out of the 11 observational studies, five of these reported improvements in cycling behaviour following the training intervention. The remaining two studies, which were randomised controlled trials, reported no significant improvement in cyclist behaviour post-intervention. Thus, in this area, results conflict but, overall, suggest that bicycle training is not particularly effective in improving cycling behaviour. The impact of

cycle training on knowledge of the rules of the road and safe cycling practice, then, was assessed in 16 studies of the 25. Similar to the results of cycle training on behaviour, five of the 11 observational studies investigating knowledge reported improvements post-intervention. There were also positive results for three out of five randomised controlled trial studies. Therefore, based on this review section, there is conflicting evidence that cycle training may lead to some degree of improvement in cycle safety knowledge.

Overall, then, there is a dearth of evidence supporting the safety and safety related impacts of cycle training in young people and children and no evidence was located investigating the impact of cycle training on adults (Richmond *et al.*, 2014). More recent research has been carried out in relation to safety outcomes and cycle training, nevertheless, similar to the studies included in Richmond *et al.* (2014), these studies have focused on young people in particular (Goodman, van Sluijs and Ogilvie, 2016; Hatfield *et al.*, 2017; Mandic *et al.*, 2018; Twisk *et al.*, 2018).

However, even if cycle training was found to be effective in promoting what is considered to be 'safe' cycle behaviour amongst adults, this in itself could be problematic. More specifically, an important concept in cycle training is that of the cyclist's 'positioning' (Cycling Ireland, 2018). In the study investigating the impact of helmet use on drivers overtaking proximities with cyclists (aforementioned in the helmet use section), the impact of positioning on overtaking proximities was also measured. Contrary to beliefs about cycling position (Walker, 2007) — namely, that positioning one's self further out into the road results in greater overtaking distances from drivers — Walker reported that the reverse was true: positioning oneself further out from the road edge was statistically significantly associated with reduced driver overtaking distances. This calls into question one of the key tenants of cycle training (Cycling Ireland, 2018) and thus, in an important respect, problematises how cyclists ought to behave in the cycle environment.

iv. Transport Infrastructure

Having broadly investigated literature relating to elements relevant to individual cyclists such as helmet and high visibility use, we now come to give some attention to what could be called the cycling 'environment'. One primary component of such an environment is the physical infrastructure in which one cycles. This can be seen as one aspect of the environment in which the cyclist, with or without a helmet, high visibility

clothing and/or cycle training, engages in the practice of cycling. One of the most important issues to consider, then, when considering utility cycling and risk is arguably the type and quality of infrastructure in which a given individual cycles. To date, the impact of different infrastructures on rates of ridership, such as the association between female ridership and separated cycle infrastructure, has been investigated (e.g. Aldred and Dales, 2017). Furthermore, the prevalence of various infrastructure types in particular contexts has been examined, such as the study of Conway *et al.* (2019), in which it is reported that Dublin exhibits a lack of high quality infrastructure to make cycling attractive and safe in contract to the well-established cycling city of Copenhagen, which has a relatively high percentage of infrastructures for cyclists that are segregated from vehicular traffic. However, regardless of preference and prevalence of various infrastructures, what are the actual effects of such infrastructures on the risk of cycle accidents and cyclist injuries?

The systematic review of Mulvaney *et al.* (2015) is one of the most comprehensive investigations to date on the effects of varying road infrastructures on cyclist injuries. In this review, Mulvaney *et al.* (2015) investigated existing research on the influence of road infrastructure on the occurrence of cycle injuries and collisions. There were three main objectives: to assess the effects of cycling infrastructure on, first, the occurrence of cycling injuries, second, the severity of cycling injuries, and third, the demographics of cycling injuries. Outcome measures, then, included injury data via self-report or evidence of medically attended injury, rates of collision for cyclists (translated per 1 million km of cycling exposure), and cyclist observational counts (to test the promotional effect of infrastructure).

In total, 21 studies were included in the review of Mulvaney *et al.* (2015). 20 of these were controlled before and after studies, whereas the remaining study employed an interrupted time series design. Seven of these studies were compatible with, and consequently included in, meta-analyses. Across the studies, the safety impacts of various infrastructural interventions were tested.

These infrastructures were of four types: motor vehicle and cyclist shared space, segregated cycle space, cycle related infrastructure to manage the road network, and, lastly, combined cycling infrastructure.

None of the 21 studies included the primary outcome measure of injury via self-report or medical verification, thus there is no way of knowing based on this review how types of road infrastructure affect the occurrence and severity of cyclist injuries via data from the cyclist themselves or from medically verified sources. However, 14 of the studies

used police report data regarding cycle crashes/injuries; hence there is evidence regarding injuries, albeit not of the same quality and representativeness as self-report and medically verified sources. The other seven studies did not clarify the origin of their data for crash/injury outcomes. This makes the quality of this data questionable.

In terms of case and control compatibility in the designs across the 21 studies, Mulvaney et al. (2015) reported that only six of 21 studies' case and control area selections qualified as "well matched" (Mulvaney et al., 2015, p.14), with the remainder rated as either poorly matched or unclearly matched. What is meant by the term 'matched' relates to the extent of risk of selection bias within the studies; in other words, the extent to which the areas in which the cases and controls were selected for each study can be judged as reliable for comparison is the same as the degree to which they can be considered 'well' or 'poorly' matched. Likewise, only two of the 21 studies included were judged by Mulvaney et al. (2015) to be at a low risk of confounding bias (i.e. the findings reported by these studies are at a low risk of being under the influence of factors that were not brought in to adjust the findings and alleviate this risk). In this way, overall, the preceding results need to be interpreted with caution due to the high risk of bias in two forms: selection bias and confounding bias. Indeed, this assessment reveals that, even with such a small number of studies for various types of cycle infrastructure, the quality of the studies – and thus any findings emerging from them – are highly suspect.

Most of the studies reported no statistically significant effects of their respective infrastructures on rates of cyclist collision. Namely, there were no statistically significant effects reported for cycle lanes (i.e. a part of a road that is usually designated by a white line and bicycle symbol that is exclusive to cyclists); advanced stop lines (i.e. a type of infrastructure that designates for cyclists to queue in front of motor vehicle traffic at a traffic light junction); use of colour (i.e. painted markings for cyclists in general); cycle paths (i.e. segregated cycle paths in a pedestrian shared space); cycle routes and networks (i.e. networks of cycle routes); and cycle lanes through signalised intersections.

In their summary of main results, however, Mulvaney *et al.* (2015) make some tentative claims regarding the impact of certain infrastructural interventions based on their narrative composition of the studies included in their review. First, they claim that the installation of 20 mph speed zones could have the potential to reduce cycle casualties. Second, in general, converting road intersections into roundabouts may increase cycle collisions. Third, both cycle tracks (i.e. tracks for cycle traffic only,

elevated and separated from motor traffic) and cyclist prioritised side road intersections (i.e. cycle lanes crossing a main road from a side road, with a 'give way' marking on the main road) may increase cycle injury collisions.

Beyond cycle collisions/casualties, Mulvaney *et al.* (2015) state that there is inadequate evidence to make any concrete claims about the impact of different types of infrastructure on certain characteristics of cycle collisions (e.g. injury severity). Nevertheless, they suggest based on their review of the evidence that, first, 20 mph speed limits may decrease cyclist fatalities and serious injuries, advanced stop lines could increase the likelihood of minor injuries but simultaneously reduce serious injuries and that, lastly, implementing 20 mph speed limits and cycle routes and networks could decrease cyclist casualties amongst children.

For the last key variable compared amongst infrastructure studies (that is, cycle flow), Mulvaney *et al.* (2015) claim that cycle routes and networks may promote increased cycling but that, other than this specific infrastructure type, there was no evidence of increased cycle flow or cycle flow was not assessed or reported in the various other studies. The fact that cycle flow was not accounted for in many of the studies is problematic as it means that collision data was not adjusted for this potentially serious confounding factor. To specify, if a particular type of infrastructure attracts more cyclists, this may increase the likelihood for higher numbers of collision and thus, could obscure the possible safety effects of such infrastructure, thus confounding the findings. This is a particularly important variable to adjust for another reason, namely, due to the possibly independent effect that cycle modal share can have on cycle collisions and casualties (Elvik and Bjørnskau, 2017), which I will investigate in greater depth in the following section.

Since Mulvaney *et al.*'s (2015) systematic review, there have been a number of noteworthy publications regarding the safety effects of cycle infrastructure (Pucher and Buehler, 2016; Thompson *et al.*, 2017; Götschi *et al.*, 2018). Pucher and Buehler (2016) in particular, presenting statistics from 10 cities in the United States that have introduced varying levels of cycle friendly infrastructure indicated by 'Growth in Bikeway Network' comment that such interventions have greatly reduced cycle crashes and fatalities. Portland, for example, has reportedly increased its cycle network by 53%, and, during this same period has seen a 62% reduction in crashes per 100,000 trips as well as a 72% reduction in fatalities and severe injuries per 100,000 trips. As always it is important to exercise caution regarding the interpretation of such figures, perhaps most importantly because they have not, in this case, been subject to quantitative analysis,

nor is the mode of data collection (i.e. police report, emergency department etc.) specified. Furthermore, during this same period, it is reported that there was a 391% increase in cyclists. Accordingly, other factors, such as modal share, may play a role in reducing the proportion of cyclists in crashes and cycling fatalities and severe injuries. Nevertheless, it does suggest that infrastructure may likely play a role. Indeed, the findings of Pedroso *et al.* (2016) – which are cited by (Pucher and Buehler, 2016) support such a claim, as it was estimated that following the expansion of Boston's cycle network between 2007 and 2014, each year between 2009 and 2012 led to a 14% reduction in injury risk following crash as a cyclist.

Interestingly, Thompson et al. (2017) have raised the issue of producing segregated infrastructure to improve cyclist safety in light of the potential lack of behavioural adaptation amongst drivers due to decreased exposure to cyclists. In other words, reducing cyclists' exposure to cars through segregated infrastructure may lead to drivers failing to adapt their behaviour in expectation of or in the presence of cyclists when occupying the shared spaces. In this way, it is posited that there may be a degree of segregation to be met in order to offset the behavioural risks due to lower exposures. Using agent based modelling, it was estimated by Thompson et al. (2017) that the introduction of segregated infrastructure for cyclists on simulated road network led to a lower proportion and sum total cycle-car crashes. Nevertheless, when it was modelled that medium to high levels of driver behavioural adaptation takes place (vs. low levels) in light of low to medium segregated infrastructural interventions, there was a very small to zero reaction in cycle-car crashes, the benefits of segregation being offset by the risks of reduced adaptation for cyclists in shared spaces by drivers. Accordingly, it may be argued from these findings that low to medium segregation measures may potentially increase the risk cycle-crash collisions for cyclists who continue to use shared space. This complicates opinions regarding segregation as one of the best measures for cycling safety (e.g. Pucher and Buehler, 2016). However, with high levels of segregated infrastructure, a reduction in cycle-car crashes was estimated even with medium to high levels of driver behavioural adaptation modelled (Thompson et al., 2017); therefore, as Thompson at al. (2017, p.27) argue, it is important to take into account that "threshold levels of separated cycling infrastructure across a network may be required before safety benefits are realised". The impact of 'behavioural adaptation' on the safety of utility cyclists, then, brings us to the question of exposing drivers to cyclists in shared space – a question related to modal share.

v. Modal Share

Alongside transport infrastructure, then, the modal share of cyclists relative to other road users can also be viewed as a component of the cycle environment. Unlike cycle infrastructure which can consist of a combination of physical and legal structures, modal share consists of aggregates of people using a particular mode of transport within a particular infrastructural setting. The 'safety in numbers' hypothesis posits that as the modal share of pedestrians and cyclists relative to motorists increases the proportion of pedestrian and cyclist accidents decreases.

Elvik and Bjørnskau (2017) conducted a meta-analysis of regression coefficients pertaining to cyclist and motor vehicle volumes and motor vehicle-cyclist accidents. The regression model used to estimate regression coefficients amongst the studies included for meta-analysis indicates that coefficients below the value of one mean that motor vehicle-cyclist accident frequency increases less than proportionally to the volume of cyclists (Elvik and Bjørnskau, 2017). In other words, if a regression coefficient estimate is below one then there is evidence of a 'safety in numbers' effect for cyclists.

A safety in numbers effect was reported by Elvik and Bjørnskau (2017) in their random effects meta-analysis of 11 regression coefficients based on cyclist data. Their summary regression coefficient was 0.43, indicating a strong effect, and was highly statistically significant. Similar findings were reported for the influence of both motor vehicle volume and pedestrian volume on each respective group's injury frequency (0.50 and 0.51 respectively). Thus, the systematic review and meta-analysis of Elvik and Bjørnskau (2017) presents evidence supporting the existence of a general 'safety in numbers' effect. Rounding up the findings for each road user at a coefficient of 0.50, they claim that if cyclist or pedestrian volume doubled (i.e. +100 percent) it could be expected that accident frequency would increase by only 41 percent.

Although this is an impressive result, none of the studies included adequately adjusted for possible confounding factors. One that is of considerable importance is the degree of road infrastructure quality for cyclists. As detailed by Elvik and Bjørnskau (2017), it is plausible that if good quality infrastructure was provided for cyclists, this would attract new cyclists, which, in turn, could increase the cost effectiveness of enhancing cycling infrastructure further. This possible confounding factor was only controlled for in some of the studies included and, even within the studies, the variables used to control for infrastructure quality were basic (Elvik and Bjørnskau, 2017). Thus, there is a possibility

that the aforementioned results are influenced by the impact of infrastructure quality rather than a 'safety in numbers' effect.

The source of injury data is another important consideration that ought to be made when interpreting the results of the meta-analysis. The source of the data used by Elvik and Bjørnskau (2017) to make their summary estimates were based on reported accidents that involved cycle-vehicle collisions. As highlighted earlier in this review, cyclist injuries are by no means represented in police report data, at least in Ireland (Foley *et al.*, 2013). Indeed, Elvik and Bjørnskau (2017) point out that the vast majority of single bicycle crashes go unreported. Therefore, there is also a possibility that a 'safety in numbers' effect only exists for reported accidents and not for unreported accidents. More particularly, there may only be a potential 'safety in numbers' effect for bicycle vehicle crashes and not for single bicycle crashes. Elvik and Bjørnskau (2017) speculate that there may even be a turning point for a 'safety in numbers' effect, depicting a scenario in which a high concentration of cyclists travelling alongside one another could increase the chance of bicycle to bicycle collision. Such a 'turning point', though, has not yet been identified.

Lastly, there is no information included in the review of Elvik and Bjørnskau (2017) regarding the types of injury sustained by cyclists (e.g. head injuries, neck injuries) and their severity (e.g. minor, requiring hospitalisation, fatal). Therefore, although their summary estimates may support a 'safety in numbers' effect, the subtleties of this effect are unclear; that is, does the effect reduce total accidents, serious accidents, or minor accidents? These estimates are based on police report data for bicycle-vehicle and pedestrian-vehicle crashes only, thus the estimates can only be generalised to such types of crashes. This leaves single bicycle crash injuries unaccounted for (i.e. accidents that specifically do not involve collisions of any kind with motor vehicles), which begs the question: is there evidence of a 'safety in numbers' effect for single bicycle type crashes? There is evidence that these types of crashes produce generally less severe injuries than reported bicycle vehicle crashes (Foley et al., 2013), nevertheless, could they increase with an increase in cyclists sharing space?

It is important to consider the mechanisms hypothesised behind the 'safety in numbers' effect. Jacobsen (2003) poses the question regarding the origin behind it: whose behaviour changes – that of the cyclist or that of the motorist? Since both the review of Elvik and Bjørnskau (2017) and the work of Jacobsen (2003) looked at the impact of modal share on cycle-motor vehicle collisions only (as opposed to single bicycle crashes without a collision between road users), this 'effect' can only be

considered in these cases as applicable to a disproportionate increase in cycle - motor vehicle collisions with increased cycle modal share. Jacobsen (2003) claims that behavioural modification on the part of cyclists (i.e. higher levels of rule compliance and yielding to motorists) is less plausible in contexts with greater numbers of cyclists than is adapted behaviour by motorists in such contexts. This, Jacobsen (2003) speculates, could be brought about via motorists' greater expectancy and perception of cyclists in such contexts and the possibility that – since more people cycle in such a context – motorists may also engage in cycling thus have a greater consideration for such road users.

A more recent exploration of this hypothesis provides greater elaboration for such a view. Jacobsen, Ragland and Komanoff (2015) describe the significance of the frequency by which motorists encounter cyclists in the road environment in increasing the expectations for these motorists to encounter cyclists in the future. This relationship, then, between the prevalence of encountering cyclists and the expectations for future encounters by motorists can help to explain the mechanism behind the 'safety in numbers' effect in terms of improved motorist detection of and responses with cyclists in the road environment. What such a hypothesis would not explain, though, would be the effect that cycle modal share may have on single bicycle crashes, as such crashes would not involve a collision with any other road users (but, perhaps, they could involve or result from interaction with other road users).

Overall, then, there is evidence to support that increasing cycle modal share can decrease the risk of cycle collision/casualty despite likely increases in absolute cycle collisions/casualty numbers. Accordingly, modal share is an important aspect in considering utility cycling and risk in its own right but also in respect of the previous sections. To clarify, considering mandatory helmet use in particular, such a measure could potentially make cycling appear less attractive and more dangerous thus decreasing cycle ridership levels; on the other hand, particular kinds of cycle infrastructure such as cycle tracks, among others (e.g. Götschi et al., 2018) could possibly promote cycling and make it appear more convenient and safe. In this way, the influence of other aspects of cycling safety and the effects that these have on the perceived attractiveness of cycling as a mode could affect levels of ridership, and, thus, influence the potential safety impact of increased cycle modal share. As pointed out by Thompson et al. (2017), however, a low to medium level of segregated infrastructure may disturb the exposure necessary for a significant 'safety in numbers' effect in situations where cyclists may share space with drivers. Thus, there appears to be

potential for tension between promotion through infrastructure below threshold levels and reduced behavioural adaptation to cyclists amongst drivers. Once again, we find ourselves at another complexity relating to utility cycling and risk.

3. Conclusion: Opening up 'Precarious Entitlement'

Accordingly, in this introductory chapter, I have explored the literature relating to the benefits of cycling, and, more comprehensively, the matters of risk and safety related to it. Topics have ranged, then, from the general risks cyclists face (namely, of road crash and air pollution) to the major components and interventions thought to influence a cyclist's safety (i.e. helmet use, high visibility use, cyclist behaviour, specific forms of infrastructure, and modal share). Thus, it is well established that cycling poses particular risks to the health and safety of its practitioners heavily depending on the context. Furthermore, it has been well established that various factors are thought to affect the risks faced by cyclists, which have been shown to involve complex interactions, dilemmas, thresholds, paradoxes, and, in some cases, a surprising lack of evidence. The scope for a question emerges: amongst all of these various factors and influences relating to matters of risk and safety and utility cycling, how does one, in their everyday utility cycling practice, experience and deal with themselves as cyclists and the road environment, involving material and legal infrastructures along with other road users? How is all of this potential ambiguity and insecurity negotiated? Amongst all of the possible variables regarding utility cycling and risk discussed - which are by no means comprehensive – a question may be posed: what concerns cyclists? Amongst a discourse that can describe cyclists as being subject to risk, putting others at risk and engaging in 'risk-taking', what is generally relevant to cyclists themselves and how do they deal with it in their everyday practices? An answer to these questions may provide a window for understanding some aspects of utility cycling behaviour and provide a rich perspective for interpreting how utility cyclists (in the context of Dublin) experience and negotiate the city as a cyclist.

This opening discussion, then, provides a point of entry for the main concern of cyclists in Dublin conceptualised in this study: 'precarious entitlement' to public space. This concept incorporates aspects relating to insecurity/risk/unreliability (i.e. the 'precarious' aspect), with a concern regarding entitlement to public space that one finds 'precarious' to exercise as a road user. Accordingly, one perceives an entitlement to use public space

as a cyclist but also finds this entitlement precarious to enact due to a number of properties that make up the 'conditions' of precarious entitlement: namely, *insecure space*, *spatial disregard*, and *police neglect*. These properties, as will be elucidated in chapter three, incorporate concerns with the material and legal construction of spaces (i.e. insecure space), the conduct of other road users and the risk of collision (i.e. spatial disregard) and the (in)activity of law enforcement in relation to policing spaces and conduct within spaces (i.e. police neglect). In this way, precarious entitlement holds relevance in considering matters of risk and safety in relation to utility cycling but goes beyond this narrow focus to integrate a concern of everyday road users with matters of entitlement to space, thereby raising issues relevant to notions of equality, inequality and justice. However, before further explicating and illustrating the emergent core category and related categories of this study – namely, the ways in which cyclists *deal with* conditions of precarious entitlement – I must first articulate the theory behind, and my practical application of, the methodology for this study: classical grounded theory.

Chapter 3:
Classical Grounded Theory
Methodology

1. Introduction

In the following chapter, I discuss the research methodology employed over the course of this study in detail, looking at both the theory and components of this methodological approach and my own nuanced application of it. First, I discuss the origins of classical grounded theory, imparting the influences behind its articulation by Glaser and Strauss (1967). Second, I look to define grounded theory, focusing on its fundamental purpose – the generation of relevant theory. Third, I describe the aim of this study as a backdrop for the succeeding sections. Fourth, I discuss in detail the fundamental aspects of classical grounded theory research and its associated procedures, namely coding and memoing, along with demonstrating my own application of these procedures. Later in this section, then, I look at the distinct phases of grounded theory - open coding and selective coding - and, once again, example my application of methodological procedures, such as theoretical sampling, in these phases. In the final component of this section, I explore the notion of 'theoretical sensitivity and the role of literature in grounded theory. Fifth, I critically consider alternative formulations of grounded theory - such as 'constructivist' grounded theory proposed by Charmaz (2006) - compared to the classical statement (Glaser and Strauss, 1967) and what has been defined as the 'Glaserian' approach (e.g. Glaser, 1998) that I adopted over the duration of this study. Sixth, I delineate my approach to data collection for this study which consisted of qualitative interviews. More specifically, I discuss my informed approach to interviewee recruitment, interview method, interview data, as well as discussing more practical matters such as the construction and use of interview guides, the question of audiorecording, my approach to transcribing, and beyond. Seventh and last, I detail the ethical considerations I was sensitive to over the course of this study, such as the matter of informed consent to participate as well as being mindful of participant vulnerability and confidentiality.

2. The Birth of Grounded Theory

Grounded theory, in its original conception, is a systematic method of generating social theory from data. It was developed in response to a perceived overemphasis in sociology with verifying existing theories that were, in some cases, of questionable fit to a particular area of interest under research (Glaser and Strauss, 1967). Glaser and

Strauss (1967) argue that these 'logico-deductive' theories were developed via unsystematic theoretical procedures which rendered them liable to be forced upon certain phenomena as questionably fitting explanations. In contrast, 'grounded' theories were systematically generated from careful comparative analysis of data and thus were highly emergent from one's analysis of data pertaining to the phenomena of study. This emphasis on 'emergence' as opposed to 'forcing', it was argued, afforded grounded theories with a credibility that could not be equally attributed to logico-deductive derived theory (Glaser and Strauss, 1967).

Logico-deductive theory, then, in contrast to grounded theory, was generated without adequate respect for data. Theory created using grounded theory methods could, unlike some prior theories, fit the data gathered from an area of interest (e.g. hospital wards) and work to explain some aspect of behaviour of individuals within such an area (Glaser and Strauss, 1967). In this way, grounded theory was "derived from data" (Glaser and Strauss, 1967, p.5) and, since this was the case, could prevent "tacked-on explanation" (Glaser and Strauss, 1967, p.5) that could occur when prior theory was applied to a body of data without systematic processes to ensure 'fit'. It was not, however, just important to revive the generation of theory as a goal but rather the systematic generation of theory that 'fits' and 'works' with the data from the area of study. Therefore, grounded theory offered a method of generating theory that 'fits' and 'works'. This original conception is known as 'classical grounded theory' (Morse, 2008).

In a word, then, with the introduction of grounded theory, Glaser and Strauss (1967) aimed to re-emphasise the importance of the 'emergence' of theory from systematic data analysis in response to perceived 'forcing' in unsystematically generating theory without adequate respect for data and applying such theory onto bodies of data for the purposes of verification. However, it is debatable whether any theory – logico-deductive or otherwise – was produced without inspiration from or use of data pertaining to the phenomenon it was intended to explain. Perhaps it is more useful to look at Glaser and Strauss' (1967) dichotomy between 'emergence' and 'forcing' as a spectrum through which a theorist can be to different extents receptive to data from the phenomenon of interest. In other words, a theorist who emphasises emergence may pay closer attention to data from a phenomenon of study (i.e. they may stay closer to the data) in generating theoretical concepts. On the other hand, a theorist who leans more towards 'forcing' may produce concepts based on broader, looser interpretations of data from the phenomenon of interest. These considerations are useful starting points in thinking about what grounded theory uniquely offers the practice of theory building. Therefore,

rather than accepting a strict dichotomy between 'emergence' and 'forcing' as valid, as I will demonstrate further in later sections, these aspects of the generation and application of theory ought to be considered on a continuum.

Lastly, Glaser and Strauss' (1967) emphasis on generation as a goal for sociologists more generally derives from their view that, in terms of unique skills, only the sociologist is suited to the task generating social theory. Theory verification as a goal, on the other hand, requires the gathering of data. This task, on the contrary, can be competently achieved by professionals from various alternative backgrounds. With this logic, Glaser and Strauss (1967) argue that the goal of generation ought to be at the forefront of what the sociologist meaningfully offer society as a professional and thus ought to be a priority in the work of sociologists.

3. What is Grounded Theory?

The goal of grounded theory is to generate social/psychological theory based on the systematic analysis and collection of data (Glaser and Strauss, 1967). A grounded theory is stated to be "a relevant theoretical abstraction about what is going on in the area studied" (Glaser and Strauss, 1967, p.23) rather than an attempt to directly represent what is going on in the area studied. 'Relevant' arguably means here that the concepts generated by the grounded theorist from their analysis of the data are observably relevant to the data; in other words, they 'fit' and 'work' with the data. Namely, one can clearly and justifiably see the link between the theory and the data used in the process of its generation. Hence, the concepts — the building blocks of the theory — are observably 'grounded', thus rendering the theory 'grounded' (Glaser and Strauss, 1967).

Grounded theory concepts do not *reflect* the data – the concepts of a grounded theory must go *beyond* the data (Glaser and Strauss, 1967; Glaser, 1978). This abstraction comes from the grounded theorist's analysis of data in tandem with a variety of flexible data collection and sampling procedures. This goal of going beyond or *transcending* is what Glaser (2002) argues for when he distinguishes between the goals of qualitative data 'description' as opposed to grounded theory 'abstraction'. Furthermore, through such a transcendent abstraction that characterises a grounded theory, one is equipped with a theory that maybe applied to other contexts (albeit with some likely modifications). More recently, Bakker (2019) has usefully commented that one ought to view grounded theory epistemologically as an 'ideal type' rather than a 'real type' in

keeping with the arguments of Glaser (1978) regarding grounded theory as a transcendent abstraction versus a description.

In this way, a grounded theory is a proposed, systematically generated "integrated set of conceptual hypotheses" (Glaser, 1998, p.3), not an absolute, mirror-image portrayal of a reality – not "findings" (Glaser, 1998, p.3). Accordingly, a grounded theory ought to be imparted by its theorist with a sense of humility and openness to alteration in the future. This is captured by Glaser's (1978; 1998) repeated emphasis on the importance of 'modifiability' for a grounded theory. Namely, a grounded theory ought to be modifiable in the future in light of new or conflicting data relevant to it. Instead of being rejected and disposed of in light of new data, an existing grounded theory merely needs to be modified and expanded to accommodate this new data through comparative analysis, thus ensuring the 'fit' between categories of the theory and the data (Glaser, 1998).

Grounded theory goes beyond the appearances and details of data and is founded upon the identification and conceptual interpretation of recurrent patterns in data. In this way, it is only ever a hypothesis systematically founded upon a conceptual analysis and sampling of data. It is not looking to conceptually capture the reality of appearances but rather a reality of social/psychological processes, which can only ever be theoretically interpreted as they are not directly observable (i.e. one cannot necessarily 'see' a social process in action; what they can arguably 'see' are things that may plausibly *indicate* such a process and thus interpret that such a process is 'going on'). Classical grounded theory, then, is committed to the notion of "theory as process" as opposed to a 'fixed truth' (Glaser and Strauss, 1967, p.32). In relation to a notion of 'social reality', in doing grounded theory one is attempting to theoretically interpret 'what is going on' within a particular substantive area. The notion of theory as process, Glaser and Strauss (1967) argue, respects the complex and ever-changing nature of social life.

Grounded theory is put forward as 'one of many' methodologies that can be used for social research. A given grounded theory is unique in that another researcher will likely produce a different analysis. Nevertheless, Glaser and Strauss (1967) argue that the constant comparative method ensures that whatever the analysis, the emergent concepts of a grounded theory study are systematically grounded in identifiable patterns in the data. Hence, the theory explains something that is actually 'going on' in the given empirical area. There is, then, an element of realism in grounded theory, albeit, this realism is located within a sphere of interpretive flexibility. Accordingly, the

procedures advocated for doing grounded theory are general enough so as not to be associated with a strict epistemological approach. Indeed, Glaser and Strauss (1967) argue that since grounded theory is a general method for generating theory, in the flexibility it affords to the researcher, it is compatible with diverse epistemological approaches.

Glaser and Strauss (1967) have articulated two forms of grounded theory: substantive theory and formal theory. Substantive theory is theory generated from the starting point of a particular problem area (which is the case in this study, with the problem area being loosely framed around matters of 'utility cycling and risk') within a specific context and is therefore only claimed to be applicable to such a context. Formal theory, on the other hand, is more abstract and applies to a variety of contexts; therefore, it can be said to have a far greater 'generality of scope' relative to substantive theory (Glaser, 1978). By the same token, due to its elevated level of abstraction, it is less 'grounded' in data than substantive theory and generally involves to a greater degree the use of substantive theory from various contexts in its development as opposed to solely the analysis of empirical data from a collection of substantive areas (Glaser, 1978). The theory posited in this thesis, then, is put forward as a substantive grounded theory.

4. Classical Underpinnings

i. Starting with a 'Problem Area'

In terms of initial data collection, every grounded theory study must start with a 'substantive area' or "general problem area" (Glaser, 1978, p.44). This 'problem area' usually involves some types of provisional concepts in order to provide a useful starting point for the study; these concepts do not provide, however, a "preconceived theoretical framework" (Glaser and Strauss, 1967, p.45), as, in grounded theory, one enters the problem area with a view to discover the problem that the people within it are dealing with. As explored extensively in the previous 'introduction' section, my general problem area for the beginning of this study was captured by the question "how do utility cyclists in Dublin deal with risk?" This problem area incorporates the provisional concept of 'risk' without a specific theory.

Glaser and Strauss (1967) place a huge emphasis on the importance of allowing for the 'emergence' of relevant concepts from data analysis rather than the application of existing theory towards this data. Nevertheless, Glaser (1978) claims that it is perfectly acceptable to begin the study with some sort of background perspective once this perspective is highly general and one adopts an attitude of discovery rather than preconception. Like many aspects of grounded theory, how much thought and detail one puts into the starting problem area is a matter of degree, with a more open starting point arguably more favourable than a more preconceived one. Irrespective of this, the grounded theory procedures of comparative analysis ensure that only concepts that 'pattern out' will earn their way into a grounded theory (Glaser, 1998). Thus, excessive preconception with the tailoring of a problem area will not – if grounded theory procedures are adhered to – stifle a grounded theory but will merely prove a waste of time and inconvenience to the researcher.

The notion of a problem area is difficult to describe, since – indeed – it is such a vague term. Nevertheless, it can be seen as a term that denotes, in one respect, a starting point for data collection. Since a grounded theory ought to be highly emergent, one should enter the problem area "without knowing the problem" (Glaser, 1998, p.122). Thus, one begins their grounded theory study with an openness to 'not knowing' and a motivation to 'discover' the problem that people in the problem area are dealing with through systematic data collection and analysis. This is what characterises the flexible use of data in grounded theory and the aforementioned process of open coding data derived from the problem area.

However, there are some necessary constraints regarding where the study ought to begin and ought to end. This can be described as an issue regarding the control of the 'generality of scope' of the study (Glaser and Strauss, 1967). Controlling the generality of scope of the study is an important aspect to keep in mind when doing grounded theory, as one may become overwhelmed with data in developing the theory if no limits are put in place (Glaser, 1978). Accordingly, the notion of a problem area proves useful; in particular, the aspect of the problem area that denotes a basic type of comparative group. This is how one controls the 'generality of scope' of the study from the beginning by limiting the study to a general comparative group that one will not sample beyond. Another way of phrasing 'scope' could be 'level'. That is, one could look to generate a grounded theory at the level of a community of interest, or, alternatively, the level of a nation (Glaser and Strauss, 1967). In this study, the basic type of group is that of utility cyclists in Dublin. Accordingly, during the process of my study, I limited recruitment of interviewees and other forms of data produced by individuals to those who cycled in Dublin for utility purposes. In this way, data were gathered from individuals in the problem area who fit a basic type of group, thereby limiting the scope of the study.

It is important to keep in mind as a grounded theorist that the problem area is not necessarily what is most important, what is important is the 'discovered' problem and collecting and analysing data to conceptualise this problem and the process by which it is dealt with by people in the problem area. The problem area, then, provides a fruitful starting point for data collection, an area that seems like something interesting may be 'going on', within which a problem/main concern can be discovered, and, at the same time, controls for the generality of scope of the study by delineating a basic type of group. Once this problem is discovered, the grounded theorist will look to collect and analyse data to develop and refine a theoretical interpretation of this problem and the social/psychological process by which participants deal with it (Glaser, 1998). I will discuss this aspect of grounded theory more in the proceeding 'theoretical sampling' section.

ii. Comparative Analysis

a) Coding

Comparative analysis is one of the foundational techniques of the grounded theory method and is employed in order to assist the aforementioned aim of emergence. One aspect of comparative analysis is coding. "The essential relationship between data and theory is a conceptual code" (Glaser, 1978, p.55); these conceptual codes act as the "building block of theory" and "transcend the empirical nature of the data" (Glaser, 1978, p.55); coding, then, is described as "the generating of categories and properties by constant comparison of incidents and categories" (Glaser, 1998, p.137).

Coding involves, first, the comparison and conceptualisation of data incidents. Data incidents are, thus, the initial units of comparative analysis. What an 'incident' is and how one goes about comparing them is difficult to describe beyond the actual practice of doing comparative analysis; what has been made clear, however, is that coding is not the same as conceptualising a collective body of data with a single interpretation. In this sense, the term 'incident' is used to highlight that one ought to break a body of data into separate 'incidents' for separate analysis. In this way, through an emphasis on analysing 'incidents' versus bodies of data, one's conceptualisations better 'fit' the data and thus are more 'grounded'.

To provide an example, in coding the concept of 'accentuating presence'—a code conceptualising how cyclists make an effort to make their presence in a given space

more conspicuous and noticeable to other roads users—various patterns of data incidents were analysed. These included incidents in which a cyclist looked to shout at pedestrians or other road users about to disregard their approach on a cycle lane ahead, by walking out in front of the cyclist. The shout was coded as an incident of accentuating one's presence to the pedestrians ahead so that the pedestrians will refrain from disregarding consciously or unconsciously the spatial entitlement of the cyclist - that is, their right of way (and potentially safety) in this scenario. Other incidents coded as accentuating presence included the use of an electronic horn by a cyclist to alert a driver overtaking them very closely to acknowledge their presence on the road and, through doing so, provide more space. Incidents of a cyclist about to move forward at a junction with a red light positioning themselves in a conspicuous manner were coded as accentuating presence. Instead of positioning themselves to the side of a motorist alongside them at the lights at a junction, the cyclists would position themselves slightly out into the traffic lane and ahead of the nearby motorist, thereby accentuating presence so that the motorist will regard the cyclists when a green light appears, thus permitting them both to cross the given junction.

In comparing incidents, then, one identifies a pattern of similarities across incidents. The grounded theorist conceptualises this pattern of similarities as a category – thus, 'accentuating presence' can be seen as an example of such a conceptualisation based on an identification of a pattern of similarities across data incidents.

In addition to this form of coding, the grounded theorist can compare incidences subsumed by a particular category so that more specific properties of that category can be developed. Indeed, accentuating presence can be seen as not only a concept but, also, as a concept related to another, more abstract or transcending, concept: 'provoking responsibility'. There can be, then, a hierarchy of concepts established through coding which are related in some way; in other words, one can code not only a pattern of data incidents, but also a subtler pattern of data incidents that still fit into a code for a larger pattern of data incidents. In the case of 'provoking responsibility' and 'accentuating presence', the former can be seen as a *category* (a code for a larger pattern) and the latter as a *property* or *variation* (a code for a subtler pattern that still fits the conceptualisation of the larger pattern) of this particular category.

Accordingly, accentuating presence can be seen as a *mode* of provoking responsibility. That is, one makes their presence in a given space more conspicuous to others so that such others will be provoked into a sense of responsibility to respect one's entitlement to a given space. Embedded within a category such as provoking responsibility, then,

there can also be a number of other *properties* or *variations*, such as accentuating presence. For example, another mode of provoking responsibility is 'asserting entitlement' – the action of asserting one's particular perceived entitlement (in this case, spatial entitlement) in order to provoke responsibility in others to respect or recognise it. An illustration of this mode could be a cyclist insisting on their right of way on a given street despite a road user ahead appearing to be intent on disregarding it by pulling out in front. Through continuing to cycle straight ahead without hesitation, in this case a cyclist can be seen to provoke responsibility in a potentially disregarding road user to respect the spatial entitlement of the cyclist – in this scenario, their right of way – due to the likelihood of collision with the cyclist in the decision (or lack of decision) to disregard.

Accordingly, coding is based upon an analysis of empirical indicators - namely, patterns of data incidents - from which concepts 'emerge'. Thus, patterns of incidents are seen as indicators of concepts. From my experience, the comparison of incidences leads naturally to emergent conceptualisations; in other words, the coming up with or generation of codes during comparative analysis experientially feels like a sense of emergence. In this way, the terminology of emergence is useful in capturing the experience of doing coding just as the dictum to 'trust in emergence' is useful in committing to the practice of coding. In the conduct of coding, I recorded my codes in the margins of physical interview transcripts which would be revisited and recoded as the concepts and analysis of data progressed in order to constantly revise, refine and ensure the 'fit' of the concepts produced in relation to the data incident patterns they were generated to conceptualise. Additionally, then, coding involves a comparison of concepts. As I have shown, these concepts can be hierarchically organised into general category-property relationships to various degrees. There is, thus, a coding of incidents and a coding of codes. In terms of the effectiveness of coding - that is, one's ability to produce useful concepts that fit the data - memoing is an absolutely crucial grounded theory procedure that must occur along with coding (Glaser and Strauss, 1967).

b) Memoing

In the practice of comparative analysis, then, along with coding comes memoing. Throughout coding the grounded theorist is frequently 'memoing'; that is, they are writing up free, exploratory, unconstrained reflective conceptual notes to keep track of,

develop and compare emergent conceptual ideas (Glaser and Strauss, 1967). Memoing constitutes exploratory, speculative and comparative thinking about concepts. Such thinking enables abstract concepts that subsequently 'fit' the data yet transcend it, which is the hallmark of generating a high quality grounded theory (Glaser, 1978). Thus, concepts are elaborated, played out, reflected upon, modified, combined, compared and sorted through memoing (Glaser and Strauss 1967; Glaser, 1998). The practice of memoing, therefore, is critical to developing one's concepts in grounded theory and is consequently inseparable from the coding process; in classical grounded theory, one ought to 'always stop and memo' during coding when a conceptual idea arises (Glaser and Strauss, 1967; Glaser, 1978).

During the conduct of this grounded theory study, I memoed frequently both in the office and outside of the office either on the go or sedentary. Consequently, I would memo whenever a conceptual possibility or possible development for existing concepts occurred to me. This 'occurrence' regarding concepts, or, what could also be called 'emergence', could happen under various circumstances. First, a conceptual idea could emerge during or following the listening to, reading of, or coding of data — namely, during or following some sort of immersion in the data, which would facilitate a potential conceptual development which I would freely memo. In this way I took the classical grounded theory advice to 'always stop and memo' very seriously (Glaser and Strauss, 1967; Glaser, 1978).

Second, I would memo following conceptual developments emerging from personal reflection or experience. This could involve me walking home from the office or at home whilst reflectively comparing data incidences in my head only to discover a new conceptual possibility which I would memo on my phone or in a notebook. I would often keep a list of concepts organised hierarchically if necessary on a 'notes' application of my phone in the case that an idea would emerge. Furthermore, I could also imaginatively compare *possible* data incidences rather than exclusively reflectively comparing *recorded* data incidences in relation to particular concepts. This, in a way, could be seen as a type of informal and preliminary theoretical sampling. Alternative to active reflection, I could be cycling to a social event and observe or experience an incident in which I could meaningfully compare with an incident from the interview accounts of participants. This would prompt me to think conceptually and could lead to a new conceptual possibility which I would memo for later comparison with the data.

For example, having been overtaken dangerously closely by a driver whilst cycling to a meeting in the city centre, I raised my hands in the air in indignation at being carelessly

disregarded as a road user and was intent on following up to confront this driver but to no avail. In this particular incident, which was nearly identical to incidents described by a variety of interviewees, one could conceptualise the problem as 'spatial disregard' – an act of disregard by another road user of my equal entitlement to public space as a cyclist – in which I responded by attempting to 'provoke responsibility' by 'indicating transgression' – pointing out to the transgressor of my space that they failed to regard my entitlement to space as a road user, as a means of provoking a sense of responsibility in them to respect a cyclist's entitlement to safe provision of space in the future.

In this way, I allowed my own experience and imaginative reflections to feed into the development of my concepts *although* these experiences and reflections were never used to 'ground' such concepts but, rather, acted as peripheral inspiration for conceptualisation beyond the formal coding of the available data gathered.

Third, conceptual ideas could emerge without any point of reference, out of the blue. This could range from the moment just before going to sleep or having woken up in the middle of the night to watching a film in the cinema. Essentially, ideas could emerge far from any sort of immediate analysis which I would subsequently record using whatever means I had available at the time.

Fourth and last, the very act of writing memos – since it involved exploratory and critical reflection about concepts – could lead to new or refined conceptual ideas and, consequently, lead to subsequent memos regarding these ideas. Indeed, one can observe in my memo on the possible concept of 'obliging regard' (Appendix B) an attempt to define the concept and an exploration of its potential in light of and in relation to other concepts (i.e. provoking responsibility and garnering favour). By the end of this memo, one can see that a new concept that is considered more useful and fitting is proposed instead of 'obliging regard', namely, 'compelling regard', thought of as a variation of 'provoking responsibility'. 'Compelling regard', then, in fact, acted as a mediating concept for the concept of 'accentuating presence' referred to in the preceding section of this chapter.

At times, I found myself becoming lost in memoing and reflecting about concepts whilst imaginatively comparing incidences. This could be useful in the task of abstracting from the data, however, it could also be derailing from systematic conceptualisation; thus, it was routinely crucial for me to return to the data so as not to become lost in this highly imaginative, as opposed to 'grounded', form of conceptualisation. This practice, I believe, is captured by what Glaser (1998) talks about as 'incident tripping' in which one

imaginatively surveys incidences that fit a particular key concept without engaging in systematic coding, and 'logical drift', when one theorises concepts without adequate data gathered through theoretical sampling. Whilst I frequently engaged in what could be called temporary 'incident tripping' and 'logical drift', I did not find that either of these were necessarily harmful in the creative process of conceptualising data provided that I *always* returned to comparing the concepts and hypotheses with the existing or theoretically sampled data to ensure 'fit'. That is to say, I found it acceptable to temporarily engage in such unsystematic conceptual practices if and only if I returned to the systematic conceptual procedures of grounded theory.

Indeed, it was important for me to imaginatively abstract from the data at many stages as a means to develop concepts that were highly transcendent as opposed to superficially descriptive. In going back to the data for comparison, then, many of these concepts served as intermediate bridges toward more fitting concepts. In this way, memoing, for me, was caught up with comparative analysis in general done both in a systematic sense during coding and in a more impressionistic sense outside of formal data analysis where I may be deliberately or undeliberately reflecting on my concepts from analysis and possibilities for new or better concepts. The important aspect, then, was to memo frequently and unreservedly whilst always referring back to the data to ensure 'fit'. Therefore, memoing was used as a means to explore and develop rich concepts and theory all the way from their basic 'emergence' from my analysis of data up to a far more abstracted reflection about concepts and the relations between them whilst routinely returning to the data for comparison to ensure conceptual 'fit'. Memoing, in this way, was intimately tied with coding and both make up comparative analysis.

iii. Discovery & Open Coding Phase

a) Overview

The first phase of a grounded theory study, when one has gathered initial data from the problem area of study, involves open coding. The grounded theorist codes the data incident by incident asking key questions such as "what category does this incident indicate?", "what property of a category does this incident indicate?", "what is the participant's main concern?" (Glaser, 1998, p.140). At this stage of the study, the researcher assumes to not know the problem/main concern that participants are dealing

with within the problem area. The goal of open coding, then, is the discovery of a main concern for participants in the problem area and the process of how they deal with this main concern (i.e. the 'core category').

Accordingly, the 'main concern' and 'core category' respectively act as the first and second organising features of a grounded theory (Glaser, 1995; Glaser, 1998). The discovery of these two organising features is achieved through the generation of maximum categories for identified data patterns through the comparison of data incidents and categories conceptualising these incidents (Glaser, 1978; Glaser, 1995; Glaser, 1998). For open coding, then, one will likely have multiple categories for different patterns of incidents (Glaser, 1978). However, open coding and comparative analysis in general operates on the logic that, through continued comparative analysis, categories with the best 'fit' with the data will remain or be fused with others, whilst the less fitting categories will cease to 'pattern out' with the data and will therefore be disposed of (Glaser, 1995; Glaser, 1998).

Categories that emerge from coding are, consequently, not a means of describing individual data incidents but rather a means of conceptualising patterns of data incidents. In this way, a category conceptualises a pattern that must be identified through the comparison of incidents (Glaser, 1998). Through the generation of maximum categories one is opening oneself up to highly divergent theoretical possibilities and, in doing so, is exercising the starting point of 'openness' that characterises a grounded theory study and thus enables the discovery of conceptual patterns in the data (Glaser and Strauss, 1967; Glaser, 1995).

In practising open coding, Glaser (1978, p.57) emphasises to code the data "line by line". He posits this method of coding in order to enable discovery which is hindered by unsystematic, impressionistic analysis, which, as discussed before, can lead to the forcing of concepts that do not fit the data. It is important to stress, however, that the direction of coding 'line by line' needs to be considered in light of one's type of data. Glaser (1998) generally relied on field notes as a source of data and strongly advocated against the recording and transcription of interviews, arguing for field notes instead. He made this assertion on the grounds that transcribing led to excessive data which was not necessary for the purposes of generating theory. This was based on his belief that field note data was adequate for discovering emergent conceptual patterns in the data (e.g. the main concern and process of resolving it).

In this way, the abundance of data that comes with transcribing an entire in-depth interview is very different from a set of field notes either recorded during or after such

an interview. With this in mind, 'line by line' was not intended to mean coding every single line of a transcript; instead, this guiding principle was intended for application on field notes or other forms of document. This assumption of field note data, then, changes the way one must consider the 'data incident'— indeed, one must generally consider such incidents in a more flexible way than individual sentences in an interview. The specifics regarding what constitutes an 'incident', then, are open to the analyst but could be seen, as mentioned before, as a term that denotes an approach to data analysis that breaks down a body of data into separate data 'incidents'. Open coding, then, ought to be done 'incident by incident' (Glaser, 1998) as opposed to 'line by line' when it comes to transcribed interviews, as this approach orientates one better towards discovering conceptual patterns in the data that may lead to the transcendent abstraction of grounded theory operationalised through coding.

Having tentatively discovered a 'main concern' and 'core category' following open coding procedures, the grounded theorist initiates the selective coding phase of their study and begins to employ 'theoretical sampling'. Importantly, if the tentative categories conceptualised during the open coding phase do not 'pattern out', this will quickly become clear due to the lack of relevance to participants and the lack of fit of the concepts with the data. If this occurs, then, one can always return to the open coding phase (Glaser, 1998). In this way, the shift from the open coding phase of a grounded theory study to the selective coding phase does not have to be final.

b) Application

In my application of open coding, I compared data incident with other incidents and identified patterns of similarities and differences between these incidences which I conceptualised as categories or properties of a category. In this way, I conducted my coding in accordance with the guidelines of Glaser (1998). Through constant, back-and-forth comparative analysis of transcribed data from a small initial number of interviews, I successfully conceptualised a 'main concern' that participants were dealing with and a number of essential ways of how they dealt with it: namely, the problem that participants were dealing with was identified as 'precarious entitlement' and the primary two modes by which they dealt with/resolved this problem was that of 'internalising responsibility' and 'provoking responsibility'. Building up to these provisionally major categories involved accumulating, disposing of, and refining a large

number of codes through memos in which I explored codes for 'fit' and compared them with other similar or related codes, as well as repeatedly returning to the data to try new or altered codes out in terms of their 'fit' with particular data.

The open coding phase proved very confusing due to a huge number of things 'going on' in the data that were not necessarily conceptually relatable. For example, I conceptualised an early concern across data from a number of interviews with 'economising effort'. Cyclist interviewees described the various steps they took to render their cycling journey 'handier' or 'easier' and, in some instances, described certain things they would do to 'economise effort' when they were feeling tired or lazy (e.g. incidents of breaking red lights in order to avoid losing one's peddling momentum). In this way, there was a clear concern across interviewee accounts with 'economising effort', which I conceptualised to be a concern with making the task of transit from one location to another as economical as possible in terms of expending physical energy. This category, then, could plausibly be conceptualised as a 'main concern' for the individuals in the problem area.

Nevertheless, dealing with matters of problematic entitlement to space also seemed to be a crucial concern across the accounts which I identified during open coding. Participants described how space they felt entitled to was frequently disregarded by other road users and, in general, they felt that the space that they inhabited was frequently under threat. I attempted to integrate this concern with that of 'economising effort' into some overarching 'main concern', however, these concerns proved to be quite distinct and did not seem to integrate. Furthermore, the way I conceptualised people dealing with a concern to economise effort was very different to my conceptualisation of their response to issues of spatial entitlement, further adding evidence to my intuitions that these concerns were disparate. What I decided to do, then, was to identify a 'main' concern that could account for most, but not all, of the action in the problem area (Glaser, 1998) as I realised that I was erroneously attempting to account for all of the action in the problem area. Accordingly, I judged the main concern of participants to be the problem of 'precarious entitlement' as opposed to the concern of 'economising effort'. Thus, I established the first organising feature of my grounded theory: the main concern (Glaser, 1998) which answered one of the central open coding questions "What is the main concern of participants?" (Glaser, 1998, p.140).

Having identified this main concern, the next step involved was conceptualising the process of resolving this main concern through identifying a 'core category': the second

organising feature of a grounded theory (Glaser, 1998). Although I had already tentatively conceptualised various ways of dealing with the main concern of precarious entitlement, many categories were not clearly related to resolving such a concern. Accordingly, I engaged in extensive comparative analysis to specifically identify incidences that indicated a response to/way of dealing with/resolving the main concern of precarious entitlement. Questions such as "Is this a way of dealing with precarious entitlement?" became essential, then, as a prerequisite to identifying and conceptually elaborating the primary modes of dealing with this main concern. For example, incidents of gesturing the middle finger to a driver that had illegally cut off the right of way of a cyclist could be interpreted as a response to an incident related to precarious entitlement (i.e. 'punishing transgression' in response to an incident of 'spatial disregard'). Incidences in the data that did not seem relevant to the resolution of the identified main concern, consequently, were ignored, such as descriptions of using the pavement in order to travel less distance to university and therefore arrive faster. This increasing selectivity marked the gradual transition from the open coding phase into the selective coding phase – namely, coding became increasingly selective.

Lastly, in terms of identifying a core category, I did not find it useful or entirely necessary to conceptualise an overarching concept that subsumed other conceptualised ways of dealing with the main concern of precarious entitlement. Accordingly, I left the potential task of conceptualising a core category for later in the project when already conceptualised ways of dealing with the main concern were more conceptually developed following theoretical sampling. In this way, my approach to transitioning from the open coding phase into the selective coding phase was not strictly in line with that of Glaser (1998), who recommended identifying a core category in advance of the theoretical sampling and selective coding phase so that one could have a clear concept with which to base theoretical sampling and selective coding around. At the same time, it could be said that, at this stage, I had conceptualised two central ways of dealing with the problem of precarious entitlement - namely, 'internalising responsibility' and 'provoking responsibility' - which provided a firm basis from which to fully transition into the theoretical sampling and selective coding phase. Nevertheless, as the study progressed, 'precarious entitlement' - the 'problem' of the study - was judged to be the core category, rather than an overarching conceptualisation of the ways in which conditions of precarious entitlement are negotiated by cyclists. This is consistent with the flexibility of grounded theory in which the core category does not have to be a social process (Glaser, 1978). Clear evidence of this is Glaser and Strauss's seminal study of 'Awareness', in which the core category was based around contexts of awareness – the main concern – rather than a process of resolving this concern (Glaser and Strauss, 1967). Accordingly, the 'core category' of the study is 'precarious entitlement' which is simultaneously the 'main concern' or 'problem' of participants. The theory, then, including the sub-core categories of 'privatising vulnerability' and 'provoking responsibility' – which are conceptualised as responses or ways of dealing with the problem of conditions of 'precarious entitlement' – is a theory of 'precarious entitlement', conceptually comprising of both a main concern of utility cyclists in Dublin and the ways in which utility cyclists deal with this concern.

iv. Theoretical Sampling & Selective Coding Phase

a) Overview

Unlike open coding, in which the grounded theorist codes all the data available, during selective coding, the researcher codes only data that contributes to the development of categories related to the core category. Therefore, data that seem irrelevant to the core and related categories (i.e. the sub-core categories) are ignored whereas data that are judged to be relevant to them are focused upon (Glaser and Strauss, 1967): the grounded theorist, then, is coding *for* data to develop these categories, which is hinged around a 'core category' (Glaser, 1978). During this period, it follows that the researcher will be more focused not only with their coding but also their memoing (Glaser, 1978).

Importantly, when the grounded theorist enters the selective coding phase, 'theoretical sampling' is employed; and, since a grounded theorist switches from open sampling in the problem area to theoretical sampling, the data collected becomes increasingly selective in step with the process of coding (Glaser and Strauss, 1967). Thus, selective coding along with theoretical sampling respectively delimit data collection and analysis, and, in this way, selective coding cannot be discussed in isolation from theoretical sampling.

'Theoretical sampling' is a hallmark component of the grounded theory approach and could be considered, in a sense, as a 'method' of data collection. As mentioned, when a core category has been provisionally conceptualised during the open coding phase, the aim of the study is no longer to code in a way that allows for emergence of new codes but rather, shifts toward data collection guided by a motivation to develop the emerging theory. This means that the researcher makes decisions regarding the next point of data

collection based on perceived "gaps in his emerging theory" (Glaser and Strauss, 1967, p.47): filling these gaps becomes the main concern of the grounded theorist.

The purpose of theoretical sampling, then, is to 'saturate' the core and related categories emerging from the open coding phase of the study through searching for and collecting data that are relevant to these categories. In this way, the data that one searches for is only that which is relevant to achieve the 'saturation' of the concepts being developed. This type of conceptual (and eventually theoretical) 'saturation' essentially means that the concept that one is theoretically sampling for has reached a 'saturation point'. That is, further data collection does not alter or develop the concept any further: the concept successfully and consistently 'patterns out' in the data (Glaser, 1998). The fact that this concept 'patterns out' means that saturation is achieved via its "interchangeability of indices" (Glaser, 1998, p.141) – namely, there are a wide variety of incidents that indicate that this concept 'fits' the data. Following this, the researcher moves on to another concept to saturate. Glaser and Strauss (1967) note that one ought to focus on saturating the main categories of one's theory as one will always have limited time and resources in which to complete their study. Accordingly, theoretical saturation is considered complete when data collection no longer reasonably contributes to the development of the core and sub-core categories of the theory. At this point, data collection stops: one's theory is considered adequately 'grounded'.

Theoretical sampling involves considerable decision-making on the part of the grounded theorist regarding where to collect data next for the development of particular concepts based on one's analysis of memos pertaining to these concepts (Glaser, 1998). Essentially, the researcher must select new points for data collection that are relevant to developing, refining and ultimately saturating the provisional concepts of the theory (Glaser, 1978; Glaser, 1998).

Thus, in conclusion, theoretical sampling along with selective coding are jointly employed in order to develop and refine key theoretical concepts emerging from the open coding phase of the study with a view to achieve 'theoretical saturation'. With both the open coding and selective coding phase clear in mind, one can clearly see that coding is a "meaning making activity" (Glaser, 1998, p.140). But where do these meaningful conceptualisations 'emerge' from, and what role can literature play in influencing such activity? This, I will discuss in the succeeding section but, first, I will delineate how I applied theoretical sampling and selective coding in the conduct of my study.

b) Application

In terms of my practice of selective coding in step with theoretical sampling, I, first, as mentioned, identified a provisional main concern (i.e. precarious entitlement) and two key modes of resolving this concern (i.e. internalising responsibility – which eventually became 'privatising vulnerability' – and provoking responsibility). Theoretical sampling was carried out in the early stages of the development of these concepts and involved many back and forth changes and reconfigurations (e.g. 'fragile' entitlement among other concepts was experimented with in the place of 'precarious' entitlement). Theoretical sampling involved asking increasingly more conceptually related questions with participants as a means to test their relevance and refine their fit. In this way, employing theoretical sampling and selective coding was a gradual, rather than clearly segregated, process with regard to the discovery and open coding phase. Nevertheless, having decisively coded my first 10 interviews using a particular aggregation of concepts, I was ensured of the relevance and fit of these concepts and could decisively and confidently make a full transition into the theoretical sampling and selective coding phase.

In applying theoretical sampling, my interview questions became more focused and were based around categories conceptualised during analysis of data from prior, more open-ended, interviews. Namely, instead of very general and exploratory questions around how participants experienced cycling in Dublin and dealt with matters of being 'at risk' and 'risk-taking', I increasingly asked questions regarding the major categories developed up to that point, centring around responses to or ways of negotiating condition of 'precarious entitlement'. For example, during the later stages of theoretical sampling, questions were asked regarding how participants try to make other road users respect them in public space (i.e. provoking responsibility) such as by using gestures, or eye contact, or assertive road positioning – data incidents that were conceptualised as variations of provoking responsibility to different degrees through final concepts such as 'indicating transgression', 'accentuating presence' and 'asserting entitlement'.

Steadily, then, I developed and refined concepts that fit with resolving the main concern of precarious entitlement with participants. In this way, I was increasingly identifying incidences that seemed relevant to the prior concepts I had generated from data analysis and inquired into these incidences with a view to develop, alter, dispose of or challenge these concepts. I would then analyse this new data and engage in constant

comparative analysis employing the existing concepts in order to investigate their fit. Accordingly, concepts accumulated and were refined and integrated through back-and-forth comparative analysis with the data; questions relating to incidences that could be relevant to these concepts were then increasingly introduced to interviews. Indeed, this process of gradual theoretical sampling can be most starkly seen in comparing one of my earlier interview guides (Appendix C) based on general exploratory questions pertaining to cycling experience and risk, to one of my final interview guides (Appendix D), in which all of the concepts up to that point were included along with common-sense phrases and pointers for action generally associated with these concepts to aid the collection of rich data and to stimulate the construction of in-depth narratives. This was done so the concepts could be developed to the greatest degree.

This incremental process, then, of selective coding and theoretical sampling enabled me to produce concepts that abstracted from yet fit the data gathered from utility cyclists in Dublin. Routinely, I would refer back to the transcripts of interviews that were previously coded and test out the fit of my increasingly developed concepts - that is, I would selectively code these earlier transcripts. Each phase of this recurrent coding aided the development of improvingly fitting concepts. This led, ultimately, to a plausible stage of 'theoretical saturation', thus signalling an appropriate stage to end the grounded theory study. Namely, data collection employing theoretical sampling no longer contributed in any significant way to developing the core and sub-core categories. Incidents emerging during the final interviews, such as, in one case, a participant glaring at a licence plate of a driver that had failed to respect her right of way, was already adequately conceptualised with the existing concept of 'punishing transgression'. In this late stage, then, new or similar incidents described by new participants failed to lead to new concepts relevant to the core and sub-core categories; that is, the concepts produced already effectively conceptualised the data. In this way, reaching a stage of 'theoretical saturation' is a matter requiring judgement and ought not be considered to be absolute point but, rather, an assessment on the part of the researcher of, as Low (2019, p.5) describes, the "conceptual rigor" of the theory. My judgement of theortical saturation, then, can be seen to conform with Low's (2019, p.6) "a pragmatic definition of saturation that lets go of the notion that there can ever be an absolute or complete end point to analysis and results in a robust and coherent theoretical construct."

Nevertheless, throughout this later phase of coding and data collection, I maintained an openness to diverging conceptual and theoretical possibilities. This engendered a

sense of provisionality and doubt with the concepts that I had thus far developed. At certain points of the study, my position of openness enabled new concepts to emerge and old concepts to be disposed of and, overall, encouraged a rigour in constantly comparing concepts with data to ensure 'fit'. Engaging in the theoretical sampling and selective coding phase, then, did not give me licence to completely abandon a position of openness despite data collection and analysis indeed being more selective. Accordingly, maintaining some degree of openness throughout the study proved useful in the conduct of generating this grounded theory. Indeed, this need for continuous openness is what Glaser and Strauss (1967) stress when they describe a grounded theory as a 'process' rather than a 'fixed truth' (p.32) and thus the importance for a grounded theory to be 'modifiable' in light of conflicting data (Glaser, 1978; Glaser, 1998). Rodner (2019, p.3) has commented on the inherent messiness producing a high quality grounded theory entails due to this ongoing openness to modification: "Theories are not neatly tested (or negated) in the field but rather unearthed with considerable amount of trial and error" – a claim that resonates with my experience of data collection and analysis from the beginning to the end.

v. Theoretical Sensitivity & The Role of Literature

Glaser and Strauss (1967) and Glaser (1978; 1998) proclaim that, when doing classical grounded theory research, one ought not to complete a literature review in the substantive area of study – that is, the empirical field from which data is being gathered – before the major concepts of the theory have 'emerged' from one's analysis of the data gathered from this area. Instead, one should only begin to review literature relevant to the substantive area when the theory is almost complete – that is, at the "sorting - writing stage" (p.79). There are primarily two reasons for this lack of engagement with literature in the substantive area of study prior to the process of generating grounded theory.

First, Glaser (1998) claims that, in suspending a review of literature in the substantive area, one enables oneself to enter the substantive area of study "without knowing the problem" (p.122); this enables the problem of participants in the area to 'emerge' from one's analysis of the data gathered from the area. In other words, the grounded theorist is enabled to collect and analyse data gathered from the substantive area with the minimum of preconceptions that reading theoretical literature from the substantive

area could encumber one with, thus potentially causing one to 'force' these concepts on the data (Glaser, 1978; Glaser, 1998). With this minimisation of preconception by avoiding a review of literature in the substantive area, one enables oneself, instead, to allow for the 'emergence' of "what is going on" (Glaser, 1998, p.131) through their analysis of data from the problem area. This can help facilitate the generation of new theoretical concepts in the substantive area of study rather than the regurgitation of already existing concepts in the given field; it empowers the researcher to think about and follow-up on diverging theoretical possibilities (Glaser and Strauss, 1967).

Second, in doing a review of literature in the substantive area of study before the generation of a grounded theory, one's theoretical concepts may not match those from the substantive area of study. For example, the substantive area for my study is loosely defined around utility cycling and risk. Thus, I have reviewed literature relating to utility cycling and risk. Nevertheless, the main concern of my participants (i.e. utility cyclists in Dublin) of 'precarious entitlement' does not directly relate to how cyclists in Dublin deal with matters of risk but does provide insight and a transcending perspective on such matters. In this sense, Glaser (1998) may be judged correct in claiming that doing a literature review prior to developing one's grounded theory may be a poor use of time when one cannot know "what is going on" (Glaser, 1998, p.131) before collecting and analysing data from the problem area. In this sense, his argument is mainly one regarding the efficient use of time - if one wants 'what is going on' with people in the problem area to 'emerge' from one's analysis of data as quickly as possible, one should not waste their time dealing with literature in the substantive area that may or may not be applicable to the participants' main concern and their varied ways of dealing with this main concern. Thus, in postponing a review of the literature in the substantive area to a stage when one's grounded theory is adequately developed, one is able to review the substantive literature in an efficient way by selecting aspects of it that are relevant to the grounded theory (Glaser, 1978). Furthermore, engaging with substantive literature prior to 'discovery' may waste more time during the analysis phase by loading one with preconceptions for data analysis which can lead to the 'forcing' of concepts on the data from participants in the problem area that will ultimately not fit the data (Glaser, 1978; Glaser, 1998).

Theory building is led, then, by attentively conceptualising the main concern of participants, not by forcing the researcher's preconceived concerns upon the participants. In advance of data collection and analysis, I engaged with literature from the substantive area, but, over the course of the study, generated a theory of

'precarious entitlement' that did not apply concepts from this body of literature. In this sense, rather than being 'relevant' to the interests of researchers or academics within the substantive field of study, a grounded theory must be 'relevant' to participants through the grounded theorist adequately conceptualising their main concern. Hence, prior to 'discovery', one ought to cultivate an attitude of openness to diverging theoretical possibilities, as Glaser (1998, p.92) states: "The researcher should realize how little one can know in advance of discovery". Accordingly, I conducted a literature review regarding utility cycling and risk as a means to develop knowledge of the problem area that was, for the most part, non-theoretical: this literature review consisted of a compilation of largely quantitative research in relation to utility cycling and risk as a means to develop expertise and background knowledge of the research area without, however, heavily examining or adopting theories relating to how utility cyclists deal with risk. In this way, I was able to develop some level of expertise in and useful contextual knowledge of the preconceived problem area without adopting a particular theoretical lens to approach the study with. From my experience, then, one can review literature from one's substantive area in advance provided one explicitly enters the problem area with a view to 'discover' the problem/main concern of participants.

Despite a strong recommendation that one should deliberately avoid engaging with existing theory in the substantive area of study due to the risk of 'forcing' extant theory on data, Glaser (1978, p.31) proclaims that it is "vital to read, but in a substantive field different from the research". In this way, reading is still an important part of doing grounded theory provided that it is not reading in the substantive area of study prior to the work of theorising. Such reading can be used as a means to develop 'theoretical sensitivity': namely, the ability of the grounded theorist to "render theoretically their discovered substantive, grounded categories" (Glaser, 1978, p.1). Theoretical sensitivity, then, can be viewed as the capacity of a grounded theorist to effectively conceptualise their data and integrate isolated concepts generated during the coding process into consolidated components of a theory (Glaser, 1978). It can be viewed as an important capacity for a grounded theorist in particular in light of the classical grounded theory goal of producing a transcendent abstraction (Glaser and Strauss, 1967). Thus, being able to effectively conceptualise one's data and theoretically integrate distinct concepts requires the grounded theorist to be able to think in an abstracted, theoretical way that goes beyond a more descriptive level analysis of the data. Theoretical sensitivity facilitates this way of thinking. A prior and developing stock of theoretical ideas facilitates theoretical sensitivity. Indeed, Glaser (1978, p.3) details how the grounded theorist's sensitivity is heavily influenced by their disciplinary background, and, through reading and familiarising oneself with the concepts and theory from other disciplines, the theoretical sensitivity of the grounded theorist may be expanded.

Accordingly, over the course of this grounded theory study, I frequently read various works from different fields to the substantive area. The 'Contribution of the Theory' chapter in this thesis includes various social and philosophical theories that were read during the course of generating the grounded theory of precarious entitlement. None of these theories were directly applied to the data, however, aspects of them enabled an abstract way of thinking conducive to the effective conceptualisation of data. Namely, an understanding of a number of theories from different fields cultivated a theoretical sensitivity that I brought into my coding and memoing. One particularly conspicuous example is the work of Zygmunt Bauman (2000) on 'Liquid Modernity' and the concept/social process of 'Individualisation'. This idea conceptualises a process of individuals in society approaching various problems, life tasks and responsibilities in an individualistic and relatively private, rather than collective and relatively public, way. It is used as a concept in juxtaposition to negotiation with other people and political, collective action in relation to particular problems, life tasks and responsibilities. This concept helped mediate the pattern of action I conceptualised as 'privatising vulnerability' - a mode of negotiating conditions of precarious entitlement in which cyclists in Dublin assume their vulnerability emerging from conditions of precarious entitlement as solely their own responsibility, in contrast to 'provoking responsibility', in which cyclists provoke other road users to take some degree of responsibility toward cyclists in light of their conditions of precarious entitlement. In this way, with 'provoking responsibility', a structural problem - precarious entitlement - is dealt with in an intersubjective or interactive, rather than individual and privatised, way. It is clear from this example how the concept of 'individualisation' fostered theoretical sensitivity in generated the sub-core categories of both 'privatising vulnerability' and 'provoking responsibility'.

Thus, Glaser (1978) highlights the critical importance of theoretical sensitivity and, for that matter, the grounded theorist, in generating theory: "Generating theory is done by human being who is at times intimately involved with and at other times quite distant from the data" (p.2). This statement epitomises the way in which the grounded theorist must immerse themselves in the data and abstract from it. Through immersion the grounded theorist gets to know their data; through abstraction, the grounded theorist

observes the data on a broader level, enabling the conceptualisation of patterns, which is influenced by their theoretical sensitivity. Albrecht (2019) has commented on this quality of 'contemporaneity' in practicing grounded theory. Namely, Albrecht (2019, p.9) claims that the "strength of GT lies primarily in its flexibility and in the possibility of the contemporaneity of emerging and conceptualizing." In other words, grounded theory is a high impact method of generating theory due to the potential for the grounded theorist to identify 'emergent' patterns of data incidents and subsequently 'conceptualise' these patterns drawing from their theoretical sensitivity.

Indeed, over the course of my study, the process of transcribing interview data helped me to familiarise myself with the data which, in turn, allowed for conceptual ideas, at times, to spontaneously emerge through implicit identification of patterns across the data. These emergent concepts were influenced, inspired and facilitated by my own prior theoretical knowledge. Following the emergence of such concepts, with abstracted conceptual thinking and explicit comparisons between data incidences and patterns, I generated concepts with a higher level of abstraction and improved 'fit'. This was the more conscious and reflective aspect of coding and memoing and was, likewise, aided by my theoretical sensitivity. This theoretical sensitivity was developed over the course of my grounded theory study through the reading of various theories and concepts outside of the substantive area (e.g. political philosophy, sociology, anthropology) that had some degree of relevance to the study and the early concepts emerging from it. In this way, my experience reflected the claim of Glaser (1978) highlighting the irreducible role of abstract thought in producing concepts: "The best way to produce is to think about one's data to generate ideas" (p.7) and such thinking requires some level of theoretical sensitivity.

Furthermore, as my analysis progressed, I found that I became increasingly 'wise' (Glaser, 1978, p.2) regarding the data in the sense that I had a developing conceptual rendering of it that enabled insightful interpretation and guided future conceptualisation. This could be seen as a sort of 'theoretical sensitivity from within' – from one's own familiarity with the data and personally generated concepts from these data – as opposed to 'theoretical sensitivity from without – from one's engagement with and knowledge of existing concepts and theory. 'Theoretical sensitivity', then, as an important component of doing grounded theory, moves away from the idea of a naive researcher who produces theory via careful adherence with methodological procedures by clearly implicating the researcher into the process of generating theory.

Lastly, separate from the pure generation of concepts by the grounded theorist, Glaser (1978) posits that it is perfectly acceptable to employ concepts that have demonstrated an 'emergent fit' with the data being analysed. One may have come across these concepts in the reading of theoretical literature. In this way, Glaser (1978), in recommending against a literature review does not, at the same time, recommend the avoidance of theoretical literature prior to or during the development of one's grounded theory. Indeed, he argues that "If there is a particularly good theory in the field, one may cover this earlier and look for emergent fits" (Glaser, 1978, p.31). Accordingly, although the emphasis is on the grounded theorist generating their own concepts via 'emergence', one can also borrow concepts from other theories provided these concepts "earn their way into the theory" (Glaser, 1978, p.8) and demonstrate an 'emergent fit'. Importantly, Glaser (1978) notes that when one brings an already existing concept into their theory, they are not directly applying the concept or a theory of another theorist but rather they are integrating a certain idea into their own grounded theory and employing it in a unique way. Ideas, then, are not forced or stolen but flexibly incorporated.

5. Departures from the Original Statement

In discussing what grounded theory is — that is, what underpins it — it is crucial to elucidate at the same time the debates that shape what 'grounded theory' currently means. In the wake of significant confusion and debate amongst 'variations' of grounded theory (e.g. Strauss and Corbin, 1990; Charmaz, 2006), the original statement can easily become lost in translation and 'grounded theory' can be presented in a way that is arguably not faithful to its origins. Following the original statement of grounded theory posited by Glaser and Strauss (1967), there have been proliferations of approaches that identify with grounded theory (Strauss, 1987; Strauss and Corbin, 1990; Charmaz, 2006; Bowers and Schatzman, 2008; Clarke, 2008; Charmaz, 2014). Morse (2008) identifies various approaches that depart from the original statement: Straussian grounded theory (Strauss, 1987; Strauss and Corbin, 1990), constructivist grounded theory (Charmaz, 2000; Charmaz, 2006; Charmaz, 2008a; Charmaz, 2008b; Charmaz, 2014), situational analysis (Clarke, 2008) and dimensional analysis (Bowers and Schatzman, 2008). However, only the formulations of Strauss and Corbin (1990) and Charmaz (2006) self-identify as versions of grounded theory as opposed to the analytic

approaches of Clarke (2008) and Bowers and Schatzman (2008) which have emerged from, but do not identify as grounded theory but are rather presented as general approaches to analysis. Accordingly, in this section, I will give explicit attention to 'Straussian' grounded theory (Strauss and Corbin, 1990) and constructivist grounded theory (Charmaz, 2006) in relation to classical grounded theory (Glaser and Strauss, 1967).

'Straussian' grounded theory was initially articulated by Strauss (1987) but was primarily popularised through the publication of Basics of Qualitative Research by Strauss and Corbin (1990). Following on from Theoretical Sensitivity (Glaser, 1978), Basics introduced a number of varied techniques and perspectives that differentiated this style of grounded theory from the original classical - or 'Glaserian' - form. First, as opposed to classical grounded theory, in which 'theory' is posited as a transcending abstraction (Glaser and Strauss, 1967), Strauss and Corbin (1990) describe that a good grounded theory "closely approximates the reality it represents" (p.57). In this way, a Straussian grounded theory is depicted as an approximation of a reality and not necessarily an abstraction, like classical grounded theory. At the same time, Strauss and Corbin (1990) contend that grounded theories are constructed based on the interpretations of the grounded theorist rather than discovered by the grounded theorist in reality. Hence, Straussian grounded theory is put forward as a theoretical interpretation of something 'real' and Strauss and Corbin (1990) highlight the role of the researcher in constructing such a theoretical interpretation - something which was implied but not accentuated in the preceding classical grounded theory texts (Glaser and Strauss, 1967; Glaser, 1978).

For example, Glaser and Strauss (1967) recommend that conceptual codes ought to be analytic yet sensitising – this necessarily implies that each grounded theorist actively constructs codes and has a choice in how a code is constructed; however, according to classical grounded theory, conceptual codes are not interpretations of data but rather abstractions from them. One does not 'interpret' data in classical grounded theory but rather 'conceptualises' them. Consequently, the interpretive stance of Strauss and Corbin (1990) regarding coding seems to correspond more with 'description' via interpretation as opposed to 'abstraction' via conceptualisation. Such a view is consistent with Strauss and Corbin's (1990) open coding approach as "Labelling Phenomena" (p.63). This is, though, of course, a matter of extent rather than strict differentiation. Nevertheless, alike to classical grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Glaser, 1998), Strauss and Corbin (1990) still place importance on

the aim of theory for "useful application" (p.24), although, simultaneously, they signal that such usefulness could be useful for the discipline of study as opposed to the participants of the study (Glaser, 1978).

Second, Strauss and Corbin (1990) advocate the incorporation of preconceived theoretical frameworks into their process of coding. This is reflected in an additional, intermediate stage of coding entitled 'axial coding' that lies between the 'open' and 'selective' coding stages deriving from classical grounded theory (Glaser and Strauss, 1967). This stage involves integrating open codes into a 'coding paradigm'. The paradigm is directly applied to the codes as a means to conceptually relate them to one another, thereby improving integration of the theory – such integration between concepts, Strauss and Corbin argue (1990), is what differentiates 'theory' from 'description'. It relates segregated categories into interrelated theory, thus reaching a higher level of abstraction. The coding paradigm, then, acts as a theoretical framework revolving around the "phenomenon" of study which is the "central idea, event, happening, about which a set of actions/interactions is directed at managing or handling, or to which the set is related" (p.100) which prescribes the analyst to interpret the phenomenon's causal conditions, context, action/interactional strategies in response to the phenomenon, and the consequences of these strategies.

In addition to this 'coding paradigms' one introduces a 'conditional matrix' into data analysis and sampling. The action/interactional strategies of individuals toward or in response to the phenomenon of study take place within certain conditions. The 'conditional matrix' is a framework for mapping out these conditions in order to situate the action/interactional strategies of the study, which are the main focus for any 'Straussian' grounded theory study. Using the 'conditional matrix' involves delineating the 'levels' of conditions that are relevant to the action/interactional strategies; these levels range from the individual conditions to global conditions (Strauss and Corbin, 1990). Along with the other aspects of the coding paradigm, for a 'Straussian' grounded theory study one samples for data relevant to the concepts deriving from the open coding phase along with the preconceived frameworks as a means to relate these concepts. It is clear, then, with the introduction of a theoretical framework along with the sampling for such a framework would constitute 'forcing' in the classical grounded theory sense (Glaser and Strauss, 1967).

This 'axial coding' stage, consequently, is an outstanding feature that differentiates 'Straussian' grounded theory from classical grounded theory. As opposed to Glaser (1978), who offers suggestions for various ways of theoretically coding the data

provided that these codes 'pattern out' with the data, Strauss and Corbin (1990) posits that the 'coding paradigm' and 'conditional matrix' are crucial aspects of a good quality grounded theory. They are, then, seen as important components, not tentative suggestions. Accordingly, 'Straussian' grounded theory (Strauss and Corbin, 1990) does not place the same emphasis on the importance of 'emergence' as is placed in classical grounded theory (Glaser and Strauss, 1967; Glaser, 1978). This is manifested by Strauss and Corbin's (1990) accentuation of the interpretive role of the grounded theorist in producing a grounded theory and the introduction of explicit theoretical frameworks to be brought into data analysis and sampling.

Aside from 'Straussian' grounded theory, an equally conspicuous and highly popular variation was formulated by a former student of Glaser, Kathy Charmaz (2000; 2006; 2008a; 2008b; 2014). This unique statement is posited as a new, updated form of grounded theory; one in which the role of the grounded theorist and participants in 'constructing' the data and emergent grounded theory is emphasised, allegedly in opposition to the view that the emerging grounded theory is 'discovered' through the analysis of data. This was entitled 'constructivist' grounded theory. The departure from the original statement can be described as the 'constructivist turn' (Bryant and Charmaz, 2007). Arguably the central claim regarding this 'turn' revolves around the view that:

diverse researchers can use basic grounded theory strategies such as coding, memowriting, and sampling for theory development with comparative methods because these strategies are, in many ways, transportable across epistemological and ontological gulfs, although *which* assumptions researchers bring to these strategies and *how* they use them presuppose epistemological and ontological stances (Charmaz, 2014, p.12).

As a means to elucidate her specific style of grounded theory, then, Charmaz (2000; 2006; 2008a; 2008b; 2014) draws contrast between 'objectivist' and 'constructivist' forms of grounded theory. She argues that objectivist style grounded theory treats data as unproblematic by ignoring the context from which they are collected, or rather, 'constructed', and the impact of the grounded theorist and participants on the 'construction' of data. According to Charmaz (2006), then, objectivist style grounded theory is implemented with the assumption that the "data already exist in the world; the researcher finds them and 'discovers' theory from them" (Charmaz, 2006, p.131) – data are found, not made. Charmaz (2006, p.131) argues that such an assumption

"assumes an external reality awaiting discovery and an unbiased observer who records facts about it."

Charmaz (2000; 2006; 2008a; 2008b; 2014) locates objectivist style grounded theory in relation to a positivist tradition of 'theory'. In operating out of this theoretical tradition, she argues, one produces theories that are highly parsimonious and abstracted from the phenomena to which they refer. These 'positivist' theories are highly causal and deterministic and aim to establish universal truths as opposed to contextualised, provisional truths. Overall, Charmaz (2006) criticises 'positivist' styles of theory on the grounds that they are reductionist. Namely, positivist theories simplify complex phenomena.

She describes that constructivist style grounded theory, on the other hand, theorises — or, one could also say, conceptually describes — "how — and sometimes why — participants construct meanings and actions in specific situations." whilst, at the same time, it "places priority on the phenomena of study and sees both data and analysis as created from shared experiences and relationships with participants and other sources of data" (Charmaz, 2006, p.130). According to this view, then, in contrast to objectivist grounded theory, data is made not found and analysis is highly idiosyncratic or 'subjective' as opposed to 'objective'; the grounded theorist, then, becomes an "interpreter of the scene" (Bryant and Charmaz, 2007, p.51) who looks to, as objectively as possible, describe the subjective realities of participants in the substantive area of study. In this way, constructivist grounded theory places heavy emphasis on interpreting and conceptually describing the meanings of participants (Charmaz, 2000).

Charmaz (2006, p.127) locates constructivist grounded theory in the interpretive tradition of theory through which, she argues, one looks to understand rather than explain phenomena; this "calls for the imaginative understanding of the studied phenomenon" on the part of the theorist. Theory aligned with such a tradition does not house assumptions regarding the existence of an 'objective' reality or the possibility of uncovering universal truths; instead, it "assumes emergent, multiple realities; indeterminacy; facts and values as inextricably linked; truth as provisional; and social life as processual." (Charmaz, 2006, p.127), and is, accordingly, highly porous compared to a positivist style of theory (Bryant and Charmaz, 2007).

Overall, then, the constructivist style of grounded theory sees 'theory' and 'data' as a part of, rather than isolated from, the social construction of reality; accordingly, Charmaz (2006; 2014) looks to acknowledge this implication of the researcher and participants in interpretation and social construction via the fostering of grounded

theorist reflexivity and attentiveness to the implicit meanings of participants. Furthermore, in doing this, Charmaz (2000; 2006; 2008a; 2008b; 2014; 2017) and Bryant and Charmaz (2007) are aligning constructivist grounded theory closer with relativism as opposed to objectivism. Namely, she is presenting constructivist grounded theory, to an extent, as another way of interpreting a phenomenon rather than a more 'true' or 'objective' way of interpreting a phenomenon. Accordingly, rather than referring to a latently structured social reality that exists beyond the researcher and participants, 'data' are constructed by the researcher and participants and 'theory' is viewed as a construction of the grounded theorist following their analysis of constructed data.

Whilst Charmaz (2006) claims that, first, constructivist grounded theory is *a* way of doing grounded theory rather then the only way, and, second, the constructivist – objectivist divide exists on a continuum, in positing this constructivist form of grounded theory, she makes serious criticisms towards the original classical grounded theory of Glaser and Strauss (1967), which she views as fundamentally objectivist in nature. There are a number of problems with both Charmaz's (2006; 2014) description of classical grounded theory as 'objectivist' and her own form of methodology as 'grounded theory'.

First, classical grounded theory (Glaser and Strauss, 1967) is consistent with 'objectivist' grounded theory and a 'positivist' tradition as interpreted by Charmaz (2006) in that it emphasises identifying and conceptualising latent patterns in the data. Such patterns are assumed to indicate something real or 'objective' beyond the researcher that can be discovered or, at least, proposed theoretically. The data are gathered from the problem area which involves individuals in a social context/situation of some sort but the theory ultimately abstracts "from time, place and people" (Glaser, 2002, p.1). In assuming the independent existence of implicit processes/structures underpinning various aspects of social life, and the data as being valid – albeit provisional – indicators of such processes/structures, classical grounded theory can be called objectivist and positivist. The classical grounded theory dictum to 'trust in emergence' testifies to such an assumption (Glaser, 1998).

However, classical grounded theory (Glaser and Strauss, 1967) also fits with aspects of 'constructivist' grounded theory and the interpretive tradition. First, it is perfectly compatible with theorising processes of social construction (i.e. how and why participants construct meanings and actions). There is no aspect of classical grounded theory that excludes this is as a possibility. Classical grounded theories are commonly – but not exclusively – orientated towards theorising a main concern or problem of participants and the process by which participants deal with/resolve this problem (i.e.

the core category) (Glaser, 1998). This core category could easily be a process that involves elements of participants 'constructing' meanings and actions in order to deal with a particular main concern or problem.

Second, rather than being insensitive to the ascribed meanings of participants – which 'objectivism' implies (Charmaz, 2006) – via carefully conceptualising a main concern or problem that participants are dealing with, a classical grounded theorist must be sensitive to the implicit meanings participants give things. In identifying and conceptualising a 'main concern' of participants in the problem area, then, the grounded theorist is getting at an aspect of the subjective reality of, and objects of action for, the participants. In conceptualising a unifying 'main concern' between participants in the problem area, the grounded theorist is getting at a social reality in which participants are a part of in some way – whether this is observably real or not (e.g. socially constructed/interpreted) is a separate issue to the fact that it is perceived as real for participants. The primacy of the main concern in classical grounded theory studies is reflected in the criterion of 'relevance': namely, the theory must resonate with a main concern of participants (Glaser, 1995).

Third, in conceptualising a main concern and core category, Glaser (2002) cites that classical grounded theory does not discount the notion that individuals have multiple perspectives but rather integrates these perspectives into a broader pattern (e.g. the main concern can be conceptualised by analysing various concerns raised by participants). In this way, in doing classical grounded theory, one does indeed aim for parsimony rather than multiplicity but in such a way that integrates fragmented accounts to provide "another perspective" (Glaser, 2002, p.2). Multiple perspectives and the complexities that they bring, then, are not ignored but integrated.

Fourth, in producing a classical grounded theory, one does not assume that they are an objective observer that does not do interpretive work (which could also be called 'conceptualising') but one does presuppose that they have generated a special point of view that can transcend individual, everyday points of view (Glaser and Strauss, 1967; Glaser, 2002). In this sense, classical grounded theory does involve interpretation but does not assume relativism because of this. Bryant and Charmaz (2007, p.41) note this assumption of classical grounded theory – namely, "that systematic theorising can claim an elevated status" – as a means to highlight its lack of relativism. However, due to the systematic nature of classical grounded theory research, it is justifiable that one could claim a transcending view in relation to a given phenomenon compared to everyday individuals. Indeed, it is questionable whether social research should exist at all if it did

not equate to something more than another perspective that is equal to other individual's common sense and anecdotal ideas (Seale, 1999). Nevertheless, alike to the interpretivist tradition, Glaser and Strauss (1967, p.32) clearly posit that a classical grounded theory is a provisional and processual truth – "an ever-developing entity" – as opposed to a 'fixed truth'. Hence, whilst one may claim an elevated status of knowledge with a classical grounded theory, it is still only a temporary hypothesis grounded in data (Glaser, 1998).

Classical grounded theory, then, is compatible with many aspects of constructivist grounded theory and the interpretivist tradition as depicted by Charmaz (2006). This renders its equation with objectivism and positivism misleading. In striving for parsimony, simplicity and abstraction, classical grounded theory is highly practical, rather than positivist, in its aims: the purpose of producing theory is to benefit individuals in the problem area (Glaser and Strauss, 1967; Glaser, 1998; Glaser, 2002); transcending concepts help to do this by providing "another perspective" (Glaser, 2002, p.2) that may enable people within the problem area greater control in dealing with their main concern (Glaser, 1978). Accordingly, through the use of grounded theory, laypersons in the problem area can be empowered to transcend their "finite grasp of things" (Glaser, 1978, p.13).

Constructivist grounded theory, on the other hand, seems to lose sight of this practical theoretical goal, instead looking to describe as accurately as possible the experiences and meanings of participants in the substantive area (Bryant and Charmaz, 2007). Bryant and Charmaz (2007, p.44) highlight such a descriptive preoccupation, critiquing the unproblematic view of data implicit in the classical grounded theory of Glaser and Strauss (1967), claiming "the researcher does not need to be concerned with quality of the data, range of data, amount of data or accuracy of data." Glaser (2002), however, makes a valid point when he claims that Charmaz's (2006) use of 'constructivist grounded theory' is a misnomer, as her concerns raised about the accuracy of the theories in relation to the data upon which they are built are not consistent with the original aim of grounded theory as discussed earlier: to generate theory from data. Therefore, a primary concern with data goes against the founding objective of grounded theory research and reveals a concern with "descriptive capture" (Glaser, 2002, p.4) rather than 'transcendent abstraction' as a means to generate theory with "conceptual power" (Glaser, 1995, p.9) that is useful and relevant to individuals in the problem area.

6. Data Collection

Since the classical underpinnings of grounded theory methodology and my personal application of these have been fully discussed, in this section, I will delineate various aspects central to my process of data collection. Namely, I will describe, first, my process of collecting data via qualitative interviewing. This will encompass the recruitment and profile of interviewees, the method of interviewing with reference to qualitative interview literature and my position on the recording and transcribing of interviews.

i. Qualitative Interviews

a) Interviewee Profile and Recruitment

Over the course of the study, 28 participants were interviewed (see Table 1, pg. 82). This provided sufficient data to reach a point of 'theoretical saturation' in which I judged that further data no longer led to the development of the core categories of the grounded theory — i.e. they had reached a 'saturation point' (Glaser and Strauss, 1967). For example, in relation to the concept of 'Provoking Responsibility', during the final interviews, the variations of this category accounted for the various incidents described by participants in relation to dealing with precarious entitlement. So, participants would describe, when, for example, having their right of way disrespected by a pedestrian ahead of them whilst they approached how they could shout at this pedestrian to get off the road ('punishing transgression'), speed up to entice the pedestrian to move ('asserting entitlement'), point out semi-politely that the they should not be infringing on one's right of way ('indicating transgression), or, for example, ring a bell while proceeding forward ('accentuating presence'). In this way, the concepts produced were judged to sufficiently 'work' with the data and 'fit' the described responses to incidents of precarious entitlement. Accordingly, theoretically sampling through interviewing failed to yield data incidents that would significantly expand or develop the core concepts. In this way, then, it was judged that the study had reached the point of 'theoretical saturation' at 28 interviews.

All interview participants were over 18 years old and, in keeping with the aforementioned delimitation of the problem area of the study (i.e. the 'basic type' of group), were active utility cyclists in Dublin. In using the demarcation of 'utility' cyclists, these were individuals who cycled for the purpose of transport as opposed to cycling exclusively for leisure or sport, although, a number of participants participated in cycling

for these purposes also. Nevertheless, since the problem area is delimited by the basic group of utility cyclists, in interviews, participant concerns and experiences pertaining to utility cycling were particularly explored. Such a broad starting sample is consistent with a classical grounded theory methodology that emphasizes openness as a starting point for inquiry and theoretical sampling to guide further inquiry and theory development (Glaser and Strauss, 1967; Glaser, 1998; Glaser, 1978).

As one can see in Table 1 (pg. 82), participants varied in terms of age (23 – 78 years old), cycling experience in Dublin (2 weeks - 30 + years), gender (12 women and 16 men) and geography (there were numerous individuals who had always lived in Dublin as well as individuals who are from other parts of Ireland or the world such as the United States and Germany; likewise, the individuals interviewed lived in and cycled through a wide variety of locations across Dublin). The average length for each interview was one hour in which in-depth data collection took place. Recruitment took place in different geographical locations across the city in the service of gathering data from participants who used different areas of the city to cycle through, since it was judged likely that one could plausibly experience very different things as a cyclist depending on the locations through which one cycled (e.g. infrastructure, interactions with other road users). Following the identification of a main concern and key modes of resolving this concern, I sought to recruit interviewees that would likely provide data that could develop the emerging concepts of the grounded theory. In this way, interviewee recruitment was orientated towards theoretical sampling with the ultimate goal of theoretical saturation (Glaser and Strauss, 1967).

There were two methods of recruitment of interviewees each using the attached recruitment advertisement (Appendix A). First, recruitment advertisements were appended to parked bikes across a wide range of public bicycle parking areas around Dublin located in the city centre, North side and South side of Dublin. This strategy was successfully employed in recruiting cyclists for a qualitative study by Aldred (2010) in Cambridge. Second, recruitment advertisements were handed in to staff at the two Rothar community cycling shops (see www.rothar.ie) located in Phibsboro and the city centre for dissemination to their clients who cycle for utility purposes.

Since the advertisement of the study was framed to explore matters of 'utility cycling and risk', it is plausible that the study attracted participants with particularly negative or risky experiences of cycling in Dublin. Nevertheless, there is evidence from Ireland and the UK that perceptions of risk and experiences of danger are common amongst utility cyclists (Lawson *et al.*, 2013; Aldred and Crosweller, 2015). Furthermore, there is

evidence that cyclist injuries are highly prevalent and underreported in Ireland (Foley *et al.*, 2016; Tommy Broughan TD, 2018). Irrespective of the particular kinds of participants recruited, grounded theory methodology is employed primarily in order to generate theory, not to verify it (Glaser and Strauss, 1967). In the case of this study, then, theory has clearly and transparently been generated via the systematic collection and analysis of data from participants in the substantive area in a way that is demonstrably 'relevant' to their concerns and 'fitting' with their patterns of incidents (Glaser and Strauss, 1967). It is proposed as a useful and relevant 'transcendent abstraction' not an allencompassing description of perception and action in the substantive area (Glaser, 1998).

Table 1: Interviewee Profile

No.	Pseudonym	Age Range	Gender	Country of Origin	Driver
1	Niall	20 – 30	Man	Ireland	Yes
2	William	20 - 30	Man	Ireland	Yes
3	Simon	70 - 80	Man	Ireland	Yes
4	Adam	20 - 30	Man	Ireland	Yes
5	Emma	50 - 60	Woman	Ireland	Yes
6	Olivia	20 - 30	Woman	U.S.A.	Yes
7	Greg	20 - 30	Man	Ireland	Yes
8	Connor	60 - 70	Man	Ireland	Unspecified
9	James	40 - 50	Man	Ireland	Yes
10	Patrick	40 - 50	Man	Ireland	Yes
11	Katherine	60 - 70	Woman	Ireland	Unspecified
12	Julia	40 - 50	Woman	Ireland	Unspecified
13	Gerald	40 - 50	Man	Ireland	Yes
14	Ivan	40 - 50	Man	Ireland	Unspecified
15	Brian	40 - 50	Man	Ireland	Yes
16	Eoin	40 - 50	Man	Ireland	Yes
17	Karl	30 - 40	Man	Ireland	Yes
18	Philip	30 - 40	Man	Netherlands	Yes
19	Killian	30 - 40	Man	Eastern Europe	Unspecified
20	Hannah	30 - 40	Woman	Germany	Unspecified
21	Sophia	30 - 40	Woman	Eastern Europe	Unspecified
22	Paula	40 - 50	Woman	Netherlands	Unspecified
23	Marianne	40 - 50	Woman	Ireland	No
24	Daniel	30 - 40	Man	Ireland	Unspecified
25	Joan	30 - 40	Woman	U.S.A.	Unspecified
26	Yvonne	40 - 50	Woman	Ireland	Unspecified
27	Charlotte	50 - 60	Woman	Ireland	Unspecified
28	David	50 - 60	Man	Ireland	Unspecified

b) Interview Method

Informed by first, the initial problem area and, second, the logic of theoretical sampling, qualitative interviews were the primary method of data collection for my study. It is important to note that these interviews were used as a method of data collection as part of a grounded theory study as opposed to grounded theory methods being used as a way to analyse interview data. Therefore, the data gathered from the interviews fed into the grounded theory process (i.e. the process of generating a grounded theory) as opposed to the reverse of this arrangement (e.g. looking to conceptually describe interview data). They were used, then, as a means of collecting data within the problem area in order to generate theory (Glaser and Strauss, 1967).

Interviews as a mode of data collection are particularly useful for a grounded theory study as they enable the researcher a high level of control and flexibility. Namely, one is well-positioned to explore particular areas of interest with the interviewee through the use of specific questions (Fontana and Prokos, 2007). This control over the structure of the interview interaction can empower both the interviewee and the interviewer: the interviewer can encourage the interviewee discuss what is relevant to them personally or asking targeted questions of varying extents of the interviewee based on their own interests as a researcher. This potential for the interviewer to heavily influence the content emerging from the interview interaction, accordingly, can allow the grounded theory researcher to alter the structure of their interviews over the course of the grounded theory study. In this way, the interview affords control and flexibility as a method of data collection for grounded theory, which is a methodology that advocates the flexible use of data (Glaser and Strauss, 1967). Furthermore, a successful grounded theorist conceptualises a 'main concern' and process of resolving this concern (the 'core category') for a particular group of people in a particular context. Thus, the primacy of the 'main concern' in grounded theory means that the "point of view of the actors involved" (Glaser, 1998, p.115) is of the utmost interest. The interview is a powerful means to access such perspectives (Rubin and Rubin, 2005; Kvale and Brinkmann, 2009) in that interviewees can "describe and portray specific events or processes" and/or elicit "understandings or meanings" (Rubin and Rubin, 2005, p.5) from particular points of view (Holstein and Gubrium, 1995; Gubrium and Holstein, 2003)

Over the course of this study, interviews were semi-structured; that is, there was a loose, provisional and flexibly applied guide of questions that semi-structured the interview interaction. As I will discuss, this guide of questions became increasingly

focused in both its formulation and application as the study progressed. The use of this guide was underpinned by the perspective of interviewing as a craft skill that "rests on practical skills and personal judgements of the interviewer" (Kvale and Brinkmann, 2009, p.17) as opposed to a more formulaic application of techniques (e.g. Wengraf, 2001). Furthermore, since participants were from a similar geographical location and arguably similar cultural milieus, it was assumed that the interview was understood as a form of communication by participants and, therefore, would not be a type of interaction that would result in a clear confusion of meanings or a lack of successful communication (Briggs, 1986).

In terms of my style of interaction with interviewees before conducting the interview, I adopted an attitude of friendliness, openness and transparency about myself and the study. First, this enabled me to develop a relationship of trust with the interviewee. Second, on ethical grounds, this approach to interviewees reflected a respect due to them for freely giving their time and energy to my project. Third and relatedly, I believe this way of interacting with interviewees allowed for the process of being interviewed feel more enjoyable and worthwhile for them and, as a result, less stressful and arduous. Fourth and last, I judged that being open and transparent was owed to participants since they were sharing details about their life with me. Thus, a large part of my approach to interacting with interviewees was influenced by an appreciation for their taking part, without which I would have no study and, additionally, influenced by a view of interviewees as equals of which one should treat like a family member or a friend rather than a stranger. In this way, my approach toward interviewees reflects the notion of 'conversational partners' (Rubin and Rubin, 2005).

At the beginning of the study, during the discovery and open coding phase, broad open-ended questions were posed to the interviewee and their responses were extensively followed up as a means to explore problems and concerns 'relevant' to participants in the problem area. These open questions included "Tell me about cycling in relation to your daily life." and "What's your experience of cycling in Dublin?" These questions offered participants a chance to talk about concerns outside of concerns related to 'risk', thus respecting the grounded theory criterion of 'relevance' (Glaser, 1978). 'Follow-up' questions were used to 'probe' deeper into something the respondent had been talking about such as "That's interesting. Could you tell me more about...?" or "Could you describe to me what happened next?" and clarify the meanings of what was being said (e.g. "Could you tell me, in your own words how you would describe this?").

Additionally, I would make statements of interpretation to interviewees of my understanding of what had been said so far to ensure that it had been correctly interpreted. Although this was not a follow-up question, it did act the same as a probe in that it demonstrated to the interviewee that they were being listened to and understood (or not, in which I would frequently be corrected) and, in this way, encouraged continued disclosure of aspects of the problem area relevant to them, along with other gestures of interest, such as nodding, taking notes, use of silence, reluctance to interrupt and making clear eye contact.

Indeed, during the initial interviews, some interviewees felt that they were 'rambling on' and would mention this and ask whether or not what they were talking about was relevant to the study, or, exclusively or along with this, they would look at me for signals that I was interested in what they were saying as a means of eliciting that what they were talking about was relevant to *me*. When incidences like this occurred, the use of encouraging gestures was crucial.

Overall, then, I took various actions to elicit rich experiential descriptions from participants (Rubin and Rubin, 2005; Kvale and Brinkmann, 2009) and clarify "meaning and indicate understanding" with participants (Rubin and Rubin, 2005, p.109). In facilitating the disclosure of issues relevant to participants as opposed to issues relevant to a particular theoretical or research perspective, this aspect of the interview was faithful to the goal of grounded theory to produce theory that is relevant to people in the problem area as opposed to the researchers of the problem area (Glaser and Strauss, 1967).

Since, as discussed, the problem area was defined by the basic type of group of cyclists and the 'sensitising concept' of risk was used as a starting point for data collection, the initial interview questions were pertinent to both of these structuring elements: namely, the opening questions were framed in such a way as to enable the elicitation of any sort of general concern of the cyclist interviewee as a utility cyclist in Dublin and, following these open questions, questions were asked relating in particular to matters of risk and utility cycling in Dublin and how they are dealt with from the point of view of the interviewee. Thus, having made efforts to enable the interviewee to express their general concerns as a cyclist that were 'relevant' to them, I provisionally explored matters of risk and their relevance to the given cyclist participant being interviewed. The general guiding *research* question of "How do utility cyclists deal with risk?" was broken down into simpler, less direct, more easily intelligible *interview* questions (Kvale and Brinkmann, 2009) as a means to render them more "answerable by

interviewees in terms of their experience and knowledge" (Rubin and Rubin, 2005, p.159) as opposed to "too abstract to elicit a meaningful answer" (Rubin and Rubin, 2005, p.152). With this in mind, "Why?" questions — that is, questions seeking explanation — were avoided in favour of "What?" and "How?" questions that, instead, prompted the elicitation of descriptions and processes. Accordingly, questions such as "Are there ever situations where you feel threatened on the road?" along with follow-up questions were asked of participants in order to explore the relevant experiences in relation to risk.

The 'problem area' of utility cycling and risk acted as a useful point of departure for the study as, without it, at least with some participants, there could be a whole variety of possible concerns to explore following the opening questions - too many to be integrated or thoroughly analysed. The 'sensitising concept' of risk, then, did indeed provide a fruitful frame with which to ask more specific questions following the opening questions. 'Risk' and questions to do with it, furthermore, were ensured relevance following the opening questions in which participants - along with talking about other concerns such as concerns with speed and convenience - talked about concerns regarding safety and risk. Accordingly, before asking specific questions to do with matters related to 'risk', the opening questions provided an opportunity for the participant to 'bring up' matters of risk as a relevant issue to them in the first place. Indeed, although a guide of risk related questions were formulated, these were hardly ever required to be asked directly. Instead, in almost all of the initial interviews prior to the theoretical sampling and selective coding phase of the study, participants would bring up issues that were related – if not identical – to a concern with utility cycling and risk. In kind, the risk related questions largely provided cues for follow up questions rather than direct questions, and, since matters related to risk were brought up by participants prior to direct questions, they emerged as a relevant concern to participants as opposed to a 'forced' perspective (Glaser and Strauss, 1967).

At the same time, it is worth noting that through the administration of the recruitment advertisement, plain language statement and informed consent form to the interviewee prior to the interview that interviewees were arguably already primed to talk about matters of cycling and risk when asked the more general, opening questions (Holstein and Gubrium, 1995). However, due to the unanimity of matters relating to risk as a concern for the initial cyclists interviewed and the depth with which the interviews went in relation to these matters of risk, the relevance of matters related to risk was ensured as a legitimate aspect of concern for cyclists, if not *the only* aspect of concern.

On top of this, prior to interviewing I would brief the interviewee on the nature of the interview interaction (Kvale and Brinkmann, 2009): I clearly proclaimed that although the study was provisionally based around an exploration of utility cycling and risk in Dublin, this was merely a provisional starting point and what I was really interested in was the issues relevant to utility cyclists in Dublin. This, I believe, encouraged the interviewee to talk about issues that were clearly relevant to them as a utility cyclist in Dublin rather than feeling pressurised to talk about 'risk' based on the definition of what 'risk' means to them.

Having a provisional 'problem area', then, proved useful as a bridge toward the identification of the main concern for this study which was 'precarious entitlement'. This main concern was not synonymous with 'risk' but certainly involved aspects of being at risk, taking risks and managing risks. Following the identification of the main concern of precarious entitlement and the conceptualisation of key aspects of resolving this concern, more specific conceptually related questions were asked in interviews. These questions were not necessarily asked in explicit conceptual terms but rather asked in a way that would elicit accounts from participants that could act as important data for the development of these concepts. Nevertheless, despite this specificity, precarious entitlement was never assumed to be a main concern for participants - opening questions were always asked to ensure its relevance and then, following this, the more specific aspects of how precarious entitlement was dealt with by participants were probed. In this way, I conducted theoretical sampling in my interviews through the use of more specific conceptually relevant questions as opposed to the more generalised questions asked earlier in the research phase. However, alike to the flexibility of my interviewing techniques during the discovery and open coding phase of the study, my interviewing approach during the theoretical sampling and selective coding phase was equally dynamic – hence, the interview guide was used as a guideline not a prescription. For the most part, theoretical sampling was quite implicit and required, just like coding, theoretical sensitivity. That is to say, I needed to be sensitive to what was being said by participants in a conceptual way: practically, this meant that I needed to keep in my mind the existing concepts I had developed (often leaving a list in front of me) and, over the course of the interview, probe aspects of the interviewees responses that could lead to data that would aid further conceptual developments. For example, if I was looking to explore a category like "provoking responsibility", having identified that precarious entitlement was a main concern of the interviewee, I could ask "How do you deal with disregard from motorists?" to which the participant could respond with a statement such as "I would give them a glare or try to make eye contact". In this way, my question constitutes a form of theoretical sampling and the respondent's answer provides data to develop the category of "provoking responsibility" which could be probed further in terms of its subcategories and properties with follow-up questions.

My approach to interviewing, then, mirrored in ways my approach to data analysis. That is, during the discovery and open coding stage, I would be sensitive to identifying a main concern of participants and the key ways by which this concern was being dealt with; then, alternatively, during the theoretical sampling and selective coding stage, I would be sensitive in particular to data relevant to developing and refining the key concepts of my theory. Accordingly, my experience of interviewing fits with the perspective of Kvale and Brinkmann (2009) positing the irreducible role of the interviewer in collecting quality data as opposed to a rigid application of the interview guide:

When the person of the researcher becomes the main research instrument, the competence and craftsmanship – the skills, sensitivity and knowledge – of the researcher becomes essential to the quality of the knowledge produced. A conception of interviewing as a craft may lead interview research clear of the Scylla of methodological objectivism and the Charybdis of subjectivist relativism. (p.84).

Furthermore, in entering the interview situation, I was sensitive to how the interviewees would perceive me. Having framed the study around 'cycling and risk', in the context of Irish discourse and prevailing attitudes regarding cyclists as a road user group, I was aware of the possibility that interviewees could feel like they may be negatively interrogated or judged about what may be considered 'risky' and 'irresponsible' behaviour that they may engage in, such as cycling on the pavement or breaking red lights (e.g. Ahlstrom, 2016). I pre-empted that this could be an issue in cultivating trust between the interviewee and I, thereby leading to the production of superficial data. Consequently, I followed the guideline of Rubin and Rubin (2005) regarding presenting oneself to participants "in ways the interviewees accept and understand" (pg. 84). As Rubin and Rubin (2005) claim, selectively and consciously presenting oneself in a certain way that is acceptable and understandable to participants does not involve deception but, rather, awareness regarding how you may be perceived as an interviewer and how this may affect the interview interaction.

Indeed, how one presents oneself can be said to 'activate' the interviewee to produce particular narratives (Gubrium and Holstein, 2003).

Accordingly, I consciously presented myself as a utility cyclist to participants, attaching my helmet to a bag I brought to the interview, with the helmet clearly in sight. In doing so, I presented myself as a person who has experience of cycling and who is part of a group that may potentially be seen to bear a controversial and contested status as legitimate road users in Ireland. In this way, I presented myself in what can be judged to be a non-threatening and trustworthy manner and, additionally, I activated the interviewees to provide perspectives of their cycling experiences in an in-depth manner, due to their recognition that I was also a cyclist. If I had presented myself without such a marker of identity, one could easily argue that presenting myself as a driver who may not have any experience of cycling (e.g., by laying down driving keys) may have altered the way participants would talk about (or not talk about) their cycling experiences and practices. Indeed, I may have been perceived with suspicion regarding my views of cyclists in general, thereby coming across as seemingly threatening or untrustworthy and, in being perceived as such, could be said to 'deactivate' interviewees, leading to thin responses.

Indeed, participants often talked to me as a 'fellow' cyclist. When this marker of identity/modal use was unclear, however, participants were, in some cases, reluctant to talk about particular practices (e.g. red light breaking) and experiences (e.g. driver altercations) for fear of being scolded or reported. On top of this, participants would give richer descriptions based on the understanding that I was someone 'in the know' regarding cycling in Dublin and, therefore, had the ability to understand and interpret detailed descriptions of experience and action. Thus, this selective presentation was invaluable for developing trust with, and generating rich narratives from participants. At the same time, though, signalling what could be called an 'insider' status in relation to interviewees could also, at times, lead to short responses due to an assumption of shared understanding or common knowledge. In these cases, however, I was quick to clarify my curiosity in participant perspectives and incidents and the purpose of exploration for the study. Namely, I acted as if I had no substantial knowledge on the subject, using probes and prompts as appropriate. In this way, I used what could be called 'insider' and 'outsider' positions strategically and to good effect over the course of data collection.

c) Interview Data

It has been made clear earlier in this methodology chapter the primary goal of grounded theory: to generate useful theoretical concepts through the flexible use of data. Since the generation of theory is the chief goal, data accuracy is of secondary importance. Nevertheless, one could justifiably claim that, if possible, one should aim for more data accuracy rather than less data accuracy. Indeed, a concern with 'data' and its accuracy or, rather, its legitimacy and using grounded theory has framed many of the aforementioned debates leading to diverging formulations of grounded theory. In this study, I have assumed that interview data can be plausibly be used as indicators for experiences beyond the interview situation. That is, I have assumed that data gathered during interviews does not have to be considered as strictly constructed within the interview situation and so ought to be abandoned in its relevance and use in understanding experiences and behaviours outside of the interview itself. I am not, on the other hand, claiming that the interview data used to generate the concepts which combined to produce my grounded theory are evidence of the reality of these concepts, which is a more rigid claim. Glaser (1998) makes this important distinction between data as an indicator versus data as evidence. Nevertheless, either way, the aim is to produce useful theory (Glaser and Strauss, 1967) and interview data can be used as a means to this end.

One could claim that my use of interview data is 'objectivist' as opposed to 'constructionist' (Charmaz, 2006) — I assume that in participants accounting for certain past experiences and behaviours during the interview, such data can plausibly be used to conceptualise their main concern and process of resolving it, which, in this case, was situated outside of the interview situation (i.e. out in public places cycling). This is not to say that participants could not frame these experiences and behaviours in a variety of different ways or, indeed, that, in the recollection of their experience and behaviours various aspects of the interview situation impinge on *how* they account for these experiences and behaviours and perhaps *what aspects* of these experiences and behaviours that they account for. Thus, I acknowledge the point of Holstein and Gubrium (1995) and Gubrium and Holstein (2003) that interview responses are, at least partially, a *construction* of interviewees within the interview situation rather than purely a *representation* or *report* of their experiences outside of this situation. Indeed, I noticed throughout the conduct of my interviews that interviewees would construct different

narratives of their experience based upon the 'subject positions' they adopted. Namely, some interviewees would construct their experiences through the subject position of them as a vulnerable utility cyclist and, in the course of this, give emotional and often angry accounts of being disrespected and how they dealt with this disrespect; on the other hand, the same interviewees could return to such experiences or talk about similar incidences of their cycling experience but, instead, from the subject position of a driver (as many of the cyclists were drivers also). In these constructions of their experience, any sort of outrage, unlike accounts from their position as a vulnerable cyclist, was often absent and, alternatively, descriptions of the incidents sympathetic to an experience of disregard by motorists could ensue. This, then, lends evidence to the assertion that interviewees can take different subject positions on similar stocks of experience and that this adoption of a particular position significantly alters the way in which these experiences are constructed (Holstein and Gubrium, 1995; Gubrium and Holstein, 2003).

However, despite the multiplicity of perspectives from which an individual can construct narratives of their experience, a classical grounded theorist looks to identify patterns across data and synthesise multiple perspectives and accounts as a means to conceptualise a 'main concern' and process of dealing with it across individuals and groups within the problem area (Glaser, 1998). In this way, my stance on interviewing as a source of data and the use of interview data resembles that of Glaser (2002, p.6) in that the data "is rendered objective to a high degree for most research methods and GT in particular by looking at many cases of the same phenomenon, when jointly collecting coding data, to correct for bias and to make the data objective"; Glaser (2002) contrasts this with the goal of interviewing for providing a unified account—for a grounded theory, it is the task of the grounded theorist to provide a unified account, not the participant who, as Glaser acknowledges, along with Holstein and Gubrium (1995), can have multiple perspectives.

Furthermore, it could equally be argued that, in one's conduct in everyday life people may *act* from different subject positions just as much as they *construct narratives* from such positions – an act in itself. Indeed, utility cyclist interviewees described a variety of different ways in which they dealt with the issue of 'precarious entitlement' and the data from which these various ways of dealing with the problem were conceptualised originated from, at times, the adoption of various subject positions within the interview (e.g. the vulnerable cyclist, the shameful cyclist, the sympathetic motorist). Accordingly, regardless of the subject position from which one narrates their experiences, one can

merely use it as more data in the task of conceptualising; either way, through the use of the constant comparative method one will capture a "latent pattern" (Glaser, 2002, p.2) that will 'pattern out' (Glaser, 1998; Stern, 2008).

d) Audio-Recording and Transcribing Interviews

Interviews were audio-recorded and fully transcribed during the initial stages of the study. This was done in order to enable careful analysis of the data gathered en route to identifying a main concern and conceptualising key ways with which this main concern was resolved by participants. Glaser (1998) argues against audio recording interviews and for the writing down of field notes through which one records the most important, standout, aspects of the interview. During my experience of listening to, transcribing and analysing the data gathered from the initial interviews – in addition to writing rough field notes - field notes would not be as rigorous a source of data as a transcribed interview. Of course, Glaser repeatedly argues that the goal of grounded theory is to generate theory and one should not be overly concerned with the accuracy of data; interview field notes, he argues, adequately enables the expediency and flexibility required to produce a quality grounded theory; transcribing interviews, on the other hand, is, in his view, superfluous and overwhelms one with irrelevant data. Whilst I partially agree with Glaser's claims regarding being overwhelmed with irrelevant data, at the same time, listening to and transcribing interviews enabled me to have a second take on my first impressions of the interview, which, at times, surprised me with different interpretations to those I had during the interview. That is to say, if I had relied on field notes as a mode of data collection during or after the interview, at least in the early stages of the research, my interpretations would have been more preliminary, superficial and, at times, simply erroneous compared to my interpretations following listening to and transcribing these interviews. In this way, the recording, listening and transcribing of the interviews proved a useful way for me to sensitise myself to the data and thus, I believe, enhanced my process of coding by engendering a more enlightened view of the meanings of what was communicated during the interview. This, in turn, improved my process of coding.

I fully transcribed interviews during the open coding phase of the study and selectively transcribed interviews during the selective coding phase of the study. In terms of selectively transcribing interviews, in general, the majority of the recorded interviews would be transcribed so that important information that was not obviously relevant but

possibly relevant would not be omitted from record and thus potential analysis. All of the recordings were transcribed, for the most part, verbatim. In some cases, if sentences were very badly constructed or highly inconsequential in relation to coding they would be transcribed in a simpler form that maintained their original meaning. Likewise, if respondents routinely repeated phrases such as "Do you know what I mean?" such phrases would not be included in every instance if they were considered to be irrelevant in relation to coding. In instances of the recording where an emotional tone of voice was used in speech, gestures were made or there were laughs or long pauses, these aspects of the interview recording would be transcribed in parenthesis: for example, (laughing), (pauses), (makes raised fist gesture), (said in indignant tone). Furthermore, and more frequently, in the case of the way in which things were said, punctuation and italics were used. For example, if an individual was describing an experience in a fragmented way or uncertain way, multiple full stops would be used (e.g. "And then he said...he drove right off..."); on the other hand, if someone emphasised a word or collection of words, these words would be italicised. This could indicate things such as the emotional delivery of what was said or an emphasis on a detail of what the person was trying to communicate (e.g. "Taxi drivers are an absolute nightmare").

7. Ethical Considerations

This research was granted approval by the DCU Research Ethics Committee. In this section, we look at the central ethical considerations pertinent to this study and how they were accounted for over the conduct of the research.

i. Voluntary Involvement & Informed Consent

As mentioned, participants were recruited primarily via recruitment advertisements appended to their parked bicycles across Dublin city. Cyclists who were interested in taking part would then email (or call – although no one did) to confirm their interest in the study having read the recruitment advertisement. This enabled potential participants to reflect on the project and make a voluntary decision to take part without any identifiable external pressure to do so. Following the confirmation of interest, I would send the plain language statement via email so potential participants could further inform themselves about the project and the potential risks and benefits of

getting involved. This was an extra measure to ensure voluntary, un-coerced involvement in the study. Following this follow-up email, to those participants who expressed interest, a date, time and place convenient for both the participant and I was arranged for the interview to take place. At the interview, I would brief participants about the study, what I was interested in for the interview, stress their right to withdraw from the interview at any stage with no negative consequences and offer them a chance to ask any questions. Following this, I would hand them the informed consent form and offer to explain any aspect of it if required. Generally, participants would not be very interested in the plain language statement or the informed consent form and simply wanted to get on with the interview in an informal way as the majority seemed happy to take part and excited to begin talking about their experiences. In this way, both voluntary involvement and informed consent was achieved.

A small number of participants were recruited face-to-face whilst they were either locking or unlocking their parked bicycles. In order to ensure voluntary consent and prevent undue pressure for taking part in the interview, having explained the study, I left the recruitment advertisement with the potential participant and requested that they call or email me if they were interested in taking part in the study. Two individuals followed up with emails and I followed the same process of organising the interview and ensuring informed consent within the interview as with interviewees recruited via the appended recruitment advertisements. Accordingly, both methods of recruitment enabled genuine voluntary involvement for interviewees and procedures before the interview ensured informed consent.

ii. Mitigating Vulnerability

In considering the ethical implications of conducting the study, no major issues of participant vulnerability were identified since the participants were active commuter cyclists and were not being interviewed regarding sensitive, personal information. Nevertheless, one possibility of participant vulnerability was pre-empted: namely, that through interviewing, some interviewees may be reminded of or recall traumatic road traffic incidents that they were personally involved in or had witnessed. It was judged that since this study was initially motivated by an interest in issues of risk and cycling, such participants may provide valuable data if they have witnessed or experienced, among other things, some sort of minor collision or near miss with a passing vehicle. To mitigate this vulnerability, it was stated in the informed consent form and plain

language statement that if a potential participant had experienced a traumatic road incident that there was a risk that they may become distressed by recalling it and that they may withdraw from the study at any stage with no negative consequences as their involvement is entirely voluntary. In this way, it was made transparent to participants that there was a potential risk involved in taking part in the study and they were made aware that they may withdraw at any stage without question. Furthermore, it was advised that participants were to consider not taking part in the study if such distress was a possibility.

In the case that the participant voluntarily took part in the study and became distressed having recounted a traumatic road incident, three means of mitigating vulnerability were employed. First, during the interview, I was sensitive to the possibility that the participant may become distressed and was prepared to ask the 'Risk Management' set of questions present in the interview guide (Appendix C) that directly checked if the interviewee wished to stop, pause or continue the interview. These would be asked at the point of distress. Second, regardless of whether the participant seemed distressed are not, if the participant had recalled what seemed like a potentially traumatic event that led the interview into the exploration of potentially disturbing content, I asked the interviewee positive questions about cycling as a means to end the interview positively (see 'Risk Management' questions Appendix C). Third and last, a free psychotherapy service was made available in the event of participant distress resulting from the interviews that was not alleviated by the 'risk management' questions. While waiting for an appointment, the contact details for Samaritans would be given to the individual as a way to provide a useful service at the onset, as this service is free and does not require a face to face meeting or appointment.

iii. Respecting Confidentiality & Anonymity

In order to protect the confidentiality and anonymity of participants, various measures were taken. First, audio recordings of the interview along with the completed informed consent forms of participants were stored in a locked cabinet in the principal investigator's office in the DCU School of Nursing and Human Sciences. Following transcription of the interview audio recordings, the recordings were deleted and the transcripts were stored on a password protected and encrypted computer and backed up on the principal investigator's private DCU Apps Google Drive account that was also

encrypted. Any written records from interviews (e.g. observations, notes on potential main concerns) were stored in the aforementioned locked cabinet. In public presentation of the research and within the transcripts, personal details were significantly altered to protect anonymity; furthermore, specific addresses which the participant accounted for during the interview were omitted from transcripts if they were thought to compromise the anonymity of the participant. In sharing data stored on the Google Drive account, the documents shared were encrypted in advance to ensure they cannot be shared with others beyond the individuals specified (i.e. only the PhD supervisor and/or PhD examiners).

8. Conclusion

In this chapter, then, I have extensively outlined and discussed the methodology of the study, its procedures, and its relation to alternative formulations; the means and application of data collection and analysis; and, lastly, the ethical considerations relevant to the study, delineating measures taken to ensure ethical research practice over its duration. In the next chapter, I elaborate and – with reference to data gathered from participants – bring to life the core category of the grounded theory: *precarious entitlement*.

Chapter 4:

Precarious Entitlement – The Core

Category

1. Introduction – The Primacy of Space & The Context of Dublin

In the everyday experience of a utility cyclist in Dublin, space is something of great importance. On the one hand, space enables a cyclist to cycle. Whether it be a cycle lane shared with road traffic, a segregated cycle track or a shared road lane, in order for a cyclist to move, space is required. One may cycle to work in the mornings or to college in the evenings, make a trip to the shops or visit a friend. Space for cyclists can be provided for or forgotten in infrastructure; equally, space can be left for the use of cyclists, given over by other road users to a cyclist or occupied or taken over from a cyclist. Whatever the space used and the destination travelled for a given cyclist, space facilitates mobility, and lack of space immobilises.

On the other hand, in environments shared with other road users in which the cyclist is especially vulnerable to harm, space is desired for comfort and safety. Experiences of being given space by overtaking motorists are either not noticed or consciously appreciated; experiences of being passed closely are very much noticed and often found to be uncomfortable and threatening. Cycling in an area with close proximity to fast moving vehicles can feel at times to be an intimidating or even death-defying experience; cycling where one has plenty of room to manoeuvre, in contrast, is found to be relaxing and secure. In another respect, then, having and being given space as a cyclist lends itself to a sense of safety and security. The reverse, accordingly, may leave the unprotected cyclist feeling endangered and vulnerable to harm from collision with other road users.

Lastly, how one is treated within a space often through the provision and deprivation of space from another road user impinges on a cyclist's sense of being welcome and recognised in public space as a legitimate road user. As will be explored later in this chapter, the experience of being beeped by a motorist in a shared public space or being cut off by a pedestrian when one has right-of-way can feel like a denunciation of one's entitlement to public space as a road user and an affront to one's dignity as a human being. Therefore, treatment within a particular public space which can relate to, among other things, the provision and deprivation of space by other road users, marks another point of significance for space as a fulcrum of concern for cyclists in Dublin.

Through the experience of a public space, then, issues of mobility, perceived safety, and recognition as a road user with entitlements to public space emerge in the context of utility cycling in Dublin. Public space is the concrete reality and site upon which these

various concerns can play out in everyday life. However, although public space (and the important issues it encompasses) is a main concern for utility cyclists in Dublin, it is not the core category of the study. That is, it is not the most important concept through which an understanding of related concepts will be achieved. Rather, *entitlement* to public space takes centre stage since having or perceiving an entitlement to public space as a cyclist bears on entitlements relating to the aforementioned issues encapsulated by a concern with public space – namely, entitlements to mobility, safety and recognition as an equal road user.

Utility cyclists in Dublin possess unique spatial entitlements as road users. Namely, cyclists have an entitlement to designated spaces on the road or pavement when such a designation is present. These designated spaces are known as cycle tracks or lanes and are reserved for the use of cyclists and wheelchair users. When designated with a continuous white line to the right-hand side, these spaces are exclusively for the use of cyclists or wheelchair users at all times and motorists are not legally entitled to enter them and are, therefore, legally obligated to stay out of them. When designated with a broken white line to the right-hand side, motorists are entitled to make temporary use of them, provided there is no cyclist occupying them. In relation to parking, under no circumstances is parking allowed in a designated space with a continuous white line; in such a space with a broken white line, a motorist may park for up to 30 minutes providing their own loading or lowering their vehicle and there is no other parking available. Furthermore, some designated cycle spaces are only designated as such within particular margins of time. These are visible on signs that are placed beside them. When such signs are not present, the cycle space is reserved for cyclists as such at all times (RSA, 2018b). In addition to cycle track/lanes, there is another form of reserved cycle space is known as an "advanced stop line" (RSA, 2018b, p.72) in which a cyclist may place themselves in front of motorists at a junction. This space is exclusive for cyclists; therefore, motorists are not permitted to infringe upon it at a red light. Additionally, motorists must give cyclists space to move off from the advanced stop line when traffic lights turn green. Accordingly, by virtue of such reserved cycle spaces, cyclists have unique spatial entitlements as road users.

The rules of the road use the word 'must' to delineate rules that are derived from road traffic law as opposed to recommendations for safe practice. According to the current rules of the road, cyclists are *legally* obligated to use reserved cycle space if it is provided. In this way, the use of reserved cycle space by a cyclist is mandatory as opposed to optional (RSA, 2018b). Cyclists are, then, both entitled to this space and

obligated to use it. Indeed, there has been significant controversy and ambiguity regarding this particular expression in the rules of the road of this legal mandate, with claims that it this law was revoked in 2012 and was reintroduced without supporting documents (Ginty, 2017). Accordingly, the spatial entitlements of cyclists in relation to the use of traffic lanes when a cycle lane is available are contested.

With the exception of the controversial mandatory use of reserved cycle space, utility cyclists also possess normal spatial entitlements as road users. As stated in the rules of the road, the rules apply to all road users including cyclists. In light of this, and with the exceptions already discussed, so do the rights. Most notably, cyclists have equal right-ofway in relation to other road users. As stated in the rules of the road addressed to motorists "Your vehicle does not have greater right-of-way than any other road user" (RSA, 2018b, p.204). In this sense, they have an entitlement to the space ahead, and therefore, to continue cycling ahead in the various instances in which a motorist would have right-of-way: namely, on roundabouts, at road junctions and in shared spaces where other road users may try to overtake. Importantly, for all road users, right-of-way is not an absolute right as exercising one's right-of-way is subject to exercising regard for the safety of other road users. Furthermore, since it is mandatory for cyclists to occupy cycle lanes rather than traffic lanes when they are present, this implies - although not explicitly stated – that cyclists are entitled to occupy traffic lanes when such cycle lanes are not present (with the exception of motorways). Accordingly, cyclists are entitled to equal right-of-way and the use of traffic lanes like motorists since they are road users (RSA, 2018b).

Indeed, the spatial entitlements of cyclists are in transition. At present, cyclists are not legally entitled to a minimum passing distance in relation to overtaking vehicles. That is, there is no legislation to legally oblige a motorist looking to overtake a cyclist to do so with a specified minimum passing distance (e.g. with one metre of clearance to the left). Rather, the rules of the road recommend that overtaking motorists leave one metre of space between them and a cyclist when travelling up to 50 kilometres an hour and 1.5 metres when travelling over 50 kilometres an hour (RSA, 2018b, p.53). However, there are currently efforts to transform this recommendation into legislation so that cyclists will be legally entitled to these spaces in the case that a motorist overtakes them due to the potential danger close passing poses to cyclists, although none have yet come to fruition (Ginty, 2018). Furthermore, there are efforts being made to explicitly acknowledge the entitlement of cyclists to occupy the middle of shared traffic lanes in an updated version of the national 'Rules of the Road' (Sanz, 2019).

Irrespective of the spatial entitlements of Irish cyclists, in the context of Irish policy, the vision for cycling in Ireland is posited in the National Cycle Policy Framework (Smarter Travel, 2009) with the goal of cycling constituting 10% of journeys nationwide by 2020. Relatedly, it is stated that, by 2020, all town, cities, villages and rural areas will be cycle-friendly and that a strong culture of cycling across the country will have grown, with cycling considered to be a 'normal' means of transport and mobility. In order to realise this policy, a number of measures were put forward, most notably engineering based measures (hard measures) to improve the accessibility of cycling for all, and education and communication based measures (soft measures). On the one hand, for hard measures, the policy includes, among other things, directions to incorporate cycle friendly design measures in the planning of town and cities, the design and/or retrofitting of infrastructure that is conducive to accessible cycling (such as the potential construction of cycle tracks in some cases, but primarily through a package of traffic management measures). On the other hand, for soft measures, interventions are proposed to improve the public image of cycling and cyclists, to improve the behaviour of motorists toward cyclists, to improve the standard of cycling practice across the country through training, and so on. Accordingly, there is an integrated policy for prioritising and promoting cycling across Ireland that includes both engineering based interventions to change modal share and infrastructures in addition to communicative and educative interventions to change attitudes and behaviour.

Lastly, the infrastructural context of Dublin as it presently exists, then, has been well articulated by Conway *et al.* (2019) in which the proportion of infrastructure types were recorded for both Dublin (a city with relative low rates of ridership) and Copenhagen (a city with relative high rates of ridership). It was reported that, in Dublin, 26.7% of the main commuter routes toward the centre of the city consisted of painted cycle lanes, 48.7% were shared with bus lanes, 8.5% were unmarked and designed for shared use and, lastly, 16.1% consisted of cycle tracks (i.e. tracks exclusively for cycling, separated from motor traffic). In stark contrast, in Copenhagen, it was recorded that only 11.6% of the main routes consisted of painted cycle lanes, 0% were shared with bus lanes, 11.1% were unmarked and designed for shared use, and 77.2% were cycle tracks. Accordingly, this study quantifies an assortment of infrastructures for cycling in Dublin, contrasting them with a high cycling level city, thus revealing a stark absence of high quality infrastructure for cyclists in Dublin. Below, I have included various images of the infrastructures one may encounter as a cyclist in Dublin, including painted cycle lanes, cycle lanes shared with bus lanes, unmarked spaces for shared use, and cycle tracks.

These images should help to sensitise the reader to the cycle environment that participants describe in detail in the interview accounts that will follow.



















2. Precarious Entitlement

So far, then, I have established the significance of public space in relation to utility cycling and the current status of spatial entitlements for Irish cyclists. This leads us to introduce the core category of the study: precarious entitlement. That is, the various spatial entitlements of cyclists in Dublin that make up 'spatial entitlement' or 'entitlement to public space' in general, are experienced by cyclists as precarious. As a cyclist, spatial entitlement is perceived to be insecure and hazardous to exercise. Precarious entitlement, then, is the problem of having or perceiving an entitlement to something that is liable to give way or is inherently insecure in its use and is, therefore, risky to both assume and exercise. It is an entitlement that cannot be trusted or relied upon with confidence. This renders the entitlement bearer vulnerable and uncertain and thus leads them to feelings of hesitation and anxiety in assuming their entitlement. Entitlement that is precarious, then, is entitlement that cannot be taken for granted. In situations when an individual is heavily reliant upon a precarious entitlement - as I will impart in this study - they may face dangerous consequences in the circumstance that the entitlement does not hold or is not respected or even in simply exploiting the entitlement.

In the following sections, then, I will delineate three different concepts: *insecure space*, *spatial disregard* and *police neglect*. These are the conceptual properties of precarious entitlement. These properties are distinct enough to be conceptually separated from one another but, at the same time, are somewhat porous as aspects of one property can seep into aspects of another. Individually and collectively, then, they contribute to the experience of precariousness in assuming and exercising spatial entitlement as a cyclist in Dublin.

i. Insecure Space

As an aspect of precarious entitlement, utility cyclists in Dublin experience *insecure space*. That is, particular public spaces upon which cyclists travel upon, and are entitled to (and, at times, obliged to) travel upon are perceived as insecure: the cyclist frequently feels exposed to danger and threats and is, consequently, routinely on edge and vigilant. Through encountering public spaces that provoke a sense of insecurity, a cyclist's entitlement to public space is rendered precarious as they feel like they are often

putting themselves at risk in exercising their entitlement to such a space by travelling through it. In this way, their entitlement to a space is not easily or comfortably made use of – transiting and occupying such a space is found to be a fearful and uneasy endeavour: a precarious endeavour. One is never at ease or relaxed in insecure spaces. 'Being' in such spaces, then, such as sitting as a cyclist amongst vehicle traffic, may be avoided as much as possible in favour of moving through such spaces – getting away from them and the insecurity they evoke. As I will illustrate in this section, cyclists can experience spatial insecurity in a myriad of environments and situations. To begin, I will start with the accounts of James.

James finds many of the spaces upon which he cycles to be less than adequate for his safety. When cycling in Dublin, he encounters poor road surfaces, potholes, and obstructions on a regular basis. In relation to designated cycle lanes, these he considers in many cases to be unusable since they are not adequately segregated from motor vehicles, hence, they are often infringed upon and, therefore, rendered pointless. Furthermore, James finds designated cycle lanes heavily fragmented, or — as he describes — "piecemeal", and, consequently, poorly integrated. This fragmentation of cycle lanes plunges James in and out of space shared with motor vehicles without warning. This he finds very threatening due to the power of these vehicles and, therefore, threatening to his vulnerability when sharing space with them.

R: You find infrastructure quite problematic, then...

J: Oh yeah. So, one of the things that's been bothering me: in the duration of time that I've been cycling – say 25 years – when I started cycling, there was *no* such thing as a cycle lane. Now there are, but they are not continuous. So they'll breakup. You'll get a, you know, 500 metres of a cycle lane, then it stops because the planners couldn't...find a way to continue it and suddenly you're in with the rest of the traffic...and then it starts again...and then it stops again (irritated tone)... And what they've done, I reckon, is stitched all those half kilometres together and report them into Europe and say "hey, we've got, you know, 500 kilometres of cycle lanes in Dublin" and that sounds wonderful but it's...it's all chopped up, it's...piecemeal, literally. So, the infrastructure is not there yet.

R: And when you're 'in with the rest of the traffic', what's that like for you?

J: It's quite frightening because you're suddenly in close proximity to all the cars – the big, metal cars – with their airbags and all their safety features are...right beside you.

Accordingly, James experiences insecure space when cycling in Dublin due to hazardous road services and being forced away from exclusive space and into shared space with motor vehicles due to the fragmented design of cycle lanes or obstruction of them.

Patrick experiences insecure space in a different manner. Rather than being uncomfortable with mere exposure to vehicle bound road users, Patrick is uncomfortable with the current design of cycle lanes being shared with motorists since, he feels, they are not enough to force other road users to stay out of these lanes. Therefore, Patrick views the only secure space to be a segregated space where cyclists are separated from vehicle traffic through an elevated path, thus forcing the motorist to notice and pay attention to the cycle lane and, presumably, respect it by staying out of it. The current layout of designated cycle lanes mixed with traffic, then, is perceived by Patrick to be insecure due to the fact that it is not protective of infringements by other road users.

R: Better cycle lanes?

P: By better cycle lanes, I mean they are *off*... They're not just a section of the bus lane (chuckles)...or the other lane, with a line through it. They are actually *on* the pavement and...I think a slight elevation of a cycle lane, like a car with a visual prompt of the motorist, is highly effective and is almost crucial otherwise I'm not really sure of the effectiveness of it – "do people to pay attention? Do buses? Meh, a bit..." Not really, you know what I mean. I will say though, it is a big risk. If cycle lanes could be elevated off the road like another pavement...it makes it better, definitely. Cars pay more attention to that because they *can't* – without a bump – they *can't* drive onto the cycle lane.

However, Patrick perceives insecure space not only with cycle lanes integrated with road traffic, but, also, for an existing segregated cycle lane that is poorly maintained. This particular cycle lane is unnerving to use due to its hazardous surface which is uneven and sometimes slippery and, more importantly, does not clearly designate that it is an exclusive space for cyclists. Namely, the cyclist symbol painted on this particular

space is wearing away and is often covered by leaves which conceal it. Therefore, nearby pedestrians will infringe upon the cycle lane. These pedestrians are perceived by Patrick, in the case of a collision, as both a risk to the cyclist but also a (potentially greater) risk to the pedestrian themselves. Thus, Patrick even experiences segregated cycle paths in Dublin as insecure, in this case due to a neglected, risky surface that, through its fading and concealed designation, mediates disregard from pedestrians:

One of the risks I would now say is for the *pedestrians* who are now on the shared space. You know, the cyclist moves down into being the one who is less vulnerable than the pedestrian. So you have to be careful, you know, because pedestrians will wander into cycle lanes, they need to be clearly marked. The surfaces and the markings on the cycle lane on the dual carriageway, which is a pretty...probably the benchmark quality corridor of Dublin, is *appalling*. It's rutted, pitted, it kind of got a different colouring which is wearing away... I've noticed they *rarely* clear leaves off of it, so the *maintenance* of it is very poor. The leaves, you think "well, so what" but when that ices over or is very wet, it's a very slippery surface for a cyclist. Plus, if there's leaves right across, the visual distinction for a pedestrian or cyclist isn't there.

Patrick went into detail about the particular hazards of poorly maintained bike lanes: they are precarious to use because their uneven services "can really knock a cyclist around" as opposed to enable smooth, predictable cycling and a sense of security in use. In these spaces, then, Patrick cannot cycle straight ahead without the risk of "destabilising" since cycling straight would mean going over an uneven part of this space. In this way, cyclists are entitled to cycle in this space but, in practice, cannot simply cycle in a straight line without the risk of losing balance. Hence, this example of insecure space is a clear illustration of precariousness in exercising one's entitlement to a space:

...they're not maintained very well, even on Stillorgan dual carriageway – which is probably one of the better maintained ones that there are – it's in a bit of a state, you know what I mean, and small little divots – which would mean nothing on a main road to a car – can really knock a cyclist around, you know what I mean. They have to swerve to get out of it and through that it can destabilise them, you know. Not sure that the people who maintain them – well, I'm not sure if they're being

maintained at all... I'm not sure that the people who maintain them realise that would be...almost nothing to motorist in terms of what can really knock a cyclist around (chuckles), they will actually have to swerve to get out of it *or* risk destabilising themselves by driving over it (chuckles).

Whilst travelling with her child, Yvonne experienced first-hand the dangers of poorly maintained space as a cyclist following an incident of "destabilising" in a space of insecurity:

As a cyclist, I would say my biggest issue is the lack of infrastructure and the road surface. Myself and my son came off the bike a few months ago – hit a pothole, lost control of the bike and two of us flipped out into the road and, luckily, the car behind us stopped. But that was pretty scary...and it was just the road surface was so bad on Dorset Street. That was scary and that's something simple they could fix – the road surfaces.

In this particular incident, Yvonne fell off of her bike with her son on to the road where incoming vehicle traffic was approaching. Luckily, the oncoming vehicle stopped in time to prevent a collision. Nevertheless, this was not the only time that Yvonne experienced a close call due to insecure space. On one particular location, Yvonne and her young daughter following nearby were passed at an unsafe distance and uncomfortably high speed by a motorist. At the location of the incident, the cycle lane upon which Yvonne was occupying while cycling towards an upcoming bridge "magically" disappeared thus positioning Yvonne and her daughter in a space primarily occupied by motorists. Despite holding the infringing motorist partially responsible, for Yvonne, this scenario was primarily brought about by the insecure design of space. Namely, Yvonne outlines that the sudden removal of the cycle lane while cycling towards the bridge places cyclists in a position of "fighting for a space" with other road users in motorised vehicles when there should be a separated, secure space for cyclists so they do not have to compete. This sudden absence of designated space, she believes, then, encourages the disregard of cyclists in space by motorists such as close passing and "cutting" across a cyclist's rightof-way through making it a space of competition. Accordingly, Yvonne avoids these insecure spaces when with her children or, when on her own, attempts to occupy them as little as possible by staying out of the way as much as possible:

R: So you try to keep to yourself as a cyclist, generally...

Y: Well, see, in a lot of cases... One day going up Drumcondra Road...you know on Drumcondra Bridge, the way the cycle path magically disappears - again, these are all infrastructure problems... But, anyway, a guy close passed me Drumcondra Bridge – not really fast, but fast enough – and I had my daughter with me and she was on the road. The guy got stuck in traffic so I shouted across to him, he pulled the window down and I said "That was a really dangerous pass you did back there" and he said sorry, in fairness. But, again, that was caused by infrastructure...and I know he shouldn't have done it but the whole way that Drumcondra Bridge is set up: the cycle lane disappears and then you and a car are fighting for a space, it's... Drumcondra Bridge has a really wide footpath. Why don't they put a cycle lane on the footpath? There's space for it there. But, yeah, Drumcondra Bridge is really dangerous. I would avoid that bridge when I have my daughter on the bike and we're heading into town - we would go through the park and go up Botanic. Like, another thing is that there is a cycle track on one side which suddenly disappears that was supposed to continue straight ahead but is now obstructed by pavement and so, when you're on a bike, all of the taxis suddenly start cutting in across you to go into the bus lane...but, ah! What I do with the children is I always avoid that...and with myself, now, I know that I'd often...I'd tuck in really, really tight but you will get close passes there as well. People just don't realise, again, because as soon as the bus lane appears all the taxi drivers start rushing into it...again, bad design, so you end up in a vulnerable situation so I'd never, never bring my children that way.

Indeed, insecure space is not a peculiar occurrence for Yvonne. She encounters it and avoids it on a regular basis on her cycle journeys around Dublin. In contrast to her husband who, she describes, "will cycle the quickest way to get somewhere", Yvonne always chooses "the safer route" which is not as fast as travelling through insecure space, thereby avoiding some of the major routes through the city such as O'Connell Street. Dolier Street is one space that Yvonne finds particularly insecure as one is exposed to a multitude of buses that are moving in and out of the way of cyclists without a means as a cyclist to escape this space. Yvonne feels concealed amongst these buses and therefore at risk of being struck since it is particularly difficult to claim space amongst these high rising vehicles which occupy the majority of it. To make matters

worse, there is no way to exit this space if one feels overwhelmed by the exposure, hence, Yvonne feels "trapped" in this insecure space or, as she calls it, "wall of steel". Accordingly, one is sharing space with large, potentially dangerous vehicles whose drivers do not have good visibility of one as a cyclist whilst, simultaneously, one is constrained in this insecure space amongst them with "no way to be seen". One can get a sense of the helplessness and claustrophobia Yvonne experiences when on the street in her emotional recollection of travelling through it:

D'Olier Street is horrible. There is no safe place...because normally you can pull in. There's nowhere to pull into because if you pull into the left the buses are coming in and out...and you can't own the lane because there is always buses... There's nowhere to be seen. There's no way to make yourself seen. I'm cautious in that I don't take risks but I believe absolutely that when you're changing lanes you own the lane – you don't stick yourself in on the left of the lane...but on D'Olier Street there's just no way to do that! Like, if you own the lane there's still a bus in...there's no way to make yourself...felt...I don't know... Yeah, there's no way to be seen – you're just incredibly vulnerable. And I'm just thinking when you're in a car there's blind spots. When you're in a bus there must be 10 times as many blind spots...and you're between two buses...with buses behind you and buses outside of you, and all it takes is one of them not to see you. It just feels incredibly unsafe. And once you're in the middle of it, you can't get out of it either – you're trapped by all these buses around you...there's nowhere to retreat to. I will never voluntarily choose to go that way ever again. It's just a wall of steel...

Thus, Yvonne encounters insecure space as a cyclist in Dublin through hazardous road surfaces and exposure to vehicle traffic in the absence of cycle lanes. However, for Yvonne, "intermittent" cycle lanes also contribute to insecure space for cyclists. To expand, Yvonne frequently comes across cars parked in designated cycle lanes across the city; nevertheless, some of this parking is, in fact, legal. In this way, only some cycle lanes are exclusively for the use of cyclists whilst others can be parked upon with some regulations. In response to this, while cycling with her children to swimming classes, Yvonne and her children will use the footpath rather than enter the insecure space outside of the cycle lane that mixes bicycles with vehicles. Hence, occupation of the cycle lane by motor vehicles forces Yvonne and her children into space mixed with motorists which, as Yvonne describes in the earlier excerpts, she perceives to be

grounds of competition between road users. Accordingly, for Yvonne, non-exclusive cycle lanes contribute to the insecure space of cyclists. In this way, similar to the physical fragmentation of the cycle lane that Yvonne encounters, temporal fragmentation occurs too, with some cycle lanes being exclusive only to cyclists across certain margins of time. This is, then, "schizophrenic of the infrastructure" for cyclists in general. Cycle lanes are not secure – they suddenly disappear and give way and, therefore, cannot be relied upon. Furthermore, since exclusive 24-hour cycle lanes are uncommon across Dublin, Yvonne perceives this contributing to the disregard of cycle lanes by motorists since they develop the general perception that cycle lanes can be parked on in general.

I come across parked cars all of the time. But then, see, some of its legal – that's the problem. Like, again, Ballymun Road...the kids and I cycle up to swimming and on that road you're allowed to park in the cycle lane...so they have to cycle on the footpath...because I'm not letting them out on the road. I mean, the thing is that's allowed...and that's kind of schizophrenic of the infrastructure as well. So, the odd cycle lane is 24 hours a day but a lot of cycle lanes are seven until 10 and then five until seven...so that kind of...it's enough to confuse people so if they see someone parked legally somewhere well, then, I think there will be a perception in their head "It's okay to park in a cycle lane." And they're not going to look and go "Oh, this is a 24-hour cycle lane" or "This is an intermittent cycle lane." So, I think that doesn't help. I don't see why they don't just... If you're making a cycle lane, make it a permanent cycle lane and enforce it

Olivia compares her cycling experiences in other countries to illustrate the relative insecurity of spaces in Dublin. Having learned how to cycle in Denmark, which frequently segregates cyclists from motorists, Olivia perceives many of spaces in which cyclists are expected to cycle in Dublin as insecure since many of the spaces integrate cyclists with motorists. As she says for spaces that are mixed but without a designated cycle lane: "there could definitely just be a cycle lane" as a means to provide some segregation between cyclists and motorists.

R: In general, how do you find the infrastructure?

O: Terrible (uncertain laugh)! Of Dublin specifically? No, it's so ridiculous with the bus lane in the bike lane in the same thing... And I'm, like, super spoiled because I picked up cycling in Denmark which is, like, you know, a cycling mecca of the world – so good there. They even have little underground tunnels for you to go through. Like, if you need to go left and then there will be a bridge so you don't have to cross traffic... It's amazing (laughs)! Yeah, here is...absolutely awful. But, I mean, I've also never biked in a big city before. It could just be the norm for all cities but...there could definitely just be a bike lane (obvious tone).

Even where Olivia comes across cycle lanes, though, they are only cycle lanes "in theory" as they do not adequately designate a separate space for motor vehicles. Thus, inevitably, motor vehicles infringe upon the space, therefore the cycle lane is unusable – it is not a cycle lane 'in practice'.

There are some areas where there have been a bike lane and that's like okayish but then it's also, like, the street is very narrow so it's like a bike lane in theory but the cars are still, like, very close and, like, not any fault of their own – there's just, like, not any space. Yeah...it's not good (laughs)!

This distinction between having 'in theory' but not 'in practice' relates well to the concept of precarious entitlement as one has an entitlement 'in theory' but in exercising this entitlement, one comes across various barriers and risks that make such an exercise precarious 'in practice'.

David describes the state of cycle lanes in general, providing a fitting summary of the variety of components that contribute to insecure space for cyclists, leading him to conclude, alike to Olivia, that many designated cycle lanes are merely symbols of safe, exclusive space that cyclists are entitled to use as opposed to realisations of this entitlement:

Cycle lanes are pretty crap. I think they're pretty poor. Yeah, they're frequently obstructed and they're poor quality and they've potholes...and there's no sense of a safe space. They're not really, I mean...they are cycle lanes only insofar as someone has *painted* the tarmac to...create the idea that "Hey! You can actually use this road to cycle." They're not protected cycle...with a few exceptions! But

most cycle lanes are poor quality, they are *nominal* cycle lanes...as in it's a notion...you know, they're not *protective*.

ii. Spatial Disregard

Up to this point, then, we have looked at the spaces that a cyclist may have to cycle upon - insecure spaces - which render their entitlement to cycle in a public space precarious. However, it is not only space but also the behaviour of other road users that can lead to a sense of precariousness in occupying or cycling through a space. Accordingly, another aspect of precarious entitlement in the context of utility cycling in Dublin is spatial disregard. First, cyclists experience their space being disregarded. When cyclists use a shared road environment they are routinely subject to various infringements of their space by other road users. Such spaces can include the space required to move safely and comfortably within a cycle or traffic lane, their designated space (i.e. cycle lanes and advanced stop lines before traffic lights) and their right-ofway (i.e. the space ahead). Accordingly, through infringing upon a cyclist's space, one is engaging in spatial disregard. Second, cyclist's experience being disregarded themselves in particular public spaces. For example, when in a shared traffic lane, a cyclist may be beeped by other road users for occupying the space, thus indicating to the cyclist that they are not entitled to use this space and must move out of the way. Relatedly, having one's right-of-way as a cyclist being "cut off" by another road user who has overtaken is also a way of being disregarded in a space. In this way, having one's space ignored by another road user is connected with having one's entitlement to be on the public space of the road or other designated spaces in the city being disregarded. Accordingly, spatial disregard refers to not only the disregard of a cyclist's space but also the disregard of a cyclist within a particular space. Both of these ways of seeing spatial disregard, then, relate to a failure to regard cyclists in a particular public space or a lack of respect for a cyclist's entitlement to particular public spaces from other road users. Thus, spatial disregard is a property of precarious entitlement as it renders one's entitlement to a public space risky to assume.

On his regular cycles around the city, Niall encounters spatial disregard in the form of close overtaking from taxi drivers in which he is not given as much space as he feels he is entitled to as a legitimate user of the road. He is afraid of these passes as a cyclist, describing taxi drivers as a "nightmare" since they pass "incredibly closely". This close passing, then, is seen as a sign of a taxi driver's lack of respect for cyclists as legitimate

road users. In this way, being given lack of space as a cyclist is experienced as being given lack of respect as a road user, which Niall feels is unjust as he feels he is entitled to care and patience as a road user:

Taxi drivers are a *nightmare*. *Absolute nightmare*. Yeah...they usually pass within inches of you. And, they're always in a rush, they're always seemingly impatient. And therefore, you know, it doesn't matter whether you're hi-vis, you got lights – whatever – they will pass you incredibly closely. And, you know, there's no...I don't think they give you much...ehh...it's just, there's not much respect for cyclists – in my view – from taxi drivers. So, I think they're the worst people on the road (laughs – resentful undertone), in Dublin and in Belfast actually, but much worse in Dublin.

He elaborates on how respect is expressed spatially (i.e. how spatial regard is shown) versus the spatial disregard of taxi drivers by contrasting his behaviour when passing a cyclist versus the typical behaviour of a taxi driver:

Because I do cycle and I do drive, when I'm on the road and I see a cyclist (with an air of obviousness) I'll slow down — I'll wait until I can pass round, you know. But it's just — that's all that is — it's just me deciding to wait until it's clear to go round. Whereas taxi drivers they're always after the next fare, so they're like (clicks fingers) "boom" — pass you. So I don't think they have very much respect.

Respect, then, is shown through the provision of space whereas disrespect is manifested by infringement of space. As Niall describes, "I'll wait until I can pass round". Implicit in this description is that one must wait until they have adequate space to pass around — that is, adequate for the comfort and safety of a cyclist, which Niall feels is not provided by taxi drivers when overtaking. Thus, some taxi drivers do not wait for the opportunity to pass with adequate distance and, rather, pass uncomfortably close instead. Niall elucidates this experience in a threatening, almost violent way as 'whipping past':

The taxis just don't hang back (while laughing)! They'll just whip past you with, you know, a foot of kind of clearance (through a smile)...

Distinct from Niall's experience of spatial disregard in the form of close passing, Patrick experiences spatial disregard through infringement of his right-of-way on a designated cycle lane. Namely, when Patrick cycles on a designated cycle lane on the left-hand side

of vehicle traffic, motorists sometimes turn left without checking for nearby cyclists thereby cutting them off. Patrick finds it insulting that some motorists do not respect cyclists moving straight ahead on the left-hand side when there is a designated cycle lane since they are, by failing to look and cutting off cyclists on the inside when turning left, disregarding the cycle lane as a lane of traffic with equal rights to other lanes of traffic (i.e. in this case, right-of-way). Patrick feels, then, that the cycle lane is not respected as a legitimate lane of traffic which ought to be respected like a lane of traffic designed for motorists and, therefore, cyclists are not respected in this space as equal road users whose right-of-way ought to be respected.

The challenges I have particularly are...when...a car is turning left. So you are turning on primarily their blindside. I fully understand and if there is no shared...if there's no cycle lane, I understand why cars are going and they will turn...they don't check...but everyone's in the same lane. But what I do have a big problem with is where there is a clearly marked cycle lane, that they cross that without checking...even though there could be eight, 10 different cyclists coming behind them. When they're crossing over a clearly marked cycle lane, I really have an issue with that...because they don't seem to treat a cycle lane like a lane: they wouldn't do it if it was a car...but they don't seem to give a shit if it's a bicycle. I think there is a huge lack of appreciation by motorists – drivers – that that is actually a lane of traffic, not just something there for the craic (highly irritated tone). If they saw a car on the inside lane they wouldn't cut a car across, so I don't understand why they do it to...to cyclists...

Adding to Patrick's sense of outrage of having his space disregarded as a cyclist and thus feeling disregarded as a road user through such spatial disregard, Patrick is highly visible and so believes that motorists are choosing to ignore him:

Now, I would say that, and I know this because I'm wearing hi viz with reflection and lights – so they can see me...

Nevertheless, Patrick perceives such acts of spatial disregard more as a result of thoughtlessness on the part of motorists – "passive negligence" – as opposed to intentional disrespect or malice. Thus, motorists disregard the space and spatial

entitlements of cyclists through a lack of due attention and care and not necessarily through a conscious rejection of or animosity toward cyclists as a type of road user.

I don't subscribe to the view that there is a huge cohort of people out there who are deliberately out to get cyclists (incredulous tone) — I think a large part of the problem is just absolute insensitivity...and, you know...passive negligence rather than...actively trying to take cyclists out.

Nevertheless, infringement of the cycle lane and right-of-way of cyclists is not only perpetrated by motorists. Indeed, Emma regularly encounters pedestrians who infringe on her cycle lane situated on the footpath designated as separate from pedestrian space. In this way, Emma concludes that cycle lanes as a space are routinely disregarded by both pedestrians and motorists.

Nobody passes any remarks on the cycle lane – neither the pedestrians when it's on the footpath or motorists when it's on the road.

Much like Patrick who viewed motorists not recognising cycle lanes as legitimate lanes of traffic and therefore disregarding them, Emma equates disregard of the cycle lane as a lack of respect for it as a legitimate lane of traffic. Emma contrasts the disregard of cycle lanes by pedestrians in Dublin with the regard of cycle lanes by pedestrians in Edinburgh. That is, whilst on a visit to Edinburgh, Emma accidentally infringed upon a cycle lane. Following this infringement, she was promptly informed by another pedestrian that she should vacate this space. Pedestrians here, then, in contrast, fail to "pass any remarks" on the cycle lane – they fail to demonstrate spatial regard, thereby making Emma's use of entitled space precarious in practice:

E: Pedestrians don't *respect it*. You know, they don't stay *off it*. Like I was in Edinburgh... And there were pathways where you can walk. And people would say to you – very nicely – "this is actually for cyclists (in hushed polite tone)". So, you know, *very politely* and then you realise "oh gosh" and you'd move because there was a...

R: These were pedestrians telling you this?

E: Yeah! So there was a pathway that was *clearly* a little figure on it showing that you *walk* on this bit and you cycle this bit (pointing to different areas), and I was mistakenly walking on the cycling bit. Thus, you see, it's clear there. Beside na Fianna [GAA Club], there's just a cycle lane and the footpath, and in my experience people walk on the cycle lane all the time (slightly annoyed). You know, they're walking up, they're walking down — they don't realise that there are actually walking on a cycle lane. So that's what I mean by they don't respect it: people don't actually pass any remarks on it. You know, they don't *stay away* from it for you to use it.

In Emma's account, spatial disregard by pedestrians appears to be merely a persistent inconvenience or nuisance, for Eoin, though, spatial disregard by pedestrians is considered to be a serious hazard. When cycling through Dublin city pedestrians cut through parked cars and stationary vehicle traffic to cross the road from the pavement without looking out for oncoming cyclists. Thus from Eoin's perspective, pedestrians in Dublin demonstrate a "complete lack of awareness" for cyclists. Consequently, Eoin is always on guard for pedestrians that may disregard his space and right-of-way through such a lack of awareness. Many years before, he learned of the traumatic consequences that assuming the security of his space can have under conditions of precarious entitlement:

E: Two girls walked in front of me across Abbey Street – they were coming out of Arnotts – and...they just...walked across the road without even looking! It was before I had the bell on the bike so...I could only roar at them...and then I swerved to avoid them. So, I came off quite badly and I ended up with...tibia and fibia broken here, ulnar and radius broken here (gestures to leg and arm). So, it involved...hospital and...three operations, I think? Yeah, so it was...quite serious.

R: Did it take a few months to resolve then?

E: I was on crutches for three months, yeah... Crutches for three months...I had an external fixator on this arm... I was on crutches for about *four* months, actually. And then, I suppose, you wouldn't be right again after a leg injury like that for another...9 months, a year before you're back to sort of 90 percent or 85 percent mobility... So it's...it's...traumatic stuff all right.

R: And where did that happen? You were cycling along a cycle lane?

E: On Abbey Street. There's no cycle lane but it's a quiet enough road for...cycling on – there's very little traffic on it.

R: Okay. And they appeared behind cars?

E: No, no. They just walked across the road without looking...and, sure, there was nothing to obscure their views, there was no other traffic on the road, eh... I mean, I swerved to avoid them and...when you have to do it at the last minute, you're mindful that there might be somebody behind you as well, so I ended up clipping one of them with the handlebars and that just...sent me off.

Accordingly, a lack of attention to and awareness of cyclists in this particular space in which Eoin was easily visible led to a multitude of debilitating injuries that affected him for almost a year. These injuries left him unable to walk without the assistance of crutches for four months and required an external fixator for the bones in his arm to heal. In this way, spatial disregard by pedestrians does not just inconvenience cyclists but also threatens their safety and, therefore, renders their spatial entitlements precarious to exercise.

In addition to experiencing spatial disregard by pedestrians through a seeming lack of attention to oncoming cyclists, Eoin has experienced blatant non-recognition of his entitlement to public space in the past. Moving up the street along a designated cycle lane with right of way over cars pulling out from the right, Eoin exercised his entitlement to the space in front despite noticing cars coming out of a side street up ahead. In exercising his entitlement to the space ahead, one particular car suddenly came to a halt to prevent a collision with Eoin. The driver of this car did not regard the right-of-way of Eoin by pulling out as opposed to allowing him to pass before attempting to turn right and was visibly frightened by the near collision, a man in the passenger seat beside her, however, held down on the horn and verbally abused Eoin for exercising his entitlement to the space ahead.

There was another incident when I went up... I was going up Patrick Street, I was on my way up to Harold's Cross this time last year and...a car... Again, traffic was

stopped and I was going up the bicycle lane and a car – a line of cars – were coming out of the side street and I *think* there was a box for them to cross or there was a gap for them to cross to turn right, but...I had the right-of-way so I kept on going and...this car had to stop *in a real hurry*. There's a girl driving the car and she got a real fright – I can't remember if she was a learner or not – but, her *boyfriend*, *beside...leaned* on the horn and just started *lashing* me out of it for...driving on the road with my right-of-way! So, I mean, again, in that incident...I think I just gave him the fingers and kept on cycling.

Through exercising his right-of-way, then, Eoin was met with spatial disregard by the driver through potential lack of care, but, additionally, spatial disregard by the passenger through a glaring rejection of his entitlement to the right-of-way as indicated by the punishing behaviour that ensued.

Sophia remembers a similar incident to Eoin when her entitlement to continue ahead on a cycle lane in a shared road space was not recognised by a motorist driving behind her. Much like Eoin, Sophia was not spatially disregarded as a result of negligent attention or awareness but, rather, on the grounds of open non-recognition of her entitlement to occupy a particular space by another road user. Sophia was enraged by this particular experience, diffusing her indignation at this act of non-recognition by at the motorist behind her – something she would very rarely do.

I was cycling to my friend in Dundrum and I was in Rathfarnham where there is a way where the cycling lane goes straight but then the road kind of...one goes straight and the other one veers to the left. So, I was on the cycling lane and the car behind me wanted to do a left turn...eh...and he beeped at me (surprised tone)! And, it really annoyed me because, you know, it's...I'm on the cycling lane, I have the right-of-way and he beeped at me and I remember I turned and I was like "Fuck off" you know, swore at him. But, his windows were closed so he couldn't see me, but, that was the only time I think I kind of swore at a driver because he annoyed me with the beeping. And I remember clearly turning and, yeah, just saying "Eff off."

For Sophia, such an act of disregard was entirely unwarranted and actively transgressive as she was entitled to the space whereas the motorist was obligated to respect this

entitlement to the space. Thus, the active beeping was seen by Sophia as highly disrespectful and therefore provoked an angry response from her.

R: And why was that annoying for you?

S: Because I'm just, you know, I'm doing (highly agitated tone)... There was no need to beep, first of all, I don't like the beeping thing. There's no need to beep and, also, I was in the right, he was in the wrong, how dare he...beep at me. So that's what annoyed me...but, anyway, sorry!

Nevertheless, this incident was not an isolated occurrence. Indeed, Sophia experiences such acts of spatial disregard when exercising her entitlement to shared spaces of the road when the surfaces of the side of the road are too insecure to cycle through. As a form of spatial disregard, routine beeping, then, is to be expected when exercising one's entitlement to certain spaces shared with motorists.

R: And have you ever experienced that in the past – the beeping?

S: Yeah, every now and then, yeah. It happened a couple of times on Swords Road, actually – so on my way back from Ballymun where you share the lane with the taxi drivers and I remember... They fixed them now, but there was a stretch of the road where there was a couple of potholes, so, I always preferred to cycle more in the *middle* of the taxi lane or the bus lane because I *know* that these potholes are there so I preferred to cycle in the *middle* of the lane rather than cycling on the *side* and then *swerving*, you know, around the potholes last minute...so I had a couple of taxi drivers beeping at me because they thought that I'm *hogging the road*, I think, which I guess, in a way, I was, but, like I said, I prefer to...I *know* that it's coming so I prefer to be in the *middle* of the lane rather than avoid the potholes at the last minute. So, yeah, they would be beeping but...(makes indifferent noise)...whatever, you know – yeah, they have to *deal*, you know.

Indeed, it is worth noting that, in conclusion, incidents of spatial disregard from other cyclists were scarcely recounted during interviews. However, Simon, an older man, provided a rich illustration of an unpleasant encounter he experienced on a relatively secure space – a segregated cycle track through an urban park. In reading his account, it

is apparent the sense that his entitlement to public space had been disregarded by another cyclist travelling at a much higher speed on a specialised bike. This incident demonstrates the plausibility that precarious entitlement may be experienced even in supposedly comfortable and secure spaces due to spatial disregard or domination from unequally powerful road users – in this case, the cyclist on a racing bike:

S: I was going through that park...I was doddling along – ok, I was doddling...this guy comes in, coming the other way, on a racing bike, and he's haring along...and gave me ferocious abuse, because I was in his way!! I couldn't understand it! Now he'd gone by and I returned the abuse but he was gone by. It was stupid really, I thought it was really stupid. He was haring along on a racing bike...and...ok – you can hair along on a racing bike but, his attitude was that I was in his way...which I found incredible.

R: And what did he say specifically, if you can remember?

S: 'Get out of the fucking way!' I couldn't believe it!

R: And you go at quite a slow pace...

S: A steady pace – don't say slow! Steady pace (both laugh).

R: And this guy was on a racer so he was really pushing it.

S: Yeah! And his attitude was that I shouldn't have been on the thing, it was only him! Ridiculous creature.

R: I know you're allowed, there are two lanes aren't there?

S: Yeah, absolutely! *Perfectly* legitimate. Perfectly entitled to be there...not in his book, but, in everybody else's, yes!

iii. Police Neglect

Thus, cyclists must negotiate both insecure spaces and spatial disregard when cycling in Dublin, both of which may be considered attributable to dangerous interactions between cyclists and other road users. But what about the authorities that protect cyclists from acts of spatial disregard? In the context of this study, the final aspect of precarious entitlement is *police neglect*. In light of prevalent acts of spatial disregard,

cyclists in Dublin perceive that disregard of these spaces and their entitlement to occupy and transit public space in general by others goes unpunished or, put another way, the protection of these spaces and their entitlement to public space is neglected by the police through a lack of enforcement.

Police neglect is most notably felt through lack of punishment of illegal parking on designated cycle spaces by motorists: spaces that, as mentioned earlier, may permit some form of legal parking and therefore may already be insecure spaces. Accordingly, illegal parking in designated cycle lanes - whether these cycle lanes are intermittently legal to park in or exclusive to cyclists at all times - contributes to insecure space for cyclists and is, in addition, a form of spatial disregard since it infringes upon a space that a cyclist is entitled to occupy. Julia finds such parking highly irritating as she views it as endangering to cyclists by taking their entitled space and, through doing so, forcing them to enter space shared with vehicle traffic. She would judge such infringing road users as perceiving more of a "right to the road" with a sense that they are entitled "to dump their car wherever" irrespective of the spatial entitlements of cyclists and other road users. Julia sees this form of spatial disregard as an extra problem to deal with in addition to the already insecure space that is the unprotected designated cycle lane, where motor vehicles pass closely to the right. However, despite this spatial disregard occurring, it is seldom punished. In this way, Julia deals with precarious entitlement in its totality dealing with insecure space, spatial disregard and police neglect. That is, Julia cycles through a readily precarious space that is frequently disregarded by motorists with such disregard going unpunished by police. In response to these conditions, Julia feels neglected as a road user on every level. One gets a strong sense of precarious entitlement in general from her spirited narrative:

First of all, the proper infrastructure hasn't been provided and secondly there is no enforcement of that being a space for cyclists and then, thirdly, the average punter in a car doesn't see that they have to...you know, be considerate about that either. So, you know, at *no* level of society is *anybody* paying any heed to it, you know, making any considerations...

It is important to note that Julia does not only regularly encounter illegally parked cars and perceive police neglect due to the high occurrence of this transgression; namely, Julia does not only perceive police neglect since such transgressions are plainly visible and common thus inferring that police are not engaging in adequate enforcement.

Indeed, Julia has experienced police actively failing to enforce road traffic law in relation to both illegal parking in the cycle lane and general criminal behaviour by cyclists and motorists alike. Through witnessing this, Julia concludes that road traffic law (with the spatial entitlements of cyclists included) is neglected by police and therefore makes reporting incidences of spatial disregard to the police futile.

I've seen the guards just drive past cars parked on the bike lane, I've seen the guards drive past cyclists breaking red lights, motorists breaking red lights, I've seen them walk past – in Ranelagh – people *obviously* on the phone in their cars and have done nothing about it, so, I *don't* think road traffic law is something that the guards have any focus on...whatsoever. If I felt that reporting incidents would get me somewhere, I *100 percent* would report *every* incident, you know. But, otherwise, no.

Julia feels that the attitude of the police towards the spatial entitlements of cyclists was revealed by their internet activity, when they set up an online poll for the public to complete in order to gauge perceptions of what was considered more dangerous: breaking a red light as a cyclist or parking in a cycle lane. Namely, Julia believes that this poll implied a prejudice against cyclists as road users by trying to garner public opinion against cyclists who break red lights as opposed to motorists who park in cycle lanes. In this way, this can be seen as an incident of police neglect of the spatial entitlements of cyclists, exacerbating for Julia her sense of precarious entitlement as a cyclist:

I just don't feel the enforcement of it even exists at all in this country. And I think there's an attitude based on...recent tweets from the guards...the Garda Press Office, there was a recent tweet about "Which is more dangerous? Is it breaking a red light as a cyclist or parking in the cycle lane?" I feel the guards show their true colours and their attitude by even stating that social media survey about which of these highly, entirely illegal activities is more dangerous than the other. I felt that they had an answer that they had already come up with in their head and were just trying to spread on social media and it actually backfired because, by the end of the survey, it showed that more people were against...parking in the cycle lane. But, I felt that it was...illuminating at the level of the Garda Press Office whose responsible for the guards that they will even engage in something like that... I mean it's...pointless.

Daniel details his experience of police neglect of the spatial entitlements of cyclists near his workplace. In this particular location, every day, various motor vehicles will be parked on the cycle lane — some of which appeared to be parked on for the sake of getting coffee in a shop nearby. Despite witnessing this behaviour for over a year of commuting by bike to work, Daniel has never seen any punishment by police for these transgressions. However, in the same area, Daniel regularly sees cars that have been parked in paid parking spaces nearby being clamped by Dublin City Council for failing to adequately pay for these spaces. For Daniel, this demonstrates the level of neglect by police in enforcing the law pertaining to illegal parking in designated cycle space when compared to the persistent and ongoing enforcement of illegal parking by Dublin City Council.

You have cycle lanes there but, a lot of the time, delivery trucks will just be parked in the cycle lane. So, near work, there is a bike lane on the road but generally there's just like six cars parked on double yellow lines in the cycle lane to get a cup of coffee in the morning. And in the year and a half that I've been cycling to that office, I've never once seen...the traffic corps or whatever ticket those people who park on it literally every day. Whereas, say, Dublin City Council clampers for parking enforcement: you pay three euros an hour for parking in that area – every day, religiously, they are there, on the AM to catch people...and they clamp. In any given day in the office facility there's cars clamped from not paying or going over their paid parking time; whereas, from a safety perspective, these people are parking on double yellow lines willy-nilly and there's never any enforcement of that.

Police neglect, then, for Daniel is a significantly exacerbating factor in relation to precarious entitlement as a cyclist. Not only does he deal with unprotected infrastructure that leaves him vulnerable to motor vehicles, not only does he face illegal infringement of this infrastructure that is already fragile, but, to compound these already precarious conditions, the police fail to protect these insecure spaces from acts of spatial disregard. Thus, much like Julia, Daniel deals with all aspects of precarious entitlement as a cyclist.

So, I would say the infrastructure is *very* poor – it's just a white line, generally painted – but, then, the design is bad, but even *then* – when the infrastructure

exists and there is a bike lane albeit just a lane painted – half the time, at key junctions, there's just cars parked in it anyway and it's never enforced. So, you're kind of like "Pffft (sighs)." You're just back it with the traffic anyway, like. So it's very frustrating in that regard, where, if they're serious about road safety, it would be very easy to start enforcing the laws that are there, but...Dublin City Council can enforce the parking but the guards or whatever can't enforce their own safety side of things!

3. Conclusion

In this chapter, I have elucidated and explored the core category of precarious entitlement and its properties – *insecure space, spatial disregard* and *police neglect*. This has hopefully provided a solid basis of understanding of the perceived conditions that utility cyclists in Dublin respond to or, rather, *negotiate* as a cyclist in their everyday cycling practice. In the following two chapters the two ways that I have conceptualised cyclists negotiate the conditions of precarious entitlement will be delineated and brought to life through the accounts of Dublin utility cyclists themselves. Accordingly, having described and evoked my conception of precarious entitlement, the following chapters will detail my conceptualisations of how cyclists deal with precarious entitlement: namely, by *privatising vulnerability* and/or *provoking responsibility*.

Chapter 5:

Privatising Vulnerability

1. Introduction

In response to the conditions of precarious entitlement, cyclists can engage in privatising vulnerability. That is, cyclists can make their vulnerability emerging from precarious entitlement a private issue as opposed to a public or political issue. Instead of attempting to make others take responsibility in the face of precarious entitlement, cyclists can take personal responsibility for their vulnerability under these conditions which are, in a large part, brought about by the action and inaction of others who are perceived to be to be responsible for these conditions. In this way, privatising vulnerability refers to the process of taking vulnerability on as an issue of personal responsibility and control as a means of keeping oneself safe in precarious circumstances where one feels others cannot be counted upon. One retreats from interaction, reliance and any form of moral/civic relationship with others as a means to protect oneself as much as they feel is possible.

Four variations of privatising vulnerability were conceptualised. First, cyclists may take measures to pre-empt acts of spatial disregard from other road users as a means of privatising vulnerability – anticipating disregard. Second, cyclists may refrain from using or insisting on their right to particular spaces when such spaces are shared with other more powerful road users who may disregard them or are hazardous to transit waiving entitlement. Third, acts of spatial infringement by other road users may be patiently overlooked and endured due to the perceived futility of challenging such acts in promoting respect for spatial entitlement - tolerating transgression. Fourth and last, one may use space in a transgressive way - that is, in a legally or morally unacceptable manner – as a means of maximising their safety – precautionary transgressing. In combination, then, through anticipating disregard, waiving entitlement, enduring transgression and precautionary transgressing, a cyclist can make an effort to take their vulnerability in their own hands and out of the hands of others in doing what they believe is required to keep them from harm, irrespective of what is right or wrong and how things ought to be. Practical considerations of personal safety, then, may come before concerns of respect, convenience and fairness.

2. Privatising Vulnerability

i. Anticipating Disregard

Anticipating disregard involves a variety of actions taken in order to predict the disregard of others before such disregard actually occurs and protect oneself as much as possible in the case that such disregard does indeed occur. This entails, then, diverse means of making oneself more ready, more prepared and more aware in the case that an act of disregard does in fact occur. Accordingly, when one is anticipating disregard, they are in a state of heightened vigilance and some degree of anxiety, often bracing themselves for a danger and actively on the lookout drawing upon their senses – sight, sound and touch – and knowledge from previous experience for cues that they will be disregarded.

Niall, for example, complained about his 'nightmarish' experience of taxi drivers disregarding him by passing at speed without providing adequate space. Niall felt that this frequent disregard forced him to anticipate disregard for the sake of his own safety. In his efforts to anticipate he would never consider listening to music with earphones while cycling because he was conscious that they could pass without adequate passing distance at any second and he would need to be prepared for this possibility. Furthermore, along with having his ears open to anticipate an approaching taxi, he would visually be on the lookout for these taxi drivers in advance to enable him to anticipate before an act of disregard may be carried out. This 'looking out' would be ongoing throughout his cycle:

I'm constantly checking behind me. It would just be what I would do.

Much like Niall, Emma is frequently anticipating disregard. In particular, Emma anticipates buses on her left pulling out in front of her when cycling down O'Connell Street. She does this by watching their indicators carefully before passing in a state of "high alert". In other locations cycling around the city which are quieter, however, Emma's mind would be "a million miles away". Thus, Emma anticipates disregard in locations where she feels particularly at risk of being disregarded by other road users. In addition to Niall's use of his eyes and ears, Emma would anticipate spatial disregard using her sense of touch whilst on this segment of her cycle. In response to a question

regarding how she would deal with zigzagging buses on O'Connell Street, she described

this 'sensing' as part of her efforts to anticipate others infringing on her space:

Well, I suppose I'd be trying to anticipate. I'd be watching the buses to my left to

see if they just stopped or are they about to pull off – I'd look at the indicators. And

I would be... It's more of a kind of visceral thing - I'd be conscious of the speed of

the traffic to my right. I wouldn't be looking at it necessarily but I'd feel it. I would

be more on high alert.

However, bus drivers were not the only road users that Emma looks to anticipate.

Indeed, Emma described pedestrians as the most disregarding road user of all to her as a

cyclist. She found that pedestrians would frequently walk on the cycle lane without

adequate regard for or awareness of cyclists on it, instead watching out for vehicles to

the detriment of cyclists. In Emma's experience, pedestrians were far more likely to

suddenly position themselves in front of an oncoming cyclist than motorists. Although

Emma watches out for disregard by both, she is in fact less trustful of pedestrians

overall. Such a stereotyping of pedestrians as less trustworthy than motorists means

Emma anticipates disregard from this group of road users to a greater extent translating

as less of a willingness to trust them to regard her in a particular space:

E: I suppose what I'm trying to say I don't see the risk is as high with motorists

because, for the most part, my experience of motorists is okay. I don't find cars

kind of recklessly going out in front of me much. I don't have that much experience

with that...whereas I do have a lot of experience with pedestrians coming out in

front of me.

R: So, would you be...less trustful of pedestrians?

E: Probably.

R: Or, like, kind of be more alert with pedestrians?

E: Emmm...it's interesting, I'd probably be equally alert but would be less trusting

of pedestrians. So I would anticipate that pedestrians would disregard me more

than I would anticipate that motorists would disregard me. That's what I meant by

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the higher risk. I would probably be equally alert but I'd probably have more negative anticipation as to what the pedestrians would do than I would of the motorists. I would probably be more likely to trust a motorist easier and kind of think "well, they'll probably be okay" or whatever whereas a pedestrian, like, "God knows". They don't even see me; they're completely oblivious to the fact that there is somebody else on the road.

Olivia had extensive experience cycling in other countries in Europe and in parts of the United States. In comparison to these places, she was surprised to find that bicycles in Dublin shared a lane with buses. This, she felt, made Dublin the 'most intense' place that she had ever cycled before as she was positioned to cycle along with the largest vehicle on the road which felt perilous to her. Furthermore, adding to this fear of the larger vehicle and the difficulty of cycling, pedestrians frequently disregarded her right-of-way on the cycle lane. In this way, she feared both buses and pedestrians entering her space and felt the need to focus attention on these road users in advance of infringement. This was experienced as highly taxing on both the body and mind:

O: people are always like jumping right front of me and then I have to get off my bike to try not to hit them because my brakes are really iffy. So, it's definitely the hardest city that I've ever biked in thus far...

R: OK. And 'intense' - is that kind of... What does that feel like – that intensity when you're cycling around?

O: I just have to really, really pay attention. In other places it's like a peaceful thing to go on a bike (laughing). Even if it's like for transportation, I can like listen to my music and kind of zone out, but here I don't have headphones in, I'm, like, always looking at the road, looking at everything around me, looking at like... Always aware if the lane next to me is like open or not because I could need to just get into it at any second for, like, a pedestrian or a bus, so I just have two like pay a lot more attention than I would normally. And it's not a peaceful thing (laughs), it's always like very physically difficult and mentally engaging — I guess is what I mean by "intense".

R: Yes. So you are kind of "on edge" a lot of the time.

O: Yeah, yeah.

Alike to Niall, Olivia decided to stop wearing listening to music via her earphones as this impeded on her anticipation of risk which she perceived required her *full* attention. Music from earphones, then, would distract from the task of anticipating disregard. Despite being able to listen to music and even talk with friends while cycling in other countries, Olivia felt that, in Dublin, one did not have a choice – she had to pay attention at all times and as fully as possible for indicators that someone may enter her space or right-of-way:

It's just like the "I have to pay attention when I'm biking here" type of thing and it was distracting me a little bit. And then I'd like want to mess with the music and everything and change the song and it was just like "no – I should just focus on this one thing".

Crucially, at no point was it assumed that her space would be respected. Indeed, she felt a responsibility to anticipate disregard not merely a compulsion – there was no mention of trusting others or holding others responsible for her safety and space. In this way, anticipating disregard was a variation of privatising her vulnerability in that her vulnerability was taken on as a personal problem requiring a personal solution as opposed to a public or political problem requiring a public or political solution:

R: ...you feel out of control or in danger when you have earphones in...

O: Not so much in danger but it's just like I *fee*l like I *shouldn't*, I guess, just because I don't fully trust myself cycling in this town yet. Maybe not danger but just like...I can't get too mad at anyone around me if I *know* that I'm doing the wrong thing, if I *know* that I shouldn't have headphones in.

Similar to Olivia, Connor considered anticipating disregard a responsibility in the name of personal safety and, in doing so, left out any account of the responsibilities of other road users to regard the space of cyclists and cyclists in space. In this sense, through his perceived lack of social alternatives in dealing with the danger emergent from spatial disregard – that is, his perception of dealing with precarious entitlement in an entirely

personal, non-relational way – reveals anticipating disregard as a variation of privatising vulnerability. He thought his lack of crashes to be a result of "being careful and aware" which was "the only thing you can do". Acts of disregard, then, were not seen as something that could be prevented. Rather, one just had to be aware of their possibility and take personal anticipatory action to mitigate the risk of this possibility. Connor iterated how imperative it is to *not* cycle in a way that assumes that you will be regarded – you *must* anticipate disregard in your cycling practice. In this way, anticipating disregard is something, as James describes, you "have to" do as a cyclist in Dublin if you want to stay safe. If you do not, negative consequences will ensue.

Connor would anticipate disregard by slowing down and looking out for potential disregarders. Through doing so, first, he would be given the time necessary to be aware of who or what was happening around him; second, he would be going at a speed that would give ample time to allow him to stop in the case of sudden infringement of space. Such infringements of space could occur for Connor by any type of road user in many different types of situations. Indeed, he recalled an instance of disregard by a driver parked in the cycle lane exiting their vehicle. Having failed to anticipate disregard or, rather, having assumed safety in exercising his entitlement to public space, Connor had experienced first-hand the consequences of unanticipated disregard:

Car doors opening – I don't know if that's ever happened to you – now, four or five years ago that happened me the last time and it was quite severe. I went into the door and over the bumper...right over the bonnet and I ended up right in front of the car... It was about half four in the evening and I remember the girl "oh, I looked in my mirror but I didn't see you" but they *all* say that...

Now, though, Connor ensures that he anticipates disregard in this particular form:

But, again, as I said, I always give myself plenty of notice.

Acts of disregard could also occur with pedestrians and drivers in moving vehicles, therefore anticipating disregard was considered necessary in these scenarios also. Connor had not only experienced the painful consequences of disregard from a motorist but also from disregard by a pedestrian and, having learned of the likelihood of these incidents occurring, had learned to anticipate disregard as a means of privatising vulnerability. In this particular incident of disregard, Connor did not have a "chance" of

preventing collision but, now, since he anticipates it he is "ready to stop" due to anticipating disregard at all times:

C: I know myself from cycling around that I am more cautious definitely cycling

around the city centre than anywhere else. Well, you can get people walking off

the path (irritated tone) and I'm sure that's happened loads of people... That

happened to me in Sheriff Street one day, one walked straight off the path and into

the bike... The two of us ended up in a heap on the ground and I hadn't a chance of

stopping. She just walked right out in front of me. So, again, if I'm cycling along and

I see someone standing, I would be ready to stop in case they're...going to come

out. And the same if I'm going along a road and side roads coming out, I will

be...waiting...I will be expecting the car to come out... I'll be stopping... I'd be

putting myself in the position that, if the car comes out, I'm going to be ready to

stop.

R: So that's in the back of your mind...

C: That's in the back of my mind...

R: I'm ready to stop, I'm ready to give way if that's going to make me safe...

C: That's in the back of my mind all of the time that I'm cycling.

road users at all times in anticipation that they may disregard you:

Katherine iterated the experience of Connor in anticipating disregard. During the interview, having been given time to reflect on her experiences, she recalled her emotional state of anxiety when cycling along Baggot Street, where she found cars often pulled out without indicating or regard for oncoming cyclists. In this particular situation, anticipating disregard was a crucial means of keeping oneself safe. Indeed, in her vivid account it is clear how the risk of someone pulling out evokes a strong sense of anxiety and protectiveness on the part of Connor. Aware of this possibility, she becomes "on guard" and "vigilant all the time" due to the precarious nature of her entitlement to public space which can give way at any moment through acts of spatial disregard. A running car in a parking space is enough for one to be wary – one must be cautious of all

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K: It was the other day, somebody pulled out in a car and, again, they came *very*, *very* close, like, no leeway at all...and just... There were *two* incidences the other day and, yeah, that kind of thing where it wasn't a bus, it was a car where they were just *very* close or they *pulled out*...actually they pulled out without even indicating and I was beside them. They didn't even...they didn't even nearly see me, I think. I was coming along and suddenly they just pull out but, again, that's where you need to be *so aware...* of the potential. If you see a car running, do you know the way? If you see the lights are on, you just need to be aware that they could pull out... You really have to... It's no more than seeing children or dogs or animals going to the other side of the road... It's a bit like the rules of the road thing where you keep...you've to be looking *constantly*... You actually do have to be on guard – without realising it, you actually are *constantly* on guard. So yeah, people, cars, they just *pull out* regardless and...ignore...ignore you...but it's not disrespect – it's putting you at risk, because they just haven't bothered to look around. That's really it. So you need to be *on guard* – vigilant all the time.

Similar to Katherine's description of being "on guard" and "vigilant" in response to the risk of spatial disregard, when cycling on roads with motor vehicles where there is no cycle lanes, Paula responds to her perceived vulnerability in this shared space by going into "protective mode"— a state of anticipating disregard. In this state, she checks to see if other road users are aware of her presence visually as a means of predicting whether they will regard her in a space or not, checking to see if their indicator is activated and looking at their behaviour to see what they will likely do next. In Paula's opinion, such anticipatory behaviour has saved her from being killed in the past. Indeed, as a variation of privatising vulnerability, Paula anticipates disregard as a means of ensuring her own safety despite being perfectly aware that such acts of infringement of space are a disregard to her spatial entitlements as a cyclist:

P: So, currently, I do the Loughlinstown to Sandyford route and, like I said, most of my route has cycling paths separate from the road or cycling paths with a straight line. So, I stick to them and I feel quite safe so that's good. Em...but I've also commuted long routes where I'm just on the road and there is no cycling path...and...when I'm cycling in a situation where I feel more vulnerable, I...go into protective mode. So, you know, I...stick to the rules...I use my hand signals...but, on top of that, I'm anticipating...the behaviour of...other road users – specifically cars.

So, I wouldn't look at the... Well, yeah, sometimes I would look at the driver to see are they *looking* in my direction...I'd *always* be looking to see if they're indicating...I'm *always* looking to see what their next move is going to be – just to keep myself safe. I have *literally* saved my life a *couple* of times by anticipating...eh...the behaviour and the next move of...of a motorist! (Pause.) And chased after them and called them a cow (bursts out laughing)! Motorist would say "Oh, I didn't *see* you" but what they *really* mean is "I didn't *look*."

R: And what would you say is the difference between those two things?

P: Eh...you can't see something if you haven't looked. So, they basically haven't...used...the facilities that they should be using – they haven't been a proper road user. Like, for example, I'm on the road and a car is about to come out of a side road and come into my...lane, right? If I see a car sitting there about to come into my...lane, I know I have the right-of-way but I know by their behaviour that they're coming out anyway...like pffft (shakes head).

As Paula eloquently describes, under conditions of precarious entitlement, one cannot assume that their entitlement to public space will be respected at any point as a cyclist – one always has to expect the worst from other road users by anticipating disregard. This means taking responsibility for others actions in your actions – this means – if safety is a priority for you – privatising vulnerability:

You know, you have to... You can't just take the right-of-way. You have to anticipate their move. And it's looking at situations like that where you're assessing the danger, the risk, where you just need to...take responsibility not just for your own actions but for their actions as well. Yeah, God, that's happened to me a couple of times...and literally, I'm looking at the driver and I saw they weren't looking in my direction – they just pulled out! You know, because you're a cyclist, your smaller – they don't see you. A lot of motorists, they literally don't see cyclists.

Failing to anticipate disregard may mean putting oneself, then, in harm's way through a failure of personal responsibility. In this way, through privatising one's vulnerability, anticipating disregard is experienced as a responsibility – something you have to do when you have knowledge of the likelihood of disregard. To do otherwise is reckless as

spatial disregard is a fact of life for a cyclist in Dublin, one that the cyclist must adapt to if they are to stay safe:

You know, the regular cut-off scenario which happens quite often. That happens to me at least twice or three times a year...and if I don't anticipate it, it would happen more often. But, you know, these are the occasions that you do have to anticipate and look out for. Now, if you are a cyclist, you're going straight on past traffic that's going slow that you know is going to speed up, you have to anticipate it. If you're a cyclist, you're going straight on where cars are about to turn left, you have to anticipate it. You have to look over your shoulder even though you're going straight on. There's no other way.

ii. Waiving Entitlement

So, anticipating disregard is one variation of privatising vulnerability. Waiving entitlement can also be seen as a variation of this process, one which is often overlapping with anticipating disregard, as I will demonstrate in this section. To expand, when a cyclist waives entitlement, they refrain from using or insisting upon their entitlement to public space. Waiving entitlement, then, means holding back from exercising or asserting one's entitlement. If one is waiving their entitlement, they are tentatively or submissively exercising it or even renouncing it altogether – giving it up. In this way, waiving entitlement can vary between the cautious and deferent use of one's entitlement and the complete renunciation of it. In the context of utility cycling in Dublin, cyclists waive entitlement to various public spaces out of a fear of the hazards of assuming entitlement in conditions of precarious entitlement. Namely, in conditions of precarious entitlement, asserting one's entitlement to a public space could result in serious harm due to the possibility of spatial disregard and the risks of insecure space. Namely, if one assumes right-of-way in a place where disregard of one's right-of-way is highly likely, asserting this entitlement to right-of-way with a motor vehicle ahead may result in a potentially harmful collision. Thus, although cyclists may be aware of their entitlements to a particular public space or to respect in a particular public space, due to their awareness of precarious entitlement, they opt to waive their entitlement to certain public spaces on the grounds of personal safety - they may dismount, reroute or give way and thus mitigate exposure to other potentially disregarding road users.

William waives entitlement in the sense that he refrains from asserting his entitlement to a road space due to a judgement of the greater risks in doing so. On his regular commute to college, he refrains from using a segregated cycle track beside the roadway due to its poor condition, which, he feels, is unrealistic for cyclists to use. Thus, he uses the road instead as a response to this incidence of insecure space. The road, then, is a smoother, cleaner surface that he can travel to college on, however, the speed limit on this particular road is quite high and he finds it intimidating to travel on because of this. On top of this, the left-hand side of this road surface has hazards of its own - bumps, drains and obstructions. Accordingly, William faces insecure space on two levels – first, a poorly maintained segregated space and, second, a road space that is hazardous for cyclists to use on the left-hand side, thus requiring cyclists to pull out into the road which has a high speed limit. Out of fear of fast moving vehicles in the centre of this space, William waits until the last possible second to avoid the potentially damaging surfaces on the left-hand side of the road space as a means to allow the cars behind him to pass before occupying the centre of the road. At the root of his reluctance to pull out is a perception that obstructing cars behind him by asserting entitlement to the road space is likely more dangerous than letting them pass. Overall, he fears anger from motorists from asserting entitlement on the road - he fears spatial disregard. His strategy, then, of waiving entitlement is a way of avoiding such anger and the potentially dangerous consequences of it since the potentially aggressive persons are operating powerful vehicles in a shared space. Nonetheless, waiving entitlement often backfires for William as he ends up swerving in front of a car that has, in some cases, not overtaken him despite his delayed response to the hazardous surfaces:

Cycling down those roads can be a little bit intimidating, when cars are like zooming past you! And so I feel like, if there's...if there's like...if I see a bump in the road up ahead of me or a drain pipe, I wanna avoid it just for my bike's sake. But, if there's a car right behind me, I tend to try and wait as long as possible to actually go around that, so that they have the opportunity to go around me. And sometimes they don't so I end up having to swerve at the last minute out and back in...just because I'm conscious of them getting past me without me interfering with them. So I end up normally...like if there's a cone in the road ahead of me, and I can see it and I'm thinkin, "I could get out now and pass by that cone, but then I'm going to stop this driver behind me, and I don't want him to get road rage and start, you know..." (smiles and laughs) so...so, I wait to give the opportunity for them to go

around, and most of the time they do. Every now and again they don't, so you end up...you end up maybe...making the situation...well they might make *my* situation worse because I'm then getting right up onto the cone before I have to come out and it's more of a...I guess a dramatic...eh...I'm sort of doing like this (sudden swerve hand movement) to get around the cone – I come like this. Em...and I feel like it's just...relying too much on them being aware of what I'm doing. So...that's about, I'd say, the two biggest risks: the little pebbles on the road and the fact that I know the traffic is going quickly past me...and that I try to give them an opportunity to pass me without me hindering them. And sometimes that hinders me because I'm coming up – I know I need to swerve around and they don't give me the opportunity...because they're not overtaking me the way I would like them to, or the way I give them the opportunity to, it ends up, I could...swerve out into traffic.

William waives entitlement even when there is broken glass in the space in front of him on the left-hand side of the road. This demonstrates the lengths he will go to in order to avoid asserting entitlement as a means of privatising vulnerability, overall, stemming from his fear of angering an oncoming motorist in a shared space. Asserting entitlement, he feels, could risk a collision with injurious consequences. Waiving entitlement, then, is the lesser of two evils despite the risk of him getting a puncture:

Just further down the road, I think like a week or two weeks later, there was glass...broken glass... on the side of the road. And, I went through it (expressively) because I'm not going to risk...I'd rather have a puncture than a broken bike and a broken back (while laughing)!

Indeed, he recognises that he has a "right to be on the road" but that such a right exists under conditions of precarious entitlement in which he must "compete" with more powerful and dangerous road users. When he is fatigued, he will, therefore, waive this right despite the fact that doing so will slow down his commute and he is not obligated to do so. For this reason, he does not get "beeped" when cycling tired because he will continually waive his entitlement in such a state due to the energy and concentration it requires to assert entitlement:

And that's from the fact that I don't get beeped (laughs) when I'm tired cycling – I'm on the path, I'm away from traffic. I'll cycle on the road coming through Finglas and Glasnevin Avenue but on the busier roads, if there's a cycle path, I'll stick...anywhere there's cycle paths, I'll stick to the cycle path. And if I see like a car that looks like it's in a rush to get somewhere, instead of competing with it for my right to be on the road, I'll just let it slide and be like "you know what I can wait...two more minutes."

Adam was, similarly, heavily reluctant to assert his entitlement to public space in the presence of other road users as a cyclist despite being aware of such entitlement. Speaking initially about asserting his entitlement by claiming space when shared with motor vehicles, he described his tendency, in general, to waive entitlement as a means of appeasing or preventing the provocation of anger in other road users. He was, alike to William, fearful of "holding up" motorists behind him by asserting entitlement to public space as opposed to waiving this entitlement and, therefore, letting them pass:

I try like...I'd rather pull over and stop and let cars by me sooner than hold them up. I don't like holding cars up because I know it frustrates a lot of people. Even when you see two cyclists out on a recreational cycle and they are cycling two abreast: if I was cycling with someone I'd try to cycle in single file...if there was a car going by me, because I know it just irritates people like...even though you have the right to do it...I just think that it frustrates people and that it's kind of needless for the sake of going in front of each other for a couple of seconds.

Although at the beginning of his account it appears that Adam simply does not like inconveniencing drivers, much like William, he reveals that, in fact, he has an underlying fear that they will disregard him if angered and, through this, put him at risk or in an uncomfortable position. He knows this because he is also a driver who becomes frustrated:

R: Ok, so, you generally would...make sure you're out of the way...

A: Yeah! If possible, yeah.

R: And that's to avoid the frustration of drivers...

A: Yeah, well...drivers would be a lot more aggressive than cyclists I think. Myself included probably when I'm driving a car, you know (laughs)! You'd be a little bit more liable to beep the horn. Like if somebody does something to you when you're cycling the bike, you'd very rarely turn around and give out about it or shaking fists or anything, but if you're in a car you'll beep the horn straight away or even flash the lights or do something like that.

In light with personal safety being considered a personal responsibility on the part of a cyclist, Adam equates his "proficiency" as a cyclist with the ability not to "upset people". In light of his description of the potential for aggression and spatial disregard by motorists, being able to cycle in a way that does not upset people means, as much as possible, waiving entitlement as opposed to asserting it:

I'm a fairly proficient cyclist anyway – I don't do anything that would upset people. Like, if there's a car going left I'm not going to go up into their inside, because I'm aware of it as a driver as well as a cyclist. You know, there is a car sitting before the feeder light goes green and the cycling goes on inside of them, I'd sooner stop because I know that feeder light could go green at any point then take the chance and go up between them.

Greg has seen a number of major collisions generally with a car turning left into the cycle lane and, in doing so, crashing into a cyclist. In most of these cases, he claims that the disregarding motorists excuse their behaviour claiming that they indicated and that, therefore, the cyclist should not have been on the inside. For Greg, however, this indication is always done too late and the motorists infringing on the right-of-way of the cyclist are merely neglecting their responsibilities to respect oncoming cyclists on the inside. In light of this experience of spatial disregard, Greg would always watch nearby motorists via their wing mirror to see if they could see him on the left. In this way, Greg will engage in *anticipating disregard* – he will watch out and look for cues that someone may disregard him in advance of it actually happening. When he recognises that someone has not spotted him and is therefore likely to disregard him, he will waive his entitlement to the right-of-way so that he can avoid the risk of a collision. He contrasts this with some cyclists who assert their entitlement irrespective of the likelihood of

being disregarded, who he considers – despite being morally entitled – imprudent in relation to their safety:

Some people will go flat out, you know, someone hits them, they go mad or whatever. I kind of take the view "yeah, maybe you're in the right but it's not much good to you if you're wiped out and in hospital". Like, it's not much good saying that he shouldn't have done that – yeah, maybe he shouldn't, but it's too late now.

As Greg argues looking after your safety as opposed to asserting your entitlements is the wisest course of action. The realistic consequences of your actions should be considered over what ought to be the case — that is, that your entitlement is respected and exercisable. Furthermore, as can be seen in the previous excerpts also, in waiving entitlement a cyclist is often sacrificing speed for perceived safety. Waiving entitlement requires one to practice patience for the sake of personal safety — one must give up their mobility through giving up the space they are entitled to but that is risky to occupy in light of precarious entitlement:

R: So, if you could tell me more about that attitude...

G: I cycle quickly, very quickly but I have a reasonable regard from my own health and safety, sometimes you see traffic merging, things are getting a bit tight, and sometimes it's just better to just back off, that the cars filter, let the cars turn left, where some people will just go for it – hell for leather – and kind of go "well, a car shouldn't come into the cycle lane" and you kind of go "yeah, maybe he shouldn't come into the cycle lane but he might, and, you know, if he wipes you out maybe you might be able to claim off of his insurance or anything but I'd rather be in one piece than...get in an tqai claim for it." So, yeah, it's just an attitude. My guess is if you stopped and said "why did you do that? You shouldn't be there." He would kind of go "Hmm, maybe not." At a different view on things, I think, it's just a more aggressive mindset, like "I have to be there" when it got to the point where if I was 10 minutes late for work, I wouldn't really care.

Nevertheless, despite implicitly claiming that asserting entitlement means abandoning "reasonable regard" for one's own "health and safety" whereas waiving entitlement does in fact exercise such regard, Greg maintains that one may indeed be understood on

moral grounds in asserting their entitlement, but, due to the inferior power of cyclists in shared space with motor vehicles, looking to assert one's entitlement or, as Greg puts it, looking to "enforce the rights on the road", is not a very intelligent course of because one will likely end up worse off as a result. Indeed, Greg had experienced in the past the consequences of a crash involving a motor vehicle, grievously injuring his collarbone. This orientation, then, of waiving entitlement, he believes has emerged out of this traumatic experience. Experiencing the harmful consequences of a road accident as a cyclist meant, from that point on, personal safety was prioritised over withholding his entitlement to certain spaces and, through doing so, getting to work on time.

R: And you'd be 10 minutes late because you wouldn't necessarily use what you should be able to use but you feel like it might not be respected?

G: Yeah, I think it's a case of if you're in a car you can enforce the rights on the road because you're kind of protected, it's kind of like "I'm in a big truck and you're in a motorbike", I mean, you can be aggressive if you want but...eh...it's not too smart to be aggressive when you're on a bicycle, I don't think – that's my view on it anyway. But, yeah, you see some people who are not too worried about it, well I'm not sure if it's because they are not too worried about it or just don't think about it... I definitely think 100 percent my attitude has changed since I crashed. I'm much, much more, kind of... It becomes a lot more real to you, like, that this is, really, really dangerous...and I just popped my collarbone going at 50 miles an hour and shattered it to pieces whereas if I was two inches to the right of the top of my head...wouldn't have been...wouldn't have been pretty...so, it kind of makes you think "how important is it to be where I want to go on time?"

Unlike Greg, who appears to have a generally relaxed attitude to waiving entitlement, for Patrick, waiving entitlement is often a frustrating but necessary exercise. Patrick anticipates disregard from motorists when turning left – he expects for them to infringe on his right-of-way when he is on the inside of them. In light of this anticipation, he does not rely on them to pay attention to him so he pays attention to them instead. So, as discussed in the earlier section, Patrick privatises his vulnerability by taking responsibility for the potential irresponsibility of other road users. This really bothers him as he feels that these motorists should be paying attention to oncoming cyclists and respecting their right-of-way – it shouldn't be his responsibility to watch out for them.

Nevertheless, waiving entitlement is what Patrick believes will keep him safe so he reluctantly does it regardless of what he thinks should be the case. Having anticipated disregard from other road users in shared space, Patrick will often waive his entitlement to a particular space or right-of-way, thereby mitigating the risk of a dangerous collision. In the case of one route, where the allocated cycle lane is unprotected and also very narrow (i.e. it is an insecure space) Patrick will waive his entitlement to this space as he anticipates that other road users will disregard it. Namely, he no longer uses this route despite being entitled to do so, thereby leaving it to other road users.

R: Okay, so you find that you can have sometimes vehicles coming into the cycle lane...

P: Absolutely, that is why I have stopped using the Rock Road. Because, it narrows at a point, there is a painted cycle lane, which doesn't leave enough, to be fair...doesn't leave enough for a car to go, so, it's just...what's the fucking point?? It's... There's no cycle lane. It's...just a line drawn through about a third or three quarters of the way out from an ordinary line. So, the effect of that is...it isn't fit for purpose. There is no purpose, it's just basically a waste of...road paint.

In cases, then, when there is no cycle lane or segregated cycle path, Patrick will waive entitlement by taking up as little space as possible in order to prevent holding up cars despite having to move out into the road lane at points – something which he seems uncomfortable doing:

R: So how do you experience, then, when you're in a road lane that doesn't have a cycle lane painted on and doesn't have a choice of a segregated cycle path?"

P: Well, I just cycle. I try not to swerve out too much (laughs), I just cycle as close to the curb as would be possible.

It is clear in Patrick's accounts that he avoids asserting entitlement to road space as much as he can. Similar to Greg, this, he believes, is the most prudent course of action in relation to his personal safety as he neatly captures his attitude to dealing with precarious entitlement with the phrase "irritated not injured". That is, he prefers to begrudgingly waive his entitlement in order to prevent injury rather than assert his

entitlement and risk injury. Accordingly, just like the previously mentioned cyclists discussed in this section, he feels a sense of entitlement but does not act on it for the sake of his well-being. Asserting one's entitlement is simply not worth the risk and as a vulnerable road user you cannot win – if you wish to stay safe, anticipate disregard from other road users and waive your entitlement in advance.

P: You know, you constantly hear cyclists going "I'm in the right, I'm in the right!" – it's no fucking good to you when you get knocked over. Right is fine up to a point but in any collision between you and a car, unless it's a wing mirror, you're going to come off worse. So, in terms of risk mitigation, you know – you're talking about how do I mitigate risks – I *modify* my cycling *wherever* possible, I'm aware of and wherever possible try and take account of stupidity in motorists...stupidity/inconsiderate motoring.

R: Yeah, so, you said now that you've kind of modified your cycling over time, over a long period of time...

P: Well, it's just *cop on*... See, the point is you can get...you can maybe have a lucky escape, right...so, for your own self-preservation you have to learn from this (chuckling), and you go "Right, I did *nothing* wrong there", but that's going to be no consolation for you if you're in the back of an ambulance – you know what I mean (laughing)?! You're right – you didn't do anything wrong *but*...if you had just held back a bit – *irritatedly* – they would have gone front of you. So you're irritated, not injured. So, I'd prefer to be irritated, not injured!

iii. Tolerating Transgression

A cyclist may anticipate disregard from other road users up ahead and, in anticipation of this, waive their entitlement to the right-of-way as a precautionary measure. However, what about when disregard is directly experienced or one's space is dispossessed by another road user? Namely, how does one privatise their vulnerability when they come across and experience transgression by others? As a variation of privatising vulnerability, tolerating transgression is when an individual endures or tolerates perceived acts of wrongdoing or disregard from another as a means of looking after their own safety and well-being. One can tolerate transgression by just "getting on with things" despite

experiencing what they believe to be someone doing something they shouldn't do. Other ways of tolerating could be taking a deep breath, making efforts to ignore what one has experienced, redirecting one's attention to other things or even engaging in some sort of privatised way of punishing the individual without direct action to bring about such a challenge to their behaviour. In this way, tolerating transgression can be understood as a variation of privatising vulnerability as one tolerates transgression, thereby dealing with precarious entitlement in a private as opposed to public or interpersonal way. The individual recognises that someone has committed an act of transgression that may have endangered them and contributed to ongoing conditions of precarious entitlement, yet, the individual responds by privatising vulnerability instead of looking to call the person to account or contest their behaviour in some shape or form. Challenging acts of transgression, then, does not serve the task of privatising vulnerability – it does not help the person deal with vulnerability within their own personal sphere of control as, by implicating people and attempting to oblige them to act in a certain way, one is extending their expectations of others as opposed to dealing with the problem themselves. Tolerating transgression, therefore, is part and parcel of privatising vulnerability as it enables one to refocus attention to themselves and their own actions in relation to managing their safety as much as possible as opposed to getting caught up in trying to get others to take responsibility for their vulnerability.

Adam experienced multiple acts of wrongdoing by motorists early on in his cycling practice. On numerous occasions, his right-of-way was cut off by an overtaking motorist whilst he was transiting a cycle lane. Thus, the transgressor did not only infringe upon the cycle lane but also infringed upon Adam's right-of-way as an equal road user. In one particular instance, Adam was cut off on his bike while wearing cycling cleats – devices on one's footwear that attach one's feet to a bicycle. Having been suddenly obstructed by a motorist, Adam fell off his bike due to being unable to release his feet in time. Following this incident, he was hurt and angry and followed up with the particular motorist to complain and challenge their careless behaviour. Unfortunately, Adam experienced a "nonchalant", indifferent attitude from the motorist in question which further aggravated Adam, leading him to curse at the driver in indignation. In addition to being moderately injured in the fall, he left the situation upset and dissatisfied – complaining had achieved nothing, so it seemed, except for exacerbating Adam's already fragile emotional state.

Following this incident and others of being cut off and disregarded Adam would commonly feel upset and dissatisfied, even sharing these negative feelings with his girlfriend after the event, perhaps even many hours after the event. This, he felt, also made things worse. He found himself feeling more indignant in addition to bringing his girlfriend down with him into a spiral of negativity. Eventually, Adam found this cycle of negative experience and emotion exasperating and ultimately futile. It did not bear fruit. Spatial disregard persisted. He decided, then, to let acts of transgression by other road users go and to take care of himself rather than expecting others to take care in dealing with him. So, the next time Adam was cut off, he waived his entitlement to the space ahead, hopped off his bike and did not confront the motorist involved. Now, he tolerates transgression and accepts precarious entitlement as a fact of life as a cyclist not worth contesting – complaining to the transgressors or to others is seen to achieve nothing in changing these conditions: it is up to the individual to manage them.

R: You said you don't complain now, you kind of just go...

A: I just say nothing — there is just no point. You go home in bad humour almost every day of the week if you said something to a car or somebody who did something stupid to you on the way home. It mightn't always be "oh, that fella nearly killed me!" But, it'd be the point where you have to jam on the brakes or whatever — a little bit of lack of respect for cyclists in some positions. Almost every day someone gets *insanely* close to me. I'm not saying, like, within two foot of me or whatever, I mean like their wing mirrors nearly clipping my... Like, if you had to swerve at all, you're hitting that car. That happens almost every day. And, back when I started cycling first, I would have given out, I would have been annoyed by it, but, now, there's just no point. I'd say, at most, I'd probably just shake my head.

R: There's no point because it won't make a difference?

A: Yeah! And it just puts you in a bad mood for the evening. You just go home and you think to yourself "Jesus, that was a close one." I might say it to my girlfriend if it was really close. But, I usually don't give out because of I give out, then, I'm automatically putting myself in a bad mood as well as the other person. They might have done it through no fault of their own — maybe possibly a lack of patience is the reason (laughing), especially at Northside there. But, I just don't bother giving

out because you're just not achieving anything by giving out to people all of the time.

Similar to Adam, James accounted for his approach of tolerating transgression as emergent from the insight that complaining or challenging transgressions does not change or improve the reality of spatial disregard and the wider conditions of precarious entitlement. James routinely experiences pedestrians infringing on the cycle lane due to neglect in their awareness of cyclists when crossing the road. Many of these occasions almost led to a collision between James and a particular pedestrian — as James called it: "near run-ins". James accounted for his change of response in dealing with such instances of spatial disregard over time:

Em...how do I respond to this... I used to get very angry...and then I realised it wasn't getting me anywhere ...so, I just...I've been quite sort of mindful about it, I suppose – I just take a deep breath and carry on, you know. What I might have done in the past is...let a roar at somebody or get into an argument with them because there is always an argument because everybody feels that they're in the right, you know. But I avoid that now because it doesn't do much to...for me. It doesn't resolve the case.

In James's experience, challenging acts of transgression has not led to any positive consequences. In relation to precarious entitlement and spatial disregard, it does not "resolve the case". Precarious entitlement continues just as before, only with James experiencing heightened indignation. Now, then, James tolerates transgression through letting this sense of indignation go and continuing on with his cycle. Furthermore, in more dangerous incidents of spatial disregard where James has felt that his safety was seriously threatened, he used to report to the police. However, he would either not hear anything back from his reports of misconduct or the response would be neutral. In this way, on another level, looking to punish transgression at a legal level did not work due to perceived police neglect — another condition of precarious entitlement. These experiences, then, further prompted James toward tolerating transgression and, through doing so, leaving behind the will to intervene in acts of transgression and hold people responsible for their actions and complicity in precarious entitlement:

R: Okay. So you'd never hear back from them...

J: I did once, but you'd hear back many months later and it'll usually be a very neutral response, you know, "well, the driver said this and you said that" and, you know, it'll be that sort of...balanced response and...nobody really gets reprimanded. And, I think, the incentive for road users would be to get reprimanded.

R: And "reprimanded", that...

J: Cautioned...penalty points if you...you know, there is a law that if you're in an altercation as a driver with a cyclist that you are automatically in the wrong, but I don't see that law being...exercised.

R: Okay, yeah. And so, in a sense, then, you leave behind the intention to reprimand.

J: I leave behind the intention to report it. Because I know that nobody will get reprimanded and nothing will come of it.

Accordingly, for both Adam and James, tolerating transgression is considered to be the most rational way to deal with acts of spatial disregard in the context of precarious entitlement as challenging transgression proves to be futile and, at times, personally destructive and unpleasant. For Julia, though, tolerating transgression is not only adopted as a means for one to cope better with painful emotions that could not be resolved socially (e.g. through interaction of some sort) but, rather, is a way of privatising one's vulnerability due to fear of the risks of public confrontation with other road users. Calling people up on their infringements is simply too frightening. Indeed, Julia feels especially vulnerable as a female cyclist. Having witnessed videos of cyclists challenging motorists parked illegally on cycle lanes, Julia felt that this fear was well-informed and that challenging the entitlement and behaviour of a motorist could result in some form of "punishment", particularly as a female, who Julia considers to be an easy target for angry motorists. In this way, Julia does not expect for her entitlement to public space (and, therefore, the responsibility of particular motorists to stay out of this space and the duty of care this involves) to be recognised but, rather, actively rejected

and perhaps even punished. Thus, tolerating transgression is Julia's response to such spatial disregard, despite clearly stating that these particular individuals "feel that they have more right to the road...feel they have the right to *dump* their car wherever." Begrudgingly, then, Julia tolerates spatial disregard and dispossession for the sake of her own personal safety.

R: Okay. And with parking in cycle lanes, when you come across that how do you generally deal with that?

J: Eh... I tend to get really annoyed. Because I'm female, I would *never* engage in any verbal contact with somebody who is parked in a cycle lane – I would not feel safe to do so. Worse I would do would be to give them a filthy look but even then I'm really reluctant to based on...a lot of the videos I've seen on social media people have tried to interact with somebody who is parked in a cycle lane... Witnessing the level of aggression that they get back, even as men, I just...I wouldn't be...confident or comfortable at all. Like, I cycle on my own a lot – I would *not* be confident that if I was to approach somebody that they wouldn't get out of their car, that then they wouldn't follow me, you know, later on and do a punishment overtaking for me having dared to say something to them about parking in a cycle lane.

Furthermore, much like James, Julia feels that police neglect is central to acts of spatial dispossession and leaves Julia even more vulnerable, prompting her to tolerate transgression since finding ways to report illegal parking and punish it is futile without police support:

Traffic law is not being enforced, so they don't see that they're doing anything wrong. I think that they just see me as another arrogant cyclist, you know, telling them to get out of *my* way as opposed to recognising that they're actually putting me at risk and causing stress for other motorists as I try and pull out around them.

Nevertheless, similar to James and Adam, Julia tolerates transgression as a way to deal with the destructive sense of indignation that can come about through experiences of being disregarded in space, having entitled space dispossessed by others and precarious entitlement more generally (e.g. having the enforcement of one's

entitlements being neglected by the police). That is, when Julia notices herself becoming increasingly wound up by acts of disregard and dispossession and engages in diffusing indignation by complaining about people and the situation, she "checks" herself in order to try and let go of these toxic feelings:

So, if I find myself muttering to myself as I'm cycling along and then I check myself because that's not healthy at all – so, I literally just say "Just stop, you know, that's just people." And, I find cycling so therapeutic from a physical and mental health perspective that if I just try and put those thoughts out of my head, immediately I feel better because you're cycling along.

Indeed, as a health professional, Julia is conscious of looking after her mental health and is aware of the risk of harbouring feelings of anger long-term. In this way, tolerating transgression is not only a means for Julia to privatise vulnerability by avoiding the risks of challenging transgression by some road users (e.g. being punished in some shape or form) but is also a means of privatising vulnerability by mitigating the mental health risks of bearing the indignation of precarious entitlement as a cyclist. Since Julia perceives that the issue of precarious entitlement will not be resolved any time soon, tolerating transgression is a wise course of action:

R: And do you find that in the past you would have ranted about it more than you do now?

J: Maybe when I first really started to notice it, it was *really* getting in on me but I'd be quite aware of how not to go down that slippery slope of negative thought. So, I probably would have started to notice that this was a problem in the last couple of years but now in the last six months I've tried to check myself that I don't let it really get in on me because I don't see it as anything that will be solved any day soon so that if I let it really, really annoy me, it could be really detrimental to my own outlook and my mental health.

Lastly, Brian provides a powerful illustration of tolerating transgression in his account of his cycling practices in conditions of precarious entitlement. At one point, Brian experienced an act of endangerment when a bus driver overtook him close and fast whilst shouting verbal abuse. Brian had dismounted his bicycle and used pedestrian

lights to cross at a junction and take a right turn rather than asserting his entitlement in the middle of road space to take this turn. In this way, Brian had waived his entitlement to road space, dismounted and, as pedestrian, used pedestrian lights to cross this junction. However, the bus driver behind him found this act intolerable despite its legality and, therefore, passed without due regard for the space of Brian whilst verbally abusing him out of the window. Brian labelled this as an act of "targeted harassment". Nevertheless, Brian did not respond with rage and retaliation but, rather, thought through the likely consequences of challenging this act of spatial disregard and opted for toleration. He spoke about this way of dealing with transgression more generally:

R: And what about a case where you were right?

B: The bus driver that I was talking about... But I didn't cycle after him. Yeah, it kind of depends, I suppose, on the day even like "Do I feel like even...attempting to educate this other road user about what they have done?" And, I won't drive up and hammer on the window and shout at them – there's no point! If I'm trying to do this, I'm genuinely trying to educate them so that, you know, for the next cyclist... I'm not just going to shout at this guy for the sake of shouting at him – there's no point. I'm going to get myself all worked up, he's going to drive away angry! And he's going to driveway thinking "What a load of absolute fucking bollocks!! That fucking cyclist! Fucking cyclists, yeah, none of them should be on the road!" And then the next cyclist might end up dead because of this guy. So, I don't want to make a driver angry – it's not safe for the next cyclist, I'm trying to make it safer for the next cyclist.

As Brian describes, challenging transgression in an angry manner could lead to more anger on the part of the other road user which, in turn, could further endanger cyclists from such a readily intolerant road user. In the service of reducing incidences of spatial disregard, then, Brian judged that challenging transgression would not only be futile as an approach but, even worse, it could exacerbate this problem thus endangering other cyclists. Accordingly, Brian touches on judgements of utility versus futility made by the previously discussed participants — challenging transgression does no good, tolerating transgression produces no more bad. Rather than the sources of harm being challenged, then, the harm is mitigated to the greatest extent possible on a personal level by

privatising vulnerability. Alike to Julia, this potential harm is psychological for Brian. Identifying himself as a "mild depressive", clinging on to indignation is not healthy for him. Tolerating transgression, then, enables him to let go and, therefore, ease psychological distress to the greatest extent:

R: Okay, okay. Have you ever asked anyone why they did something that you thought was unfair?

B: No.

R: So you haven't gone up and said, like "Why did you just do that?"

B: No. If somebody does something crappy to me, I just...I tend to generally think "Awh, he just either doesn't know or doesn't care." And, again, it's like "I'm not going to get myself worked up and in a fizzy about this." Generally speaking, I will... Immediately then when it happens, I will probably think "What an arsehole." And then I will generally try to dismiss it from my mind. And...I am a depressive – mild depressive – and...it does not do to get yourself...

Furthermore, tolerating transgression brings him back to the other aspects of looking after your safety on the road as a cyclist: *anticipating disregard*. According to Brian, if you allow yourself to give in to the indignation following an act of spatial disregard, you are now distracted and no longer anticipating and, thus, you are no longer prepared for future acts of spatial disregard or danger:

B: ...you know, it's...I suppose, you know the... You got to be like the dude. You know, you're letting your thinking become too uptight – if you get focused in on that one driver and you're like *raaaging* about that "Fuckin asshole. He did x, y and z and I was in the right" and bla, bla, bla...now you're not watching the road. Now you're not watching the other drivers. And they don't have to be very wrong for you to make a mistake. You don't need to make a big mistake, you know, it doesn't need to be something illegal, you just need to do the wrong thing at the wrong time and...suddenly you're dead.

R: So it happens and you just back into...

B: I will consciously make a decision "right now, you're driving along a street – let go, let it go. You don't want or need to be raging about this because that is distracting from the cycling that you are doing now. *Be in* this moment. Watch for the other guys.

In this way, tolerating transgression is not only a means of privatising vulnerability in the sense that one retreats from holding others responsible as a way of easing psychological tension. But, additionally, tolerating transgression can enable one to re-orientate themselves to the tasks of anticipating future acts of disregard, which can be perceived, as a cyclist in Dublin, as a never-ending imperative if one wants to stay safe.

iv. Precautionary Transgressing

So far, I have outlined variations of privatising vulnerability that, for the most part, are ways of cyclists dealing with the potential transgression of others. However, cyclists themselves engage in forms of transgression as a means of dealing with precarious entitlement. That is, cyclists engage in acts that are generally considered legally or morally unacceptable as a means of protecting oneself from harm and mitigating exposure to risks: *precautionary transgressing*. Transgressing, then, is done as a means of precaution in the face of the risks of harm in doing what one is legally or morally obliged to do or that which is acceptable to do. Thus, doing what is improper to keep oneself safe is thought to be favourable over doing what is proper but, through doing so, putting oneself at greater risk of harm. Importantly, 'transgressing' generally involves – much like the 'spatial disregard' of precarious entitlement – transgressions of space; that is, uses of space or ways of using space that are considered transgressive for a cyclist (e.g. use of the pavement, entering a junction through a red light).

As a means of dealing with precarious entitlement, precautionary transgressing is a variation of privatising vulnerability as one does what they believe they need to do to keep themselves from harm and risk to the greatest extent possible, irrespective of what one ought to do or what another ought to do. This awareness of taking precautionary measures against what is expected and accepted creates conflict in the individual which swings from a sense of entitlement based on considerations of personal safety under conditions of precarious entitlement to a sense of guilt deriving from one's awareness

that they may be putting others at risk or inconvenience whilst also breaking a moral or legal code.

Cycling to work in the mornings, Niall would use the pavement in sections as a means of privatising vulnerability through precautionary transgressing. On this journey, Niall would generally cycle in a bus lane with the cycle lane on the right-hand side. However, when a bus would approach from behind Niall would feel threatened and preferred to engage in precautionary transgressing by using the pavement – a space that is illegal for cyclists to use – to re-establish a sense of comfort, provided there was a window of opportunity.

If it's an opportune moment to get on the curb, the curb is clear and the bus needs to get by then I will do that – for my own safety. And if it's an option I'll do it.

Indeed, the fact that Niall was uncomfortable with buses being behind despite being perfectly entitled to use the cycle lane and 'hold them up' attests to his sense of precarious entitlement in that, with buses present, he felt the space insecure mixing with such a large vehicle and regard for his space by an approaching bus driver as precarious. Later in his account, he describes the bus as "trying to get by" which alludes to the notion that spatial disregard may be a threat from Niall's point of view. In this way, precautionary transgressing by using the pavement is a way of privatising his vulnerability under these circumstances rather than relying upon the approaching bus driver to take care of Niall.

In addition to precautionary transgressing when situated in front of an oncoming bus, Niall engages in precautionary transgressing in the absence of a clearly designated cycle lane on a particular road to work. This, it seems, relates to his fear of spatial disregard that may occur when 'holding up' motorists. The way in which he describes his behaviour – that is, with a shrug of his shoulders – demonstrates how he, in part, feels such transgressive behaviour is warranted due to the spatial insecurity brought about in not having a designated cycle lane in a space shared with vehicles.

I'll jump on the kerb because it's down to two lanes – there's no cycle lane. In fact, the cycle lane goes on the kerb for a period of time and then it just stops! So then you're on a road with two lanes and everyone is trying to get past you. And sometimes you will see a tailback of people who won't pass the cyclists because it's going to be too dangerous to do so. So, I stay up on the kerb (shrugs shoulders)!

He clarifies, with an air of obviousness, that precautionary transgressing is simply what he would do when there is no cycle lane which, from his point of view, equates to not having a secure or usable space despite being entitled to use spaces shared with vehicles in the absence of a designated cycle lane.

Yeah... Yeah, if there's no space for me. If there's no cycle lane, yeah I would of course.

Nevertheless, despite Niall's sense of being partially justified in transgressing on the basis of his personal safety, he also demonstrates his awareness of transgressing moral standards in his account of such behaviour. It is clear from the way he describes precautionary transgressing that he feels the need to justify it and moderate it by illustrating how he engages in it in a responsible and considerate way. He achieves this by describing the manner in which he transgresses: he uses the pavement but overtakes pedestrians on it with "lots of space" and cycling and at a pace that is "much slower" than when Niall is on the road.

R: When you're on the pavement and you see a person on the pavement up in front of you, how would you deal with that?

N: Well, I'll look for an opportunity to go around and give them lots of space and I don't drive...I don't cycle fast so I keep my pace *much* slower on the pavement. So even if (laughs)...even if you're a metre and a half away from them, they're walking their dog, there's no kind of...there's no...I'm not driving fast, I don't have my helmet on...

However, pedestrians, Niall finds, still complain about his transgressive behaviour despite doing it in a way that he believes is at least partially acceptable. This aggravates Niall as he judges his actions to be warranted since he is looking after his own safety by precautionary transgressing and also their safety by cycling in a way that is considerate of the vulnerability of pedestrians on the pavement:

I'm the one being safe, like I'm not racing by them.

In this way, for Niall, precautionary transgressing emotionally entails some degree of guilt but also some degree of entitlement.

This ambivalence is also present in the account of Simon, who engages in precautionary transgressing in times where he feels that his safety is more threatened in road space where he is entitled (and obligated) to be than in spaces where he is not entitled to be (and obliged to stay out of). Similar to Niall, Simon describes how he goes slowly on the path as a way of minimising the transgression. On the other hand, though, Simon sees his transgression as unjustifiable to some extent as he perceives that the pavement is for pedestrians and the road is for cyclists. However, the moral ambiguity of precautionary transgressing emerges as Simon raises the issue of precarious entitlement for cyclists on road space. As he says, the place for bicycles is on the road, however, there are often no designated cycle lanes, and when there are such cycle lanes are, these are often insecure to use and disregarded by other road users, hence 'precarious'. Accordingly, Simon uses the pavement instead at times "out of safety".

S: Sometimes, you know, especially at night, I'd ride on the path, actually. For instance, last night now, I was coming back from the Inns, I walked with this fellow who's in the class and we walked up to the bridge there and then he turned right and rather than go back onto the road I just nipped home on the path...

R: Yeah. And this is at night time as well...

S: Yeah, and I go slow, I always go slow on the path now...always. I shouldn't be on the path and I'm well aware of that and I go slow...and I apologise to people if they're to move out of my way. When they move out they're – sometimes people are very good, they move out of your way and I say 'look, I'm sorry, I shouldn't be on the path at all.' And they're very good about it, but...I shouldn't be on the path and that's the end of it.

R: And when you say you shouldn't be on the path...why do you think you shouldn't be on the path?

S: Ah! Because it's for the pedestrians and...you know...you shouldn't just be on the path!

R: Ok, you just a have a general sense that it's not...

S: Yeah! Of course, of course! Yeah...that's for pedestrians and...you know...the bicycle is for the road. Now, there should be *cycle lanes* – it would be much better and sometimes there are – but cycle lanes aren't great (doubtful tone)...and they're not that well respected. So, sometimes - out of safety really...I go on the path.

Unlike Niall and Simon who cycle solo and are primarily concerned with managing their own vulnerability, Yvonne is additionally a mother who cycles with her children on separate bikes, leading them to school in the mornings. For Yvonne, precautionary transgressing is clearly worth the benefits it brings to her children's safety and to her ability to look after children whilst cycling. Cycling in the spaces one is meant to cycle is simply too risky. Many other road users, however, seem to make allowances for her transgressing due to the fact that she is clearly bringing her children to school. As Yvonne puts it:

When you have kids the rules are different. People are generally more patient and nicer to you.

In order to cycle legally, Yvonne described that she would have to cycle on the left-hand side of the road whereas, for her children, the safest place was on the right-hand side pavement on the way to school. This, however, puts her in a position of having to shout across to the children on the other side of the road which, Yvonne believes, could lead to her children getting anxious and wanting to go across to their mother whilst, additionally, distracting Yvonne from her awareness on the road and therefore looking after her own safety. Accordingly, this arrangement is experienced as unsafe for Yvonne for both herself and for her children. Precautionary transgressing, then, is considered by Yvonne as the responsible thing to do – something one must do for the sake of safety:

So, there are times when with your children you have to cycle on the footpath...and there's no way around that.

Nevertheless, despite Yvonne's conviction that precautionary transgressing is justified, she still experiences ambivalence alike to Niall and Simon in breaking the law as a precaution:

But, the thing is, it *is* uncomfortable knowing that technically it's illegal. And, if someone, if they stop you and go "You know you shouldn't be cycling..."

Ultimately, though, Yvonne recognises that conditions of precarious entitlement meant that, with children, cycling where one is obligated to cycle does not make sense from the point of view safety and, therefore, precautionary transgressing is the most reasonable course of action. Yvonne describes how cutting through the local park avoided a hazardous bridge and confusing junction which both mix cyclists with motor vehicles, leaving cyclists vulnerable. However, through precautionary transgressing, Yvonne fears her 12-year-old could be subject to complaints from others when transgressing since she will be viewed as an adult as opposed to a child cycling. This dilemma leads Yvonne to challenge the act of cycling through the park as transgressing. That is, cycling is prohibited in the park but Yvonne believes "slow cycling" should be allowed due to the hazardous cycling conditions nearby in which the park provides a safe route for children. Prohibiting cycling, then, in light of precarious entitlement, was perceived as "unfair" and precautionary transgressing as reasonable.

...they repainted the signs in the park to say 'no cycling in the park '...but, again, when you're with kids it's a much safer way. In order to avoid a junction with my daughter I come through the park but, technically, she's 12 now so she's not a little tiny thing and, like, she's very good but...someone could kind of...rip us for doing that. I feel that's unfair because...that's the safer route...and we are being cautious and courteous and stuff. Rather than 'no cycling' it should say 'slow cycling'. By going through the park I can avoid the dangerous bridge and the weird junction — we go straight onto the protected lane so it gives us a much safer route into town.

Similar to Yvonne, Charlotte felt that *having to* transgress in order to stay safe was something that should not be the case – something that was unfair. One should be able to cycle safely where one is obligated and entitled to cycle. The conditions of precarious entitlement, however, prevented this from being the case. Charlotte vividly illustrated the conditions of precarious entitlement she had faced on her commute to work – first, spatial insecurity:

Conyngham Road was the most hairy...place. Particularly coming back into town, where you have a big junction where the Phoenix Park entrance is...and, as a cyclist, you're really exposed there because there's a whole lot of quite fast moving traffic turning left into Infirmary Road and...

And, second, the fear of spatial disregard; namely, Charlotte did not feel confident that she would be regarded by fast moving motorists if she chose to occupy the road space:

...you can't clearly be in that left lane - otherwise you'd be mowed down...

Consequently, exercising one's entitlement to the space required courage in the face of this precariousness brought about by spatial insecurity and fear of spatial disregard:

 so, you have to *force* yourself to be brave and go out into the...straight on lane where no one really wants to...and I felt quite vulnerable there...

Charlotte, however, came to find this precariousness too much to tolerate and deal with and, as a result, opted for precautionary transgressing as a means of privatising vulnerability rather than relying on others to respect her in an insecure space. This left her with a feeling of bitterness that her entitlement to public space could not be secure and comfortable to use:

...and eventually I decided I was going to use the path. And, I would cycle slowly on the path and where it is too narrow or there are too many people, I would just get off and walk it. So, I did kind of resent that...those junctions I did not feel safe at.

For Charlotte, then, it was simply not considered feasible in many cases to exercise entitlement without putting oneself at an unjustifiable risk and was viewed, therefore, as unfair that she was put in the position where transgressing was safer than compliance and which inconvenienced her commute by taking longer than the more dangerous route:

I felt a bit annoyed that...there wasn't a safe way for me to go that didn't involve me...doing that. So I either had to go on an unsafe route or go a safe route

but...break a few rules. It would have been faster to go along the Quays on the road but that was less safe.

Precautionary transgressing, though, did not only involve cycling on pavements and other prohibited areas. Joan experienced the road space as insecure for her as a cyclist — it was a place of competition between road users in which cars would be "racing other cars to get into the car lane" but, at the same time, "racing the cyclist" since "everyone is sharing that road space". In this way, Joan was in a space which was insecure due to mixing with high-powered vehicles and subject to spatial disregard, since vehicle bound road users could compete with her for space. In response to these conditions of precarious entitlement, Joan would break red lights at junctions when it was green for pedestrians to cross in order to get ahead of motorists who accelerate quickly at the green light and subject her — as someone "in the way"— to spatial disregard whilst competing for the single lane ahead.

...it feels safer to go with the pedestrians than it does...to be in the way of cars trying to race each other into a narrow one lane car situation. I think one of the reasons it feels so stressful is the speed at which they try to get off the mark at the intersection.

Indeed, in scenarios when spatial disregard has occurred in the past, Joan opted for the pavement rather than the road as a means of precautionary transgressing:

Someone didn't respect my right-of-way the other week and...I actually got up on the pavement because it was at a roundabout. So, I crossed and went down the pavement rather than going with the yield, yeah.

Lastly, precautionary transgressing did not have to involve illegal activity such as using prohibited spaces and breaking red lights. As a precautionary measure when taking a right hand turn, Brian dismounts from his bike and walks across a junction with pedestrians rather than occupying the right-hand lane to take a right turn, which would expose him to vehicle bound road users. In this way, he switches from a cyclist to a pedestrian and uses space allocated to pedestrians whilst abandoning space allocated to cyclists. Nevertheless, despite legally transitioning from a cyclist to pedestrian and therefore legally using pedestrian space, he is conscious that such behaviour could be

seen to be transgressive by motorists and thus bring about disapproval and annoyance. Indeed, Brian was subject to verbal abuse and a close pass from an angry bus driver who had witnessed this in the past, despite such behaviour being legal. However, in spite of the possibility of negative judgement under the motorist gaze and the potential for anger directed towards him, Brian judges such a morally transgressive behaviour (i.e. transitioning to a pedestrian and crossing using pedestrian lights) to be favourable over doing what may be expected by some other road users under conditions of precarious entitlement (i.e. claiming the right lane and taking a right turn) since the risk of injury or death at junctions, he perceives, is so elevated compared to other road spaces.

Walking across a junction during a red light when I can see that the way is clear and it would be *legal* for a pedestrian to do – I'll do *that*. And I know that *some* drivers will see me do it and *cop* – I hope – that I'm doing this – *this is legal*. And I *know* that some of them are going to think "What another arsehole cyclist." But, I'm balancing this out against "Yeah, but he's an arsehole of a cyclist that got through a junction safely!" As I say, when it comes to getting through a junction safely because that is not – statistically speaking – a good bit – that's where we die! I'm planning to *not* be one of the ones who dies very, very suddenly.

However, notwithstanding Brian's morally transgressive use of space that was legal, Brian was adamant that it does not matter whether his acts are legal or illegal: much in the spirit of privatising vulnerability, Brian will do what he believes he has to do keep himself safe and precautionary transgressing is one way of achieving this:

There is nothing I won't do to keep myself safe – legal or illegal. There *are* things that I will do that are technically illegal but I'm like "Yeah – I don't care! This keeps me safer." So...legality be damned if it keeps me safer...as *long* as it wouldn't endanger the pedestrian, I'd be thinking "I don't care if this is legal or illegal – I'm doing it."

3. Conclusion

In this chapter, then, we have looked at the different ways in which cyclists in Dublin privatise vulnerability under conditions of precarious entitlement ranging from watching

out for potential transgression from others that could put them at risk, giving up their entitlement to certain spaces, putting up with acts of disrespect or neglect for their space as a road user, and engaging in transgressions of space when it is judged to be safer than adherence to the rules or expectations of others. In the following chapter, we will look at what could be viewed as the contrasting process of dealing with precarious entitlement — provoking responsibility — in which one looks to oblige and implicate others into responsibility for the vulnerability of cyclists under conditions of precarious entitlement as opposed to making this issue of emergent vulnerability an issue of personal, private management.

Chapter 6:

Provoking Responsibility

1. Introduction

Provoking responsibility entails a radical departure from privatising vulnerability as a response to precarious entitlement. When faced with the various conditions of precarious entitlement in combination or in isolation, cyclists do not solely withdraw into private strategies of managing the emergent risks of these conditions. Alternatively, or simultaneously, they can provoke responsibility in others. That is, they can engage in various types of actions that may bring about or stimulate a sense of obligation in other road users toward their entitlement to public space. In one sense, a cyclist may provoke responsibility for a road user to respect their spatial entitlements by showing spatial regard toward the cyclist. This can include apologising for disregard, giving adequate space for safety and comfort, staying out of entitled space and respecting a cyclist's right to be in a particular space. In another sense, a cyclist may provoke responsibility by obliging another road user to regard them as a means of dealing with spatial insecurity, for example, allowing a cyclist to pull out into the middle of the road lane to avoid a vehicle parked in the cycle lane. When provoking responsibility, then, a cyclist obliges other road users to take responsibility for their vulnerability and spatial entitlements under conditions of precarious entitlement.

Five variations of provoking responsibility were conceptualised. First, cyclists try to make themselves as conspicuous as possible in a space so that others will notice them – accentuating presence. Second, cyclists assert their entitlement to public space to other road users in their proximity using their bodies and voices – asserting entitlement. Third, cyclists indicate to other road users that they have committed an act of spatial disregard – indicating transgression. Fourth, acts of spatial disregard are punished by the cyclist in a variety of ways that can be direct or indirect, first-hand or second-hand – punishing transgression. Fifth and last, cyclists make a case for other road users that they are worthy of respect by showcasing their 'responsibility' as a road user – displaying responsibility.

By provoking responsibility, then, the responsibility of others under conditions of precarious entitlement for a cyclist is not withheld but actively provoked despite the hazardous conditions of precarious entitlement and the risks provoking responsibility may involve. Accordingly, provoking responsibility contrasts markedly from privatising vulnerability, in which the responsibility of others for one's vulnerability and spatial entitlement is often forfeited in favour of personal management of risks emerging from

precarious entitlement. Through provoking responsibility, a cyclist's entitlement and the responsibility for others to respect the entitlement of a cyclist to space is maintained. In this way, unlike privatising vulnerability, the idea of a moral and/or civic relationship – a relationship of rights and responsibilities – between a cyclist and another road user is not abandoned but is actively provoked and stimulated to various degrees.

2. Provoking Responsibility

i. Accentuating Presence

Accentuating presence involves taking action to make one's presence in a space more conspicuous to others in one's proximity. This is a means of provoking a sense of responsibility in these others by reminding them or making them aware of one's presence in a given space, so that these others can take one into account in their behaviour in this space. Under conditions of precarious entitlement, cyclists in Dublin accentuate their presence so that, first, other road users will be aware of their presence in space and, second, having become aware, potentially respect their entitlement to a given space.

James finds cycling in a space shared with motor vehicles frightful due to their powerful nature and their capacity to harm him — that is, James perceives these as insecure spaces. When in these spaces, James is determined to be in front of vehicles at traffic lights before the green light is signalled. Hence, he negotiates his way through the vehicle traffic to reach the top. By positioning himself in front of drivers when in a shared space, James accentuates his presence to other road users, thereby attempting to provoke responsibility in them to take care of him in this space. Indeed, James believes being amongst drivers of motor vehicles rather than ahead of them is unsafe not only because of their power relative to a bicycle but, also, due to their "blind spots" caused by the design of the vehicles and a lack of watching out for cyclists. Furthermore, James views cyclists as poorly visible at night time, therefore making accentuating presence even more important in an insecure space. Thus, accentuating presence is a way for James to deal with both spatial insecurity and the potential for spatial disregard by motorists:

R: And when you're 'in with the rest of the traffic', what's that like for you?

J: Em... Very difficult to pass... em...and you *need* to pass because the safest place to be is at the top of the traffic when the traffic takes off. So, on a red light, you need to be in front of the leading car, you need to get there...because if you don't get there and the traffic starts moving and you're in amongst it, you're...you're gonna be...you're gonna be in close proximity to, you know, *moving* cars...stuff like that. So, from a *safety* point of view, you need to move past a line of traffic and get to the top...and, when there's no cycle lane, that can be quite difficult. You know, you got to manoeuvre around people's wing mirrors and stuff like that and drivers get little bit tense when they see you so close and when you cut in front of their cars – that might be the only way to get to where you need to get to, because it isn't safe to stay stationary in a stationary line of traffic.

R: Yeah, yeah. And do you find that's because of the speed discrepancy or...

J: Yeah... It's because of speed and it's more to do with proximity to the driver. So, you're very very close to a car or a truck – a truck that might have a blind spot – or somebody who has a blind spot because they're texting on their phone, they're not watching, they are not looking at their wing mirrors, stuff like that... At night time, it's very difficult to see a cyclist no matter how brightly lit you are – as a driver, I know that.

Nevertheless, James is under no illusion that accentuating presence is the only way to deal with precarious entitlement in this insecure space. Rather, James acknowledges that he chooses to accentuate his presence rather than cycle on the footpath (i.e. precautionary transgressing) since cycling on the footpath means he would not "make any progress" toward his destination. Therefore, James is not willing to sacrifice his mobility for safety — that is, James, in these circumstances, does not privatise vulnerability but, rather, since he still exercises his entitlement to the road in a shared space, provokes responsibility in other road users to respect him in this space by accentuating presence. Through this, James looks after his safety to some extent whilst withholding his entitlement to public space and the mobility that comes with it:

So, all these things mean that you, because of the proximity in a line of traffic, you've got to make yourself safe, and the only way to make yourself safe is to either get out of there onto a footpath – which means you are not going to make

any progress – or get to the top of the line of traffic as soon as you can. So, I make an effort to do that.

Brian uses alternatives to positioning to accentuate presence. Indeed, he takes accentuating presence as a cyclist exceptionally seriously and uses various means — visual and auditory — for others to notice him. This, he finds, is crucial because cyclists are often disregarded because they are not adequately visible and, therefore, highly vulnerable to not being seen. In order to accentuate presence, first, then, he ensures that he is visible to other road users through extensive use of high-powered lights all across his bike — so much so that people on the street will comment on how visible he is. Brian spends large amounts of money on these lights and always feels that the legal number of lights is simply not enough in order to be seen by other road users. So, Brian continuously purchases lights and keeps backup lights with him in case he is original ones fail. Under no circumstances does he cycle without lights. Equipped with his lights, Brian feels that it is almost "impossible" for others not to notice him. In addition to this, he uses bells that ring constantly as he moves so others will hear him approaching. On two fronts then — both sight and sound — Brian accentuates his presence on the road:

R: Yeah, so, do you find when you're cycling at all that others fail to notice you as opposed to, like, a bus driver shouting at you? Have there been any recent incidents of this?

B: Almost *impossible* to do...because I have...*two* front lights, *three* backlights, and I have lights on my *wheels* also. I also have *two* bells that I ring and a cowbell that is inactively going "dinkety, donkety, dinkety, donkety" the *whole* time. As I explain to people, cyclists are like the unintentional snails of the road: unseen and unheard until they're crunchy noise under your wheels! So, I work *very* hard to be *very* visible. It *is.*.. It's hard to not notice me. The lights I have on my bike – *these are not small lights*. They are monkey lights – there are *huge*! They're *very* visible. I often have children and adults shout after me "Cool wheels!" Or "Cool lights!" Or something like that. I am *very visible* as I go, so, no, I don't, and that's because I'm *keenly* aware of how invisible most cyclists are. I'm a driver, and, on occasion – particularly at dusk when the light is tricky... As a cyclist, I know you can't have too many lights – it would be *difficult* to miss me.

Interestingly, in his efforts to accentuate presence in an auditory manner, Brian opts for cowbells as opposed to regular bells one finds on standard bicycles. These unique bells constantly ring and do not require the cyclist to manually activate them. This, Brian finds, is crucial for the effectiveness in provoking responsibility in other road users who may disregard him through accentuating his presence in a given space without making them angry in doing so. That is, in his experience, pedestrians respond with disapproval if prompted to move out of Brian's right-of-way through accentuating presence by ringing a normal bell directed toward them. Accordingly, Brian's cowbells enable him to accentuate his presence to pedestrians in order to provoke them to respect Brian's right-of-way without provoking anger instead, since this mode of accentuating presence is "passive" as opposed to active — like the manual ringing of a bell.

I did used to just have a regular bell and I would ring my bell at people to let them know "Hey! I've got the right of way and I'm coming through and I don't really want to...give up my right-of-way because this is tiring, so, if you could not do that thing that's illegal and if you could actually respect my right-of-way — that'd be super!" So I'll ring my bell and they would give me the filthiest look because how very dare I ring my bell at them...my god, you know "How very dare you sir (posh accent)!!" And...I read about this idea of the cowbell and it was a much more passive way of informing pedestrians that you are coming up behind them — I was like (clicks fingers) "That is a great idea! I need to get a cowbell." And I have a cowbell and I keep on thinking "You know what? You know what would be better than one cowbell? Two cowbells! And to you know what would be better than two cowbells? Three cowbells!

Brian remarks on the success of adopting this particular technology for accentuating presence in provoking responsibility in pedestrians to respect his right-of-way. Indeed, Brian thinks that the cowbells are, at times, excessively effective at prompting pedestrians to move out of the way. Furthermore, Brian does not receive angry responses. In this way, in Brian's view, the cowbell is in exceptional tool for accentuating presence:

You asked me earlier if I ever feel that people ignore me or don't know that I'm coming – no. No. And I mentioned how cyclists are the ninjas of the road – not this guy! And if you don't hear or see me coming, you are working *very* hard to ignore

me. "Wow! You really didn't hear or see me? Wow!" The funniest example of this is there is a road that I cycle on the way home that is cobbled and it's downhill and...it's in Temple Bar. So, if you're going over cobbles...with a cowbell...you're very much dinkely, donkely, dinkely, donkely, dinkely, donkely all the way down the hill. And people will shift out of my way and they won't give me the filthies! Even to the point where I've seen people move out of my way with more haste than I really feel is warranted or required! I even feel like "Wow, I mean, you didn't need to get out of the way that quickly, like." But, when they hear a cowbell coming and I suppose it's coming up from behind them, increasing in volume but they really kind of hear like (makes loud bell noise). So, cowbells are great – they inform pedestrians that you're coming, the pedestrians aren't pissed off at you, it reduces road rage, it increases...your presence on the road – wahey! It's all good.

In stark contrast to Brian's indirect approach to accentuating presence, Killian exercises a much more directed means of accentuating presence with sound through the use of technology. Following an incident with a rubbish truck years before, Killian stopped cycling for a number of years and then, having returned to cycling, makes efforts to ensure that he is noticed in a particular space. Accentuating presence, then, is a strategy he employs for preventing spatial disregard through not being noticed. Alike to James, positioning himself in front of other road users is one means by which he accentuates his presence:

K: I did have an accident *once* a long time ago in 2008...which put me off cycling for a couple of years – I bought a car and drove after that. I only got back into cycling a couple of years ago. So, I was hit by a rubbish truck that was turning left and I was in the cycling track right next to it.

R: And it cut you off, did it?

K: No, it just...drove into me. I was right next to it and he was turning left and...didn't see me. Whereas, now, I would be...aware. I don't even remember if he had turning signals on... On a junction I would position myself in front of the car, you know, that way they could see me or...stand back behind it.

R: Okay. And that would be so you are identified?

K: Yeah, so they are aware of my...presence.

Primarily, though, Killian uses an electronic horn to alert other road users of his presence in a space. In the past, Killian would use a regular bell to alert others to accentuate his presence; however, he felt this bell was futile in provoking responsibility in drivers of motor vehicles. The horn, then, provides a louder stimulus and, therefore, allows for a more effective accentuation of presence – one in which Killian is still hoping to enhance even further:

I felt my bell wasn't *loud* enough and...it's not really audible if you're inside a car – you need something louder. There are better ones you can buy – I was thinking of upgrading. I've seen on YouTube that there are ones that are much more effective – they sound more like another car or a truck and that would definitely...get a better response from the drivers.

As Killian describes, the point of the horn is to get a "response" from motorists: namely, to provoke responsibility in these road users to respect Killian's presence in a particular space by giving him space to occupy the road as opposed to infringing on his space accidentally or knowingly. One way in which Killian uses the horn, then, is when road users are disregarding his space by passing at a distance which he finds to be "too close". In response to this spatial disregard, Killian accentuates his presence by beeping his horn as long as is required for the road user to take responsibility and provide more space for Killian, if indeed this occurs at all. Killian recalls one incident in which accentuating his presence using the horn was indeed effective in provoking responsibility in a motorist failing to give Killian adequate space, who, in response to this, proceeded to give Killian space by 'backing off':

R: Okay. Could you give me some examples of typical situations where you would use the horn?

K: Eh...it's when the car is passing me very closely. If they're too close, like a couple of days ago, I just turned on the horn and it was beeping so long – a couple of seconds until...they realised...I'm here! They backed off. I mean, he probably realised that I was there but he didn't know how much space I would need and he

was very, very close to me - I could touch him with my hand. It wasn't very comfortable (nervous laugh)!

In the absence of the horn in the past, Killian would use other highly direct ways of accentuating presence. For example, in one instance, Killian banged on the roof of a motorist's car that was infringing on his space and, in doing so, dangerously pushing him into the kerb. In this way, Killian physically accentuates his presence by striking a vehicle to create noise to alert the driver of it. This unnerving incident was a part of the motivation for buying the horn — so that Killian could provoke responsibility by accentuating presence or, as Killian puts it himself, to communicate in essence:

"I am here. I'm another road user. Give me some space."

Accentuating presence, then, for Killian, is a means of alerting other road users that he is present alongside them in a space, that he is a road user like them — with entitlements to space — and, consequently, that they have a responsibility to acknowledge and respect these facts by providing space. Hence, in Killian's case, accentuating presence is making another aware of one's presence in a space but, at the same time and implicitly by doing so, making another aware that one is a road user with entitlements that ought to be respected.

Indeed, Joan's method of accentuating presence captures the essence of what is communicated in this act. Through simply making eye contact with other road users, she attempts to provoke responsibility in them to notice her and thereby give her space. In one instance, Joan looks to make eye contact with a bus driver who was repeatedly disregarding her entitlement to public space as a road user by passing closely, pulling in and cutting her off while collecting passengers in a shared bus lane.

There have been another couple of incidents with buses that are travelling, I feel, too close...or buses that overtake close and then pull in to stop at the next bus stop and then pull back out. So, it's almost like I was going with the bus and then I kept being cut off. I felt like I was cut off couple of times. I was, like, overtaken very quickly and very closely so the bus could pull in and then I went around the bus and it stopped to pick up passengers and then the bus flew by again very quickly and very closely and pulled in again and almost cut me off to pick up passengers...and I

had to go around them. I think I was annoyed and frustrated. I tried to make eye contact, but...it didn't work.

Instead of responding to this potentially endangering behaviour from another road user by privatising vulnerability in some way (e.g. waiving entitlement, precautionary transgressing etc.), as mentioned, Joan channelled her annoyance and frustration into accentuating presence through an attempt to make eye contact with the bus driver. Through this look, Joan tries to provoke a sense of responsibility in the bus driver to respect her right to be on the road as a cyclist and her vulnerability as a human being on a bicycle in a shared space. Thus, Joan deals with problems of spatial insecurity and spatial disregard in this case by accentuating presence through directing an obliging gaze to the bus driver:

I think I'm trying to communicate with that glance that, like...humanity (laughs)! In the sense that...a reminder that we're sharing the road and that...as cyclists, we're very, very vulnerable because we don't have a metal machine around us, and, that...that if drivers keep driving like that...they will someday injure a cyclist. I mean, I hope it doesn't happen, but my belief in that moment is trying to make eye contact to, like, share "We're both people, we're sharing the road!" and "Please take care with all people on the road, including those of us who don't have this metal machine so that we all...arrive safely (laughs).

ii. Asserting Entitlement

Under conditions of precarious entitlement, accentuating presence may not be enough to provoke responsibility in other road users to respect a cyclist in a space and/or provide a cyclist with space. Asserting entitlement is a step-up from accentuating presence as a cyclist asserts their perceived entitlement to public space as a road user in a multitude of ways rather than solely making an effort for others to notice them in a space and thus feel obliged toward them. In this way, asserting entitlement entails various acts of assertion in which one looks to directly oblige others to pay attention and provide space. Claims of assertion may be made corporeally through assertive movements, placements and indications of the body and/or through assertive language involving commenting, talking and shouting. Regardless of the mode of assertion, a cyclist seeks to vigorously claim their entitlement to a space so that others will respect

this entitlement to public space. For example, a cyclist may assertively occupy, transit or enter a space, thereby laying claim to it and exposing themselves fully to other road users who may endanger them (e.g. motorists) or who they may endanger (e.g. pedestrians). Through asserting entitlement, then, the cyclist may exploit their relative vulnerability or power in order to provoke responsibility. That is, other road users must adjust their behaviour or risk harming the heavily exposed cyclist or being harmed by such a cyclist. Since cycling into or through a space under conditions of precarious entitlement cannot simply be taken for granted, asserting entitlement ensures that others must pay attention to a cyclist in a particular space. A cyclist can engage in this act for any of the provisions that space can mediate as described in the precarious entitlement chapter: namely, one may assert entitlement to a space in order to provoke responsibility in another to give space for safety, space for mobility and/or space for respect for one as a legitimate road user who is entitled to space.

In the past, Katherine has asserted entitlement in response to a pedestrian disregarding her right-of-way on the road. In her account of this incident she refers to herself as "one of those cyclists" signifying the type of cyclist who she perceives to be "aggressive" since they assert their entitlement to a space rather than slowing down or waiving this entitlement in the face of acts of spatial disregard - in this case by a pedestrian. For this particular incident, Katherine asserted entitlement simply by the fact that she "kept going" rather than stopping or slowing down to provide space for the infringing pedestrian. The pedestrian, then, disregarded the spatial entitlement of Katherine – her right-of-way as a cyclist – and Katherine continued to move forward, presumably threatening a close pass or collision with the pedestrian. This assertive behaviour prompted the pedestrian to reprimand Katherine's behaviour telling her to "slow down", despite infringing Katherine's space. One can view Katherine's behaviour, then, as asserting entitlement through exploiting her power as a high-speed road user, thereby provoking a sense of responsibility in the pedestrian in question to get out of the way for the sake of their own safety. In this instance, then, Katherine attempts to provoke responsibility through provoking fear. Intimidation was used to assert entitlement.

Now, I have to admit that one time I was one of those cyclists who got really annoyed when somebody just kept coming: a pedestrian was cutting across, I had right of way, but they just ignored...I kept going and then they got highly indignant: "For God sakes, slow down!"

Nevertheless, Katherine feels ambivalent and guilty about her assertive behaviour. She raises the issue that pedestrians often ignore the right-of-way of cyclists and that road users in general have a sense that cyclists are not legitimate users of the road since they 'boot along', which Katherine sees as irresponsible. Indeed, Katherine believes that "she should have slowed down a bit" as opposed to continuing on at the same speed despite a pedestrian in her trajectory. It seems, then, Katherine was reluctant to give up her entitlement to public space - her right-of-way - since this would mean giving up her mobility and momentum as she was cycling along, something which the spatial disregard of the pedestrian was impeding. Katherine describes herself with a sense of shame as having been "that other cyclist" - the kind that asserts their right-of-way through keeping going rather than slowing down or being ready to stop for infringing road users. For Katherine, asserting entitlement seems to be a pathological rather than legitimate act. As she describes "everybody is influenced by what is going on in their own lives". Through claiming this, Katherine diminishes her act of asserting entitlement in the past and in general as something coming from a place of personal turmoil rather than a warranted sense of social injustice:

I mean, I should have slowed down a bit as well, but, of course, I was in a bit of a tear and, you know, it's kind of...it's both ways but pedestrians are inclined to ignore the fact that cyclists might have a right of way, I think, do you know? And they also... Any friends of mine when I said I was doing this, they said "oh, get cyclists off the road – sick of them (bursts out laughing)!" And that's really the perception generally...just that they are...booting along. It has changed very much from what it was – it is much more frantic now. But I too have been that other cyclist. I have, sometimes, been belting along and just, you know...and whatever is in your edge and whatever mood you're in and it's like "I have right of way (shouting impersonation)!" You know, there is that, and everybody is influenced by what is going in their own lives (laughs)...

Indeed, Katherine views her assertive behaviour as unjustified because "cyclists are seen as a nuisance really". Accordingly, she views that, since, in general, people do not perceive cyclists to have and recognise cyclists having entitlements to the road, cyclists do not have entitlements to the road and, thus, ought not assert entitlement to the road. Asserting entitlement is not assertive but "aggressive" akin to "road rage". Despite

engaging in asserting entitlement, then, Katherine retrospectively perceives the act and her sense of entitlement behind the act as "pathetic", having additionally responded to the pedestrian's direction to slow down with a further verbal assertion of her entitlement to the road as a cyclist:

K: I just cut across — I was a bit aggressive, quite honestly, I was... And I just cut across and she was angry and then I talked to myself and thought "Cop on (laughs)! You are that cyclist that you give out about all the time." It's a bit like... It's like road rage, in fact. It's exactly the same as being in a car. It's exactly that, there is an element of that in it. If you have road rage in the car you have it on the bike as well. That's actually...that's it.

R: And when the pedestrian was like "What are you doing?"

K: She shouted "Slow down!" I shouted, of course, something back at her like "Do you not see the green light?!" So, it's like "We have rights too!" – It's pathetic but there you go (laughs)!

Now, then, instead of asserting her entitlement to public space – which Katherine considers excessive – she accentuates presence as a gentler way to provoke responsibility in other road users through politely ringing her bell and asking pedestrians ahead to make space:

For your woman, would I still pedal through? No, I'd be ringing the bell, I'd be going slower and I'd be ringing the bell (laughs) like an auld one and...just saying "excuse me, excuse me" or whatever. I mean, if they're not aware, they're not aware and I do think it's a case of them not being aware...that there was a right-of-way for a cyclist.

In contrast to Katherine's remorse in asserting entitlement, James is unapologetic. With the possibility of being 'doored' by a potentially disregarding motorist exiting their car and the risk of being passed uncomfortably close if one cycles on the left-hand side of the road lane, James asserts entitlement to shared road space so these acts of spatial disregard can be avoided: namely, so that he has enough space that he will not be "hit by a door" and because "cars can't pass" since he is positioned squarely in the middle of

the road. Asserting entitlement, then, enhances James's sense of safety since he can avoid spatial disregard by road users exiting their vehicles and provoke responsibility in road users behind him to refrain from close passing by trying to "claim the road":

I would cycle in the middle of the road – not on the left, I'd cycle in the middle of the road because it's actually safer...because, then, cars can't pass you. If you cycle in on the left, they tend to pass you. You could also be passing a parked car, the door opens on a parked car, you got a car passing you on the right-hand side, it's...a dangerous place to be. So, I claim the road, if you like, as a road user.

Nevertheless, safety is not the only concern of James when asserting entitlement. When turning right, it is necessary for James to occupy the right-hand lane. However, he often faces non-recognition by motorists behind of his entitlement to this space. In response to this, James refuses to waive his entitlement by moving out of the way to make way for the motorist behind but, instead, remains in the centre of the lane until he feels it is safe to turn left and therefore make way for the disgruntled motorist. This maintenance of position is asserting entitlement since, through staying put, James resolutely refuses to submit his space, despite his awareness of a potentially indignant and more powerful road user behind him who could cause him harm. Indeed, regardless of it sometimes being safe to turn left and make way for the motorist behind, James may at times stay in the centre of a road space "to prove a point" that he is an equal road user. That is, he will cycle in the centre of the road lane at 20 kilometres an hour thus slowing down the non-recognising road user behind. In this way, as James describes "you're making a bit of a protest but you are also doing it in a safe way". That is, James is asserting his entitlement to public space in general as a road user in response to spatial disregard instead of solely for reasons of personal safety or mobility:

So you are at a junction, you're on a red light, taking a prime position on the right-hand lane, turning right, and somebody behind you starts beeping as though you're in the wrong place — that's happened a couple of times, and, again, I will just maintain my position on the road until it's absolutely...until I'm completely out of the junction and it's absolutely safe to move into the left, but, if it's not safe, I'll keep cycling in the middle of the road. Now, I've sometimes done that to prove a point — that I'm a road user as well. So I'm going at, let's say, 20 kilometres an hour, slowing them up...they get frustrated... What's happened on a couple of occasions

is they've tried to pass me out – even when there's only one lane for them – but I'll still continue doing what I'm doing because I do feel it's safer...

Whereas James sometimes chooses to assert entitlement, Charlotte learned that asserting entitlement is not a decision but a necessity in some spaces as a cyclist in Dublin if one wishes to stay safe in conditions of precarious entitlement. In one particular road space Charlotte encounters, spatial disregard is frequent. In order to keep moving, motorists behind Charlotte often pass threateningly closely if she cycles in a more "instinctive" way to the left of the road lane. Asserting her entitlement to public space by staying in the middle of the road lane, then, prevents road users from attempting to pass at all since both Charlotte and these road users occupy the middle of the road. In this way, Charlotte does not afford motorists with the "temptation" of passing dangerously closely, instead forcing them to respect her occupation of space and "put up with" being slowed down:

R: Okay. And you were saying up ahead other traffic wouldn't want you there...

C: Yeah. So you've two lines of traffic - one going left and the other going ahead and it's being stopped at traffic lights and then all those cars want to go fast...for a few yards until they get to another set of traffic lights, and, more traffic is going left then straight ahead, so...they've suddenly freed up and they feel like they can and, now, here's me sitting in the middle of the go-ahead traffic lane...because if I didn't sit in the middle... I learnt to sit in the middle because if I didn't sit in the middle, they would have creamed me. You know, they would have thought they can get around me and there wasn't enough room because they're in the middle of the road and I'm in the middle of the road (laughs)! So, like, there was a cyclist killed on that road the week before I started... Not that junction but the Island Bridge one...so I was very conscious that that was not a safe road. I don't want to be killed, so (laughs)...it's that if I stayed...if I cycled in a kind of instinctive way which would be towards the left of a lane, there would have been a great temptation - there was a great temptation - for cars and buses to just skim around me at a fairly high speed. Whereas, when I sat out right in the middle, they couldn't do anything about it - they had to wait! And I didn't particularly get any...beeping. I think they just sort of put up with it – it wasn't for very long.

Asserting entitlement, though, is not easy: it requires experience and nerve since one has to trust that it is safer to provoke responsibility in this way as opposed to waiving entitlement by cycling to the left. Indeed, Charlotte still finds asserting entitlement to this day and uncomfortable behaviour:

But it requires a fair bit of...courage to do that and you would not be doing that if you just started cycling a week or so before – it's just because I've been doing it for years now that...I got more assertive. I know it's safe although it would still make me nervous.

She is acutely aware that asserting entitlement involves exploiting one's vulnerability as a means of provoking responsibility. Namely, through asserting entitlement one is putting oneself in the line of fire of more powerful and faster road users that could – if they intentionally or unintentionally disregarded a cyclist – grievously injure or kill a cyclist up ahead. Accordingly, in asserting entitlement, one is provoking responsibility through exposing themselves to another road user by claiming space as an equal despite being relatively unprotected and therefore increasing one's "opportunities to be hit":

Like, if you doing that every day then...you know, statistically, you're increasing your risk of...being hit because you just increasing the frequency of opportunities to be hit (chuckles). Whereas, if it's just occasionally, it's less likely that...across your lifespan it's going to...result in your death (laughs)!

Asserting entitlement, therefore, is both safer for Charlotte and more dangerous: namely, it is safer because it reduces acts of spatial disregard by other road users and more dangerous because Charlotte is placed in a more exposed position in a space that is already insecure.

David is not as concerned with the risk of asserting entitlement but is, instead, simply reluctant to give up the mobility space provides. Hence, he asserts entitlement to the shared space of the road as a way of making space to keep moving in response to parked cars or potholes in designated cycle space. David is particularly communicative in his assertion of entitlement – he turns around and indicates to the driver behind to stop in order to let him claim the middle of the lane to his right. Following this indication, he insists on taking this lane by assertively cycling into the centre of it. He does this in particular when there is not adequate space for other road users to pass him from

behind thus prompting him to act "like a car". This is interesting in relation to the concept of waiving entitlement which could be argued to be acting "like a cyclist" similar to Charlotte's description of cycling to the left as an "instinct" as a cyclist. Acting "like a car", then, means asserting your entitlement to public space on the road as a legitimate road user. Indeed, David generally does not slow down or waive entitlement when there are obstructions but, instead, makes other road users slow down and give him space to join the road:

D: I would not be slow to... If I felt I needed to create space...I would not be slow to turn around on my bike, put my hand up and...kind of caution the driver.

R: And what kind of hand signal would you make then?

D: (Extends arm straight ahead with palm facing outward.) "Give me space, I'm coming out here." If I was coming, I would just look behind and say, you know (extends arm again)...and then I pull out. But I mightn't need to pull out – do you know, I only need a small bit of space. But if I felt it was a tight junction or there wasn't going to be enough room for everybody, I would pull in like a car and...just take up space. If there's an obstruction and both people can't fit, I don't think I'd stop, I think I'd just get the car to slow down and give me some space to pull out.

David insists on his entitlement to public space in roundabouts also through extending his arm indicating to drivers to respect his space and by facing up to other road users with his body and eyes. In doing this, David is both accentuating his presence and asserting entitlement in the same act as a means of provoking a sense of responsibility in other road users to give him space:

I would do the same roundabouts. So, if I was coming to a roundabout I will...(extends arm, palm facing outward). I'll be all...kind of, alerting cars. I'd prefer to get eye contact. I'd prefer to know the person, you know... I wouldn't *presume* by putting my hand out that anyone was going to stop. So I will keep cycling but turn my head...turn my body around.

Through doing this, David is forceful in this accentuation of presence since he is positioning himself in front of other road users by asserting entitlement. In this way he

provokes responsibility or, in his own words, 'obliges' these other road users to pay attention to him since he places himself in a position of exposure in which the motorist gives him space or else he may be injured:

R: And have there ever been any cases where someone hasn't made eye contact with you?

D: No, no...I don't think so. I'd kind of oblige...

David, then, asserts is entitlement to public space in both roundabouts and general traffic lanes as he enters them. In addition to this, similar to Katherine, David asserts his right-of-way. However, instead of only continuing to move forward despite the likelihood of one's right-of-way being disregarded by a road user ahead, in anticipation of disregard, David will extend his arm to direct the road user in question to respect his entitlement to the right-of-way and stay put. In this way, David clearly provokes responsibility in other road users to respect his space by asserting entitlement. Through doing so, he successfully maintains the space necessary for his personal mobility by shutting down potential acts of disregard. It is clear in the following excerpt how David clearly perceives entitlement to public space as a road user, entitlement which licences him to provoke responsibility in other road users to respect his right-of-way:

I think if I have right of way, I should exercise that right of way. That's predictable – that's me following what is expected of me. I would *assert* that right...and I'd say, you know, "Back away (extends arm and palm)". I put my hand out if I thought, you know...they were going to pull out. I have the right-of-way, I've a clear road ahead of me, there's no obstructions, there's no reason why I should *stop* because I've no...I have the right-of-way.

iii. Indicating Transgression

Accentuating presence and asserting entitlement are ways of provoking responsibility in others under conditions of precarious entitlement that can be executed without any form of spatial disregard actually occurring. Indeed, one can accentuate presence and assert entitlement in response to an insecure space rather than necessarily an anticipated act of spatial disregard. Indicating transgression, on the other hand, is

something that is only done to provoke responsibility in another following an act of spatial disregard. In this way, it is more specific than the aforementioned modes of provoking responsibility. When a cyclist experiences an act of spatial disregard – be it a dangerously close pass, illegal parking on the cycle lane or non-recognition of one's right-of-way by a pedestrian or motorist – they may indicate transgression. In other words, a cyclist attempts to point out to another road user that they have engaged in an act of spatial disregard or, more generally, transgression on the road that has contributed to ongoing precarious entitlement for the cyclist. For this concept, then, 'transgression' is synonymous with spatial disregard. Accordingly, indicating transgression is a communicative act in which one aims to impart to another that they have done something wrong as a means of provoking responsibility in this other person to stop doing what they are doing or refrain from engaging in such transgressive acts in the future.

When Philip encounters infringement of the cycle lane, he uses non-verbal communication to indicate transgression to the offending party. First, he accentuates his presence by positioning himself in front of the transgressing road user so that he is clearly visible. Then, gesturing with his body, he challenges their behaviour by indicating to them that they are disregarding his space using a questioning raise of his palms and arms. Philip articulately describes how indicating transgression is used as a nonaggressive, non-argumentative means of provoking responsibility in response to acts that he perceives to infringe upon his spatial entitlements. It is merely an indication – as Philip calls it: a 'reminder' – rather than an elongated verbal argument. Through this indication, Philip is also asserting his entitlement since he is indicating that he 'knows' his spatial entitlements and is therefore provoking responsibility in this other road user to respect them:

R: And, generally, when you see a cycle lane is disrespected, how do you respond to that? So you're cycling along on the lane and then you see somebody who is in the space...

P: I usually like...pass over either go from the right side or just go through the pedestrian line and specifically come in *front* of them. And then, like, just using my body language, I'm like "What is this (makes questioning gesture with arms)?" You know, I just try to *communicate* that with them that "Hey! You *are* disrespecting my space." I don't really want to get into a kind of *argument* with them but I

just...try to let them *know* that...I am *aware* of my own rights and of what belongs to *me*, i.e. that space in the street, and I am also aware of the fact that you are disrespecting it so I'm just *reminding* you of the fact that this is not...what you're supposed to do.

Sometimes this approach to provoking responsibility is successful: particular motorists will use their vehicle lights to acknowledge that they have transgressed and, therefore, indicate an apology of sorts, thereby taking responsibility for their transgressive behaviour. Philip hopes that this sense of responsibility in the motorist endures beyond the immediate act of transgression — that is, that one will respect the spatial entitlements of cyclists in the future so that another cyclist will have their "fair share of the road" that acts of spatial disregard such as infringement of the cycle lane take away from cyclists:

And, then, well, usually when the light turns green I go and...I've never had any response from them, I've never heard anything from them. Sometimes some of them do a, you know, right-left blink after they passed me over. That's kind of like an aspect of road etiquette, you know, if you're driving on the road and someone gives you the way in order to say thank you to them you go right-left with your blinker. The same I've seen from some drivers that, once I show them that I'm actually dissatisfied with the fact that I haven't had my fair share of the road and once the light turns green, I go, once they passed me over the do a right-left blink. So, in those cases, I have a feeling that, probably, I had maybe, kind of, a positive influence on, you know, how the culture should be because I just reminded the person that "Hey, you are not respecting my space." So, by doing that right-left blinking, he's acknowledging that I had a point and, hopefully, in the future he will turn into — I don't know — a more careful driver.

Rather than gestures, Sophia indicates transgression using a "look" when she is passed at a distance that she feels is disregarding of her entitlement to public space as a road user by a motorist. Since Sophia cannot immediately indicate transgression since the transgressing road user has passed, she catches up with this individual when they are stopped at a red light up ahead and she is near them. For Sophia, indicating transgression is a means of provoking responsibility by making the person who is disregarded her entitlement to public space as a road user face up to what they have

done. Namely, Sophia believes, in the case of taxi drivers who pass too quickly, that they have not failed to see her but are perfectly aware of their disregard and have chosen to engage in it since they are "in a hurry". Through the use of eye contact, then, Sophia is trying to make them feel a sense of guilt by indicating to them, alike to Philip, that she is aware that they have done something they should not have done. Indicating transgression, in this way, is a communication of this awareness with the implication of such awareness being that the transgressing person should act more respectfully in the future. Hence, Sophia's look is a "knowing" look:

R: Great. And with passing and cutting off and stuff like that, would you ever feel annoyed after those types of things happen?

S: Yeah, yes, I do. The passing...I know I'm going to catch the person at the next lights. More than likely they are going to stop the next lights so I would usually, like, shoot them a look, you know, because they know what they did – it's not that they didn't see me, it's just that they were in a hurry (indignant tone) and that's particularly when you share the cycling lane with taxi drivers because they are always in a hurry. So I know, for a while, they chill behind me and then they spot their little moment and they...come flying next to me and quite closely, then I catch them at the lights, I shoot them a look because they know what they've done. Eh...the cars turning left...yeah, of course I'm annoyed if they've cut me off, turning left on top of me. Yeah, but...no, I wouldn't be rude, you know, I would shoot somebody a look – I don't flip (bursts out laughing)...or I don't really shout at cars, no...

R: Okay. So what kind of look would you give?

S: I just...I give them a *knowing* look. Like, I just look at them....you know – I don't know how to describe this look. I'm just telling them "I know what you did." You know, "Come on."

Sophia's is fearful of verbally indicating transgression. Thus, she does not enter into conversation with someone in order to indicate to them that they have disregarded her entitlement to public space. Instead, then, she relies on eye contact as her means of indication for fear of receiving abuse:

R: Or talked, have you ever talked?

S: No. *Never*, I've never done this. Like I said, I would give a *look* but I never...knocked on the window. No, no, I never did that – I wouldn't have the confidence to do it. Well, maybe I would have the confidence... *No*, maybe I would have the confidence but I'd be afraid that they're gonna...talk back or abuse me or something so I'd rather let it go.

Accordingly, for Sophia, using her eyes to indicate transgression is subtle, low-risk and highly detached way to provoke responsibility in other road users following acts of spatial disregard – on a scale of methods of indicating transgression, it could be seen as one of most indirect and private ways. James, on the other hand, has taken indicating transgression to its other logical extreme indicating in such a way that is as direct and as public as one could imagine. In response to having his right-of-way infringed upon whilst moving by the driver of a large coach - a form of spatial disregard that James experienced as endangering - James looked to indicate transgression through a "semiprotest". In particular, following suddenly breaking on his bicycle in reaction to being cut off by a coach driver, James caught up with the driver who had to stop at a red light up ahead and, in retaliation to this transgression, positioned himself to the front of the coach and laid his bike on the ground to prevent the driver from moving ahead without running over the bike and potentially damaging his vehicle through doing so. Following this, James summoned the driver to roll down his window so that he could indicate transgression with him verbally in a direct face-to-face manner and, through doing so, provoke responsibility in the driver so that he would recognise his wrongdoing (and therefore his obligations towards James as a road user) and apologise. In a word, James wanted to indicate transgression so that, following an act of spatial disregard, he would be subsequently regarded by the transgressor:

J: So, what I have done on one or two occasions is, kind of, do a bit of a semiprotest. So, if I've felt that I've been...this is an interesting one... If I felt that I have been...put in danger, I might try and...stop that vehicle with the intention of having a chat, and I mean an *amicable* chat with the driver. So can I tell you about an example of that? R: I'd love to hear, yeah.

J: So, big coach, I was coming from the north side to the south side. I was crossing the Liffey and there was a big coach passing beside me which...cut in front of me into the left lane...without looking. So, I was in a lot of danger – they cut right onto my path – and I had to make, you know, a sudden stop. So, as he was cutting into the lane he had to stop at a red light, so, I went in front of the coach and I put my bike down on the road in front of the coach, at the red light, okay, and I gestured to the driver, I said, you know "I wanna talk to you, so, roll down your window" (beckoning gesture with hand)... So, I think, in that instance, what I tried to do was to...tackle the situation there and then but in a non-aggressive, non-confrontational way. I just wanted to talk to the driver and really all that I wanted was an apology from him...for him to acknowledge that he cut in on front of me, and an apology.

Nevertheless, the driver refused to deal with James and acknowledge his spatial disregard, instead remaining detached and insulated within the confines of his vehicle:

...he wouldn't, he just kept saying "no, no"...and I noticed the coach was full of young men that looked kind of foreign, they were coming in from the airport maybe, and they were all looking bewildered. There was a tour guide also sitting in the front of the coach, who looked quite bewildered at me but they wouldn't open the door...just would not open the door under any circumstances.

Subsequently, James discovered that the driver who had disregarded his right-of-way and endangered him was in fact transporting the French rugby team into the city to face Ireland in a rugby tournament the next day.

So, I just took his number, went to the local Garda station and reported him. And I thought about it afterwards and I *realised* that he was transporting the French rugby team into Dublin on a Friday to play against Ireland in the Six Nations on the Saturday...

In this particular instance, then, James's extraordinarily head-on method of indicating transgression did not perceptibly succeed in provoking responsibility in the disregarding

coach driver. Nevertheless, James continues to indicate transgression to road users in a way that is "calm" as opposed to "confrontational" as, he believes, this is the most effective method of any to provoke responsibility since an overly aggressive approach can provoke anger as opposed to responsibility in road users who have transgressed and are challenged by James because of it:

I'd pull them up on it, yeah, yeah. But that *usually* ends up in an argument...and...I'm not argumentative. And arguments tend to be quite...they just end up in a war of words and *nobody* wins because people are quite...people can get confrontational, they, as I said before, they feel as if – I feel as if – I'm in the right, or, something's been done wrong to me, somebody else feels like they're in the right...and you never win in a situation like that because there is *emotion involved* and it's a *heated exchange*. So, I just avoid it. If I can, I'll... If I can, I'll say something in a *calm* way to the driver to find out that they weren't looking or whatever...

Similar to Philip, then, gestures are James's favoured means of indicating transgression since the majority of road users who disregard him will not engage in reasonable conversation with him, in his view, because they have underlying negative perceptions of cyclists as road users:

R: So you would just make a gesture, generally, now...

J: Yes, make a gesture. Like, you know, point to my eyes or point to their wing mirror or something, you know, because, generally speaking, they won't...engage with you, they won't pull down the window and have a chat with you because, again, there's this unconscious bias against cyclists, that cyclists are just...are just trouble.

Thus, James adopts a polite and amicable way of indicating transgression as a means of provoking responsibility in other road users and, if the road user does not 'engage' with this, he simply moves on with his cycle and lets the transgression go (i.e. he tolerates transgression). This contrasts with James's former approach of dealing with transgression in which he wished to punish other road users for their disregard which, in one instance, led him to kick a vehicle in indignation. In light of this undesirable past

behaviour, James generally tries to provoke responsibility up to a certain point. Beyond this point, he moves on:

I never thought that I'd *ever* say that you could be mindful on a bike but that's what it is – it's about being *aware* of your reactions and deciding not to go with the *dangerous* one which would be to...react angrily. So you try and do it in a responsive way and get to the driver and – if you can – point out something and if they aren't engaging, then, don't bother."

Unlike the aforementioned participants, Karl indicates transgression verbally since he is often dealing with pedestrians who, unlike drivers, lack the barrier of windows and a vehicle that may impede such a verbal indication. It is clear from the following excerpt that Karl indicates a pedestrian's transgression both through pointing out what they are doing wrong and also what they should be doing (i.e. their responsibilities as a road user) both explicitly and implicitly:

On Friday night, I to go up to Christchurch and I was going down Dame Street – there was a lot of people around Dame Street – two old men walked out between two parked cars to crossover because traffic was stopped but there was enough room for me and *just* as I was coming to get across another guy came across...I managed to jam on the brakes... I think he was Welsh, because he was here for the match or whatever. So, I jammed on the brakes, he looked at me and...he didn't *say* anything and...I would always make comment (laughing) sort of like "Listen, yeah, you need to watch where you're going" whatever it is, "You don't have the right-ofway, there's a pedestrian crossing up there", "Lights are red", whatever it is...but he was a bit belligerent.

For example, in this instance, he points out to the disregarding pedestrian that they don't have right-of-way – therefore indicating that they are infringing on his right-of-way – and that there is a pedestrian crossing up ahead – therefore indicating that they have a responsibility to this space to cross. However, in this case, Karl's attempt at provoking responsibility seems unsuccessful since the offending party appeared to lack remorse for his behaviour and was, instead, "belligerent" in response to Karl.

With pedestrians, then, Karl generally indicates transgression through a "throwaway comment" whilst passing and does not engage in a conversation or confrontation per se.

With drivers, though, indicating transgression is not as easy since there are more barriers to communication, as mentioned. Consequently, compared to pedestrians, Karl engages in different ways of indicating transgression to drivers who he feels have disregarded him. Similar to James, Karl interacts with the vehicle of the motorist in question in order to get their intention. However, instead of using this as a means to engage the driver in conversation, Karl interacts with the vehicle as an indication of transgression in itself – he merely wants to indicate and move on, not engage. Physically interacting with the vehicle, then, is his primary means of indicating transgression with motorists. In the case of a motorist unnecessarily infringing on the cycle lane when there is room to the right for them to stay out of the cycle lane, Karl will knock on the window of the motorist in order provoke responsibility. That is, through frightening them by knocking on the window, he attempts to make them get out of the cycle lane since he is forcefully indicating that they are doing something they should not be doing. He sees this as an effective method of provoking responsibility:

It scares the bejaysus out of people if you knock on the window!

If he is cut off by a motorist and particularly angered by this act, he will take this physical indication to a higher level and physically strike the car from behind. Similar to the fear that knocking on the window whilst passing provokes, this means of indicating transgression provokes responsibility effectively since individuals may believe that they have been hit and, at times, suddenly stop. In this way, both physical methods of indicating transgression clearly capture the attention of the motorist that Karl indicates toward:

And if they've really pissed me off – they've cut me off or whatever – I'll (smacks table)...smack the...the rear of the car – they generally think they've been hit then...and then they jam on the brakes (chuckles self-consciously)...

Karl will do what he believes is necessary to indicate to other road users that they have disregarded him from the physical indications as mentioned, and, in the absence of the physical barrier of a window, he will shout at them in order to indicate transgression. In comparison to the aforementioned participants who engage in largely calm and non-aggressive ways of indicating transgression, then, Karl's approach to indicating transgression stands out as particularly provocative. Indeed, he acknowledges this

describing himself as "really, really belligerent". Nevertheless, he stands by his approach to indicating transgression since he believes that it is an effective means of provoking other road users to pay attention to the spatial entitlements of cyclists. In this way, being considered "a dick" for doing this is seen as an acceptable consequence if this means of provoking responsibility fundamentally works overall:

I knock on the window... I'll slow down, knock on the window and go "What the hell?" Or if the windows open I'll shout at them. I'm really, really belligerent (laughing self-consciously). I said this at the beginning, I am a belligerent cyclist and I have no problem admitting it but...yeah, I don't see any problem because...ultimately it gets people to understand that there's other road users out there, so...if it helps them think twice... If they think I'm a dick, they think I'm a dick!

The more forceful elements of Karl's approach to indicating transgression that, in part, are carried out in order to incite fear, begin to border on acts of punishment. That is, Karl indicates transgression but does so in a way that also looks to in some way upset the transgressing road user — he is not merely looking to point out their disregard in a gentle, non-offensive way but, instead, describes himself as "belligerent". This more assertive means of indicating transgression leads us to the next mode of provoking responsibility in which some form of payback or retaliation for spatial disregard is sought: *punishing transgression*.

iv. Punishing Transgression

Unlike indicating transgression, punishing transgression is not simply trying to indicate to another that they have disregarded one's spatial entitlements. Rather, through punishing transgression, one is acting to inflict a penalty or take retribution on another who has engaged in spatial disregard. This is done in order to provoke responsibility in them through promoting fear of the potentially negative consequences of engaging in acts of spatial disregard in the future. If indicating transgression is, in general, an attempt to provoke responsibility through stimulating a sense of guilt in the disregarding party, punishing transgression is an attempt to provoke responsibility through evoking fear of retaliation, thereby bringing about future regard for the individual or cyclists. Punishing transgression can range from instinctively lashing out in response to acts of

spatial disregard without conscious decision-making to highly orchestrated attempts to penalise and reprimand other road users for their transgressive behaviour using either existing institutions or a vigilante-like approach. Through punishing transgression, the cyclist is not satisfied merely pointing out to another that they have done something wrong – they want the disregarding individual to be met with consequences for their spatial disregard. A cyclist may try to administer these negative consequences personally or through some form of authority. A sense of indignation, then, is acted upon and not necessarily tempered or allowed to diffuse: when punishing transgression, indicating

In the past, Ivan was knocked off his bike by a motorist while cycling in the middle of the bus lane. This motorist failed to regard Ivan in this space and, therefore, collided with him whilst cutting in to this lane. However, the aftermath of this collision was not as one would expect:

R: Could you tell me more about that? How that went down after what happened?

I: Emm...he called the guards.

R: Okay. He called the guards.

I: Yeah, because I hit the side of his door...

and/or tolerating transgression is not good enough.

R: Okay...

I: And...the guards came along, I was in a hurry to go into work, I was like going "Oh, Jesus, do I really have to deal with this?!" And...we...dropped the case.

In retaliation to this act of spatial disregard by the infringing motorist, Ivan kicked the side of the driver's door to punish his act of transgression leading to this individual calling the guards to press charges. Accordingly, since both parties could be considered at fault – the motorist failing to regard Ivan's space and Ivan lashing out in response – no case was pursued with the police. This incident can be seen as an example of punishing transgression in an instinctive way motivated by a sense of outrage. For Ivan, he diffused this sense of outrage by physically striking the oncoming vehicle, despite being knocked off afterwards.

Indeed, Ivan recalled another incident where he punished the transgression of a pedestrian in the heat of the moment without conscious thought. Whilst on a Dublin Bike travelling across O'Connell Bridge, a pedestrian infringed on Ivan's right-of-way whilst looking down and talking on the phone. Due to the sudden nature of this infringement Ivan accidentally "took him out" with his bicycle. To Ivan's surprise, he shouted at him in anger for his act of transgression – instinctively trying to punish him due to the fear and shock he provoked in Ivan through this sudden infringement of his space whilst cycling:

He kind of met me halfway and I could hear the whole street going "OHHH!" just before I hit him, and I was like "Oh no (dreadful tone)" and I gave out to him (surprised tone)! But you know what happens is, I think: I gave out to him because...I was in shock and he done something stupid, I mean...and it was only after a while – he actually kept on walking (incredulous tone)!

Following this incident, Ivan felt guilty for his instant reaction and felt sorry for the pedestrian since the collision seemed to be quite significant. Indeed, the bicycle had struck the pedestrian with so much force that the metal basket at the front of the Dublin Bike was bent out of shape as a result. Thus, on reflection, punishing transgression was not something that Ivan thought was warranted in response to this act of spatial disregard but, rather, compassion; even though, at the same time, Ivan perceives this act to be transgressive or, as he calls it, "bang out of order":

I: I bumped into him – but I didn't knock him down. So, he kind of put his hand on the basket on the front and he kind of hobbled away, right...and then it was 30 seconds later I was standing there going like (shocked face)... I was probably in shock and the basket was bent! I'd say he got a good bruise!

R: He was trying to pretend it never happened?

I: Yeah – never happened! And I was kind of then thinking "Jesus, I should run after him and see if he's all right" because those bikes are heavy, aren't they? I'd say he got a good pain the next day, you know... Later on, I felt really bad for him – because I gave out to him! But I mean, he did...he totally crossed the road which was bang out of order, you know? But I felt bad – the poor fella (laughs)! And then someone giving out to you! The words I was calling him!

Unlike the aforementioned incidents of Ivan, Karl deliberately, as opposed to somewhat reactively, engages in punishing transgression as cyclist in response to acts of spatial disregard. One approach is to obstruct a motorist who has infringed upon his space or disregarded him in a particular space by positioning himself in front of this individual in order to "draw attention to them" from other road users and, by doing so, "embarrass" them. Therefore, by exploiting his vulnerability as a cyclist, Karl penalises the transgression of the motorist by impeding their movement and trying to, as one could describe, 'make a show' of them. For Karl, punishing transgression in this manner is considered to be a valuable and valid way of provoking responsibility in other road users even though he receives significant angry backlash from such behaviour. Unwilling to accept spatial disregard as a fact of life – that is, unwilling to tolerate transgression – Karl sees this backlash as worthwhile since his behaviour may lead them to not transgressing in the same way in the future, due to the humiliation they experience through Karl's method of punishment:

But, yeah, it's a case of making the point rather than just...accepting the fact that people do all these things. Just...draw attention to them, embarrass them! You know, because I don't care. Listen, they'll all be pissed at me but that's fine. I don't care, what are they going to do? But...if they get pissed at me for doing something that stops them doing it again...then it's a good thing. That's the way I see it.

Other than looking to punish through humiliation, Karl also consciously punishes transgression through impeding the progress of a motorist who he perceives to have disregarded him in some shape or form. Furthermore, he demonstrates his intention to punish by gesturing to them that he is aware of what he is doing – slowing them down through exploiting his vulnerability, since the road user is unlikely to collide with Karl in retaliation. This is a clear illustration of penalising another road user for an act of spatial disregard:

K: Yeah. If somebody is pissing me off and I get ahead of them – like traffic lights or whatever it is – I will...(laughing) intentionally cycle slow...to get in their way. If they try to get past me or they're trying to do something, I'll just move out and go (makes apathetic gesture). And I'll acknowledge the fact that I know I'm doing it...and it just makes them *more* mad (bursts out laughing)!

At its core, such an approach to punishing transgression is vengeful in origin, underpinned by a sense that acts of transgression should not be accepted and should, instead, be fought back against:

Yeah, I'll do that, kind of go "Well, no." My whole attitude is "Well, if you're going to *fuck* me over, I'm going to just...try to annoy *you*!"

Despite this highly straightforward confrontational means of provoking responsibility through punishing transgression, Karl does not in fact find such actions stressful but, instead, "cathartic". Namely, through provoking responsibility in other road users, Karl feels like he has done what is right in response to perceiving an act of wrongdoing from another, thereby relieving him of his sense of indignation following spatial disregard so he can continue cycling relatively carefree:

R: And how do you deal with all the stress? Does this make you really stressed?

K: No, it doesn't! It actually...I feel better than if I'd gone "I should've done something, I should have done this, I should have done that" instead of "Okay, I've made my point, now I'm gonna..."

R: That's really fascinating. A lot of the people I've interviewed have been assertive at one point but largely stopped doing it due to the stress whereas for you it seems to make you feel better.

K: Yeah, for me, it's cathartic! It's out there, I've made my point, there is no point dwelling on it so move on.

Indeed, Karl does not only engage in punishing transgression individually but has involved the authorities. In particular, having had his right-of-way cut off by a motorist Karl decided to take legal action in response. This act of spatial disregard resulted in a collision which damaged Karl's bike and injured his ankle. In response to a lack of financial compensation from this incident and the lack of recognition of wrongdoing from the offending party, Karl retaliated by taking legal action which led to him receiving significant compensation. Therefore, Karl looked to punish the transgression of this particular motorist who had disregarded him in space and, to make matters worse,

would not acknowledge this act of spatial disregard in person, by legally and financially penalising him through the use of institutions.

To sum up, then, Karl is resolute about punishing transgression as an important activity for cyclists, since tolerating transgression means condoning acts of spatial disregard from others who are at fault by doing nothing:

I think there's no reason why you should cycle on. Yeah, if somebody is the reason for me falling off bike, I'm not going to just sort of go "Oh, well, listen, I'm...I'm happy enough to allow you to...do whatever." Like, there's been times where I have slipped like places where it's paved with bricks from the footpath and I fell over and people run over like "Are you okay?" I was more embarrassed than anything else and I was like "Yeah, yeah, I'm fine" and away I went because obviously that was my fault and there was nobody else involved! But, yeah, if there's somebody else involved and they are at fault, I'm going to sure as hell let them know that I'm not happy with them.

For Paula, punishing transgression is not, like Ivan, an instinctive reaction or, like Karl, a deliberate strategy but is, instead, a last resort born of frustration in the face of non-recognition of transgression by another road user. In a bizarre incident, Paula encountered a motorist who she witnessed speeding ahead of her before coming across this same motorist blocking a cycle lane along Paula's route. In this particular instance, Paula tolerates this act of transgression and decides to cycle around the motorist's parked vehicle. However, upon doing so, she is met with a beep and abusive gesture from the woman in the illegally parked car. Paula, then, decides to indicate transgression to this motorist, pointing out that she is infringing on the cycle lane. However, the motorist looks to justify her spatial disregard by arguing that there is no other way for her to access the petrol station. At this point, Paula's sense of indignation is growing as she once again attempts to point out that the woman's behaviour is unjustifiable since, through infringing upon Paula cycle lane, this individual is unnecessarily putting her at risk through forcing Paula to enter a space shared with motorised vehicles:

I said "You do realise you are blocking the cycling lane." "Well" she said, "I can't get into the petrol station." She was there in front of the petrol station – it was blocked because of renovations. Anyway, less than a hundred metres further down the

road on the N 11 is an opportunity for motorists to turn right and there was a petrol station on the other side, so, if she was really in dire need for petrol she could have just gone to the other petrol station. Anyway, no, she was *stationary*, sitting there, on the phone when I went past her, so I said "I don't care! I don't care that you can't get into the petrol station, you are blocking a cycling path. You're breaking the rules of the road here. And, besides, not only are you breaking the rules of the road here, earlier, when you were whizzing down the bus lane at speed, you were breaking the rules of the road there as well! Why are you beeping at me? You were putting my life in danger because I have to go into a bus lane!" (Bursts out laughing incredulously.)

Nevertheless, as Paula describes, her indications of wrongdoing were "falling on deaf ears" as the motorist persisted in not recognising her transgressing behaviour, thereby not recognising Paula's spatial entitlement to the cycle lane. As a result, Paula felt like she could no longer control her indignation and, despite starting off by indicating transgression relatively calmly, following a repeated lack of recognition from the motorist – going as far as questioning why cyclists are so "arrogant" – Paula launched a tirade of abusive language, losing grip of all reason and calm. Indeed, in recounting this incident, Paula was perceptibly re-experiencing the outrage that came with not having one's entitlements as a road user acknowledged, actively looking for recognition during the very interview. Similar to Ivan, Paula was highly surprised at her behaviour whilst punishing transgression, which she judged as out of character:

P: She wasn't having any of it. I was *livid*!! I literally wasn't using my rational thinking at all, I should have just taken a picture of her damn car, you know? I was *livid* at the fact that this person who was breaking at least three rules of the road was giving me the two fingers! I said "And for *fuck sake* put your *fucking* phone away before you start *fucking* driving on the phone (emulating shouting)!! Fucking bitch!" (Bursts out laughing.) Sorry, *I was...fuming*! Now I never use that kind of language, of course, apart from now, sorry, excuse me (laughs)! But I generally don't swear (surprised tone), I was *livid*!"

R: Were you surprised at yourself?

P: I was, yep. Ah, it took me a good hour to calm down! Can you believe it? Giving me the two fingers, for what?!

All of this escalation of tension, then, arose out of a desire from Paula for this motorist to recognise that Paula was entitled to be in the cycle lane and that she was obligated to stay out of it. However, instead, this individual openly rejected this view in addition to unnecessarily abusing Paula:

R: And what did you want for her to say to you?

P: "I'm sorry". I just would have wanted her to say "I'm terribly sorry. I realise I'm in your way — I'll move over now." Not say "Oh but can't you see I can't get into the petrol station" which was closed anyway! In other words, "Well, I have a right to sit in the middle of the cycle path because I can't get into the petrol station." That's basically what she was saying to me...and "fuck you". And that is what she did, because she gave me the fingers, you know!

Despite this highly emotive encounter, Paula retrospectively stands by her actions on the grounds of the need for cyclists to provoke responsibility in other road users — to "stand up" for their entitlements as road users when facing acts of spatial disregard, because such acts make the road a more dangerous place for cyclists, making exercise of spatial entitlement precarious:

I wouldn't say we have to be arrogant but we have to *stand up* for ourselves. You know, cyclists *do* have to stand up for themselves. Whether it be...to motorists or to other cyclists, but, you know...it concerns your own safety because you're still...99% of the time the more vulnerable road user.

Eoin indeed makes a concerted effort to "stand up" for his entitlements to space as a cyclist, albeit indirectly through the reporting of spatial disregard to the police. Having repeatedly encountered numerous taxis parked on the cycle lane on his way to work, Eoin decided enough was enough and consistently photographed and reported "about a hundred drivers" for their acts of spatial disregard:

Em...guards...I've...reported loads to the guards. I went through a phase, there, where I used to cycle home for lunch when I was working in town...and there's a stretch up beside the Four Courts — there's taxis parked there, half on the pavement, half in the cycle lane, all day long. I mean, they're breaking so many laws it's just unreasonable. And, I would photograph them, photograph the number plates and just email them off to the guards. So, I suppose I would have reported about a hundred drivers or more for doing that.

This particular period of recording and reporting incidences of illegal parking in the cycle lane took place over a number of months; however, in reporting spatial disregard, Eoin came across another aspect of the conditions of precarious entitlement – police neglect. Namely, no action appeared to be tackled by the police despite clear evidence and reporting of spatial disregard, leading to an increased sense of precarious entitlement as a cyclist for Eoin.

I went through a phase for a few months of systematically doing it, yeah...and, eh...nothing ever happened. Absolutely nothing. The odd time I've reported cars for breaking red lights...nothing. I got the impression that guards...traffic police going around the place...that you're more likely to be stopped as a cyclist than you are as a motorist, you know...

Indeed, when Eoin began the practice of reporting acts of spatial disregard to the guards as a means of punishing these transgressions, police responded asking for vehicle registration numbers following his reports using taxi numbers. In addition, police requested witnesses for these incidences for more evidence. In the absence of witnesses, then, Eoin was told that "we can't do anything about it". Accordingly, Eoin decided to gather evidence himself in order to report:

You know, so...(sighs) I *started* taking pictures after guards said "Oh, well we've no evidence, what can we do? It's your word against theirs (parody tone)" and whatever.

Nevertheless, these efforts were ultimately futile as no response or evidence of punishment was received from the police following Eoin's submission of evidence. Accordingly, due to this police neglect in response to acts of spatial disregard, Eoin has

abandoned his efforts to punish transgression using the authorities since it has not been effective as a means of provoking responsibility in road users who engage in spatial disregard.

So far, then, I have illustrated various means of punishing transgression deriving from participant accounts. On the one hand, personal action is taken to directly provoke responsibility to road users engaging in spatial disregard; on the other hand, authorities and external agencies are contacted in order to indirectly provoke responsibility through the hands of a second party. Interestingly, Yvonne does not directly provoke responsibility through punishing transgression nor does she transfer the task of provoking responsibility on to others. Indeed, underpinning all of this is a sense of scepticism regarding the willingness of police to punish acts of spatial disregard — a suspicion of police neglect. Instead, she uses social media — namely, Twitter — to publicly shame motorists engaging in spatial disregard by accentuating their transgressive acts online for all to see:

There was one car, one day, outside the Skylon hotel on the cycle track separate from the road parked illegally. There was a guy plonked ... right in the middle of it...right in the middle of it... I was frustrated. You know, sometimes, cycle lanes at the side of the road - like, there in front of these houses on the side of the road and they're allowed to park - I don't think that's right but that's the way it is. This was...a proper cycle lane segregated from traffic going up the footpath. It was like...it had bing, bing, bing...you know, it was really obvious and it wasn't like he had a wheel on the cycle lane or half the car, it was like plonked. If someone said "I'm going to go out to piss people off and block as many people as possible," you couldn't have done a better job. So, I took a photograph and put it on the 'free the cycle lanes' Twitter...it was a campaign 'free the cycle lanes'. So, if you saw someone parked in a cycle lane, you took a photograph of it and you tied it 'free the cycle lanes' on Twitter and stuff. I even set up a Twitter account which I never used to do it! But (gestures indifferently) I'm not sure there's much you can do about it. I mean, I don't know what I can do as a person about it. It's frustrating...but that was a really particularly blatant case. I doubt if I took the photo and went to the guards that this guy is parked in the cycle lane, I doubt anything would really be done about it.

In this way, then, similar to Karl, Yvonne punishes transgression by 'making a show of' transgressors albeit indirectly through an online medium as opposed to the road space. Through making their acts of transgression visible online and, by doing so, their vehicles which may possibly be identified, Yvonne is provoking responsibility by stimulating a sense of shame brought about by garnering public opinion through Twitter. Indeed, the '#freethecyclelanes' online campaign is intended to achieve such a name by shaming transgressing road users and highlighting the plight of cyclists to persistent spatial disregard: this display of the disregard of cycle space that renders a cyclist's entitlement to public space precarious leads fluently to the final means of provoking responsibility by cyclists in Dublin – displaying responsibility.

v. Displaying Responsibility

As a means of provoking responsibility, displaying responsibility is markedly distinct in relation to the aforementioned variations. To expand, the previous modes of provoking responsibility are primarily based on getting other road users to regard one's spatial entitlements or the spatial entitlements of cyclists in general through some form of provocative action or interaction - accentuating one's presence in a space, asserting one's entitlement to a space, pointing out that someone has infringed on your space, punishing someone for disregarding you in a space. Through these actions and interactions, a cyclist tries to stimulate awareness, fear for others, fear for oneself, guilt, and shame in other road users. In displaying responsibility, on the other hand, a cyclist tries to garner favour from other road users by publicly demonstrating in some respect their own 'responsibility' as a road user. In this way, displaying responsibility is an attempt to provoke responsibility in other road users to regard the spatial entitlements of oneself as a cyclist or cyclists as a group of road users through evoking a sense of respect for cyclists as a road user group in general. Through displaying responsibility, then, a cyclist wants to positively influence the perceptions of other road users so that cyclists are considered legitimate and respectable users of public space. Accordingly, displaying responsibility is a way of preventing or reducing acts of spatial disregard that contribute to precarious entitlement for cyclists.

Philip wears a bicycle helmet, uses a high visibility vest and functioning lights on his bike during the night time, and, additionally, indicates with his hands when he wants to turn so that other road users know in advance. Interestingly, these measures are not undertaken purely for Philip's safety. Indeed, he considers them a visual display to other

road users that he is a "respectable user of the road" since he is taking responsibility for his own safety. Thus, through using hand signals and bicycle equipment, Philip feels that other road users are now obliged to respect his spatial entitlements as a road user since he is "doing whatever" he is "told to be safe and to be seen". In this way, Philip's manifest behaviour as a cyclist – wearing a helmet, high visibility, using lights and communication signals – align with his notion of what is expected of a 'responsible' cyclist. Since he is being 'responsible', he therefore considers himself "respectable" as a road user, which generates obligations on the part of other road users to respect him. In this way, it is clear that Philip is displaying responsibility in order to provoke responsibility in other road users to regard him.

R: Do you ever behave or be *seen* to behave in a certain way that makes you look like a responsible road user to drivers?

P: I use my hands my want to turn, I use the lights on my bike when I go out at night — I always make sure I have the lights with me — and I think that's an indication of "I am a...respectable user of the road so you have to respect me because I am doing whatever I was told to be safe and to be seen." I always have a helmet, I always have lights and I always have my high viz vest.

Without his equipment, however, Philip feels partially vulnerable. So, using such equipment does enhance his sense of safety to some extent. However, without lights he feels "guilty" as opposed to unsafe. Thus, failing to use lights may be considered by Philip to be 'irresponsible' since he is not looking after safety. When he has equipment, on the other hand, he feels confident in exercising his entitlement to public space since he is displaying his responsibility as a road user. Therefore, through displaying his responsibility as a road user, Philip provokes responsibility in others to respect his spatial entitlements as a cyclist and, therefore, has the confidence to exercise his entitlement to public space on these grounds:

R: And would you feel vulnerable if you didn't have them?

P: Yes.

R: Purely because of the safety features that apply or would that also be because of how people would see you and then treat you?

P: Both of them. I would feel uncomfortable myself if I'm not...wearing a hi-viz. I would feel...guilty if I don't have lights. Once I have all of them I also feel...entitled to claim my space and my rights...because I have followed every single thing that I was told to keep safe and remain safe.

Gerald feels a sense of stigma from other non-cycling road users for being a cyclist in general, regardless of his behaviour or use of equipment. In his view, inconsiderate and illegal behaviour by cyclists provokes the various forms of spatial disregard cyclists experience. Gerald, then, feels that he is carrying a "badge" – a badge of shame for being a cyclist due to the poor road behaviour of other cyclists. Indeed, even in describing his view on spatial disregard, Gerald accidentally excludes cyclists from his description of "road users", noticing that cyclists are indeed road users too. This could be seen as a revelation of his own notion of cyclists as inferior or somewhat suspect road users, which prompts him to display responsibility in the first place:

One thing I said earlier is that I think sometimes cyclists are cyclists' worst enemies... I'm aware that badge that you kind of have, that you are carrying all the badness that other cyclists have so that when road users...oh, sorry, why am I saying road users? We're all road users.

Regardless of the reality of his view, Gerald believes that drivers have a negative perception of cyclists as road users and that he must accommodate individually for this in order to provoke responsibility in them to regard his space as a cyclist. In a word, he must display that he is not like 'irresponsible' cyclists — that he is a 'responsible' road user. If he does not, he fears that a driver may disregard his entitlement to public space out of a lack of respect for cyclists due to their perceived bad behaviour:

When drivers see a cyclist, what's at the front of their mind is the last four cyclists breaking those lights or the last cyclist that cut straight across them or the last cyclist that might have, you know, banged their bonnet or whatever. I feel like I'm carrying that badge, do you know what I mean? And I get frustrated at other cyclists because...the car that's going to eventually hit me and knock me off my bike

will be a frustrated car driver because of...well, any number of things but partially because of his frustration with other cyclists from seeing them break the lights all of the time, crossing illegally at that junction or swerving in front of them, so, I feel like I'm carrying that badge.

Thus, for Gerald, displaying responsibility is his way of provoking responsibility in other road users – in particular, motorists – to respect his spatial entitlements as a cyclist in an environment of "vague hostility" towards cyclists; an environment that may precipitate acts of spatial disregard that could endanger Gerald's safety in the present and the future. Interestingly, then, Gerald does not practice what may be considered 'safe' and 'responsible' cyclist behaviour for the expected safety it may bring but, instead, Gerald displays it for other road users to see so that they will regard the spatial entitlements of cyclists and, through this provocation of responsibility, then, Gerald may become safer. More particularly, Gerald refrains from breaking red lights – therefore complying with the rules of the road – as a means of displaying responsibility to nearby drivers. Through doing this, Gerald sacrifices the expediency that comes with breaking red lights for the reputation of cyclists, even though he does not consider such a practice dangerous. Accordingly, Gerald believes that engaging in such behaviour that is considered 'responsible' by motorists when around these other road users challenges their negative view of cyclists as road users produced through 'irresponsible" behaviour by other cyclists – the cyclists who break red lights.

So (laughs), I...I will confess that I do occasionally break red lights myself. There are places where I feel it's okay – it doesn't make it okay of course, but, sometimes, I will decide not to do it because I'm aware there are car users on the road so I'm like "Well, shit. I could break this light and save an extra 10 seconds on the commute home" thereby, you know, strengthening the stronghold that is, you know, the strong opinion that drivers might have that all cyclists are dicks (laughs). Or, I can wait that extra 10 seconds and just...have them go "Wait a minute (surprised tone)! Cyclists aren't so bad." And, you know, restore their faith in the humanity of cyclists (laughs). So, yeah, to answer your question, that sense of antagonism, whether real or not – perceived – does sometimes influence how I cycle...but in a positive way, I would think.

Yvonne, on the other hand, displays responsibility through wearing a cycle helmet which, similar to the matter of breaking red lights for Gerald, she considers perfectly safe to cycle without. Informed by her experience of discourse relating to cyclists and responsible behaviour as a cyclist, Yvonne acts up to this equation of the 'cyclist wearing a helmet' as the 'responsible' cyclist, despite rejecting such a view herself. Wearing a helmet, then, is displaying responsibility to other road users as a way to generate favour:

I always wear a helmet even though I don't think the research is there to back it up. Whenever you see any *spats* going on online, it's always "Oh! They weren't wearing a helmet." People just have this perception that you are a *responsible* cyclist if you wear a helmet...so I'm inclined to wear a helmet for that reason. I actually don't really think it makes much difference to safety from the research I read...but I think it gives a *perception*.

Alike Gerald, she displays responsibility by stopping at red lights despite the fact that breaking them, in some cases, would not pose a threat to her safety or infringe on any other road user's right-of-way. Nevertheless, she displays responsibility in this manner despite judging such behaviour absurd. In this way, displaying responsibility is engaged in begrudgingly by Yvonne purely for the sake of making a "good impression" with other road users, which cyclists who break red lights do not produce notwithstanding Yvonne's view that they are, in fact, not doing anything unsafe or particularly wrong. Thus, Yvonne is playing up to the moral expectations of other road users even though she considers them flawed:

I would generally not break lights and stuff even though with left-hand turns, *not* to go through the lights makes no sense because...if there's a cycle lane going across and there's no pedestrian crossing, there's no reason not to do a left turn...but I'll still sit there like an eejit going "This is really stupid!" But I'll sit there because I want to give a good impression. Yeah, I kind of stick to the rules and stuff to kind of, yeah...I kind of want to give cyclists a good impression, I suppose. I don't want to give a *bad* impression to cyclists. People break the lights beside me, I do a tut to myself and stuff like that because it looks bad...I'm a real mammy on a bike, actually (laughs)! It's not good for perceptions. But, a lot of cases where people break the lights they're not doing anything dangerous (defensively)...

As a means of provoking responsibility through improving the perception of cyclists by motorists, Yvonne is unsure how effective displaying responsibility is. Nevertheless, awareness of the "badge" – as Gerald puts it – that cyclists wear prompts her to display responsibility in order to prevent acts of spatial disregard which she fears most of all:

I'm really aware of the perceptions of cyclists as irresponsible so I just try to do my bit. I think having someone in the car whose angry towards cyclists is a is not a good thing because...they could kill somebody...so, I think anything which kind of gets people to be more accepting of bikes being on the road is a good thing. It makes people go "Actually, you know...people on bikes are considerate." Anything that helps that perception is a good thing for safety.

In a fascinating twist, then, Yvonne displays what is considered 'safe' road user behaviour which she believes has no bearing on her safety so that she will not be subjected to unsafe road user behaviour from disgruntled motorists. Hence, equipment like a cycle helmet is only considered good for safety in how it improves the perception of cyclists by road users in vehicles.

Contrary to Gerald and Yvonne, Paula displays responsibility not through her behaviour as a cyclist but through accentuating the transgression of other road users so that others can see that she has been responsible as a cyclist and another road user has not. In one incident, Paula's right-of-way was cut off by a motorist coming out of an intersecting road. Since she had to brake in order to prevent a collision with this vehicle, she was unable to indicate transgression as a means of provoking responsibility to this disregarding road user. Instead, then, Paula looked to a nearby motorist who had witnessed the incident in order to display her responsibility as a cyclist in that particular scenario, thereby challenging the prevailing view of cyclists as "arrogant" and transgressive themselves:

P: So, this...jeep...range rover, thing...coming from the other side (bursts out laughing)...wanting to turn right... What did it do? It turned right! So, of course I had to brake...and, like, you can't do anything because you're there breaking. Like, you really can't do anything...you can't say (continues laughing and makes "What are you doing?" gesture)...pretend you're Italian! But, I had seen her from the corner of my eye and I saw that she was moving and I thought "This one is going."

And I thought "I better start breaking – this one is going, she's *not* going to stop. She's going to go." So she did, she did go, she did cut me off and, as it happened, I had already started breaking at this stage but I was still only less than a metre between myself and the car when she did cut me off. I looked up again and a car that was stationary on the intersecting road had seen it and she went (rolls eyes as if to say "What were they doing?!") and I'm like (rolls eyes too). What were they thinking? But that happens, that happens a lot.

R: And you are actively looking around for someone to kind of go (gestures raised arms)...

P: Yeah, yeah, yeah...exactly. For somebody to *see* that, yes, my life had been put in danger...that, no, not all cyclists are arrogant cyclists...that *we* stick to the rules of the road yet other people put us in a dangerous situation.

As she describes, through looking at another motorist and denouncing and accentuating their open disregard of her space, Paula displays responsibility as a cyclist actively by showing, with a particular incident, that "not all cyclists are arrogant cyclists" but are, instead, responsible cyclists who "stick to the rules of the road" and, yet, are subject to irresponsible behaviour from others that put cyclists in "a dangerous situation". This can be seen as a second-hand way of displaying responsibility through displaying the irresponsibility of another road user which a cyclist must deal with which, equal to the direct way of displaying oneself as acting 'responsibly', looks to provoke responsibility by challenging the presumed negative perceptions that other road users have of cyclists by giving positive, clearly visible counterexamples.

3. Conclusion

In this chapter, we have explored the various means by which cyclists in Dublin deal with conditions of precarious entitlement by looking to provoke responsibility in others. This has included highlighting one's presence in a particular space so that one is noticed by others, asserting one's entitlement in or to a space in the presence of other road users, pointing out to those who disregard one's space that they are transgressing, making those who transgress experience negative consequences from doing so, and, lastly,

showing to other road users that one is a responsible and, therefore, respectable user of the road as a cyclist. In exploring and describing precarious entitlement as a concept and the core category of this theory, privatising vulnerability as one way in which utility cyclists in Dublin deal with conditions of precarious entitlement and provoking responsibility as another way in which such conditions are dealt with, the grounded theory has been elucidated in the greatest depth and clarity as is possible in this thesis. In the next section, then, it is time to explore the contribution that this theory can make in relation to other applicable and novel concepts and subject areas across different fields.

Chapter 7:

The Contribution of the Theory

1. Introduction

In this chapter, I will explore and propose potential contributions that the core category of precarious entitlement and the sub-core categories of privatising vulnerability and provoking responsibility can bring to various fields of theory, research and policy including but not limited to vulnerability, neoliberalism, state governance, social contract theory, automobility, mobility, public space, and accessibility. In suggesting potential contributions and uses of the major concepts of the theory, I will, for the most part, focus on possible contributions and uses in the context of the substantive area of utility cycling in particular. However, this does not mean that these concepts do not have a wider general potential beyond the substantive area; rather, for the purpose of precision and relevance, I have chosen to emphasise the substantive area, with some mentions of more general applications of the theory and concepts. Importantly, the following claims regarding the contribution of the theory are not meant to be interpreted as concrete or definitive but, instead – in the spirit of grounded theory – as useful suggestions for the broad possibilities in which the 'high impact' concepts emerging from this study can be applied (Glaser, 1995).

2. Precarious Entitlement

i. From Personal Vulnerability to Structural Vulnerability

Vulnerability is a concept widely employed in the fields of philosophy, medicine and indeed road safety, with cyclists often labelled as 'vulnerable road users'. Vulnerability, however, is not a homogenous concept. That is, the term 'vulnerability' can refer to many different things and, therefore, can be defined in somewhat diverging ways. According to ten Have (2016), one conception of vulnerability is that it "functions as a warning sign that for some people special attention is needed" (p.1). Vulnerability, then, acts as a sort of signal – a signal for others to pay attention and take care. ten Have (2016) argues that, in many cases – particularly in the field of bioethics – vulnerability is portrayed as an exceptional state for a human being to be in. It is a state of "diminished autonomy" (p.2) and dependence on others which is designated as special or outstanding rather than fundamental. In contrast to this perspective on vulnerability, in which human beings are considered for the most part autonomous and independent,

ten Have (2016) claims that such independence and autonomy is in fact exceptional and vulnerability is, instead, fundamental to being human. Accordingly, human beings are foundationally vulnerable. This philosophical perspective on vulnerability focuses on the innate susceptibility of all human beings to "harm or damage" (p.12) — no one is excluded from this susceptibility.

However, generally in political discourse the focus is on the aforementioned 'special' vulnerability in which exposure rather than innate susceptibility is focused upon. Namely, the risks of harm for individuals, groups or larger social units are attended to with the view of minimising such exposure that renders them vulnerable. In this way, vulnerability is normative – it is a concept that calls for action; through designating one as vulnerable and therefore dependent on others, it mobilises others to take care of the vulnerable (ten Have, 2016). However, what if vulnerability is made normative for its bearer? That is, what if the responsibility to care for the vulnerable is put on the very persons who are vulnerable, thus making one's vulnerability a personal, as opposed to social, responsibility?

Cyclists in Ireland are designated as especially vulnerable road users in comparison to motorists since they are relatively unprotected and are therefore heavily exposed to harm in the case of a collision with a motorised road user. They are constructed as vulnerable subjects. Nevertheless, at the same time, one can argue that cyclists are largely ascribed the primary responsibility for dealing with this vulnerability (RSA, 2018c). The construction of their vulnerability appears to attribute vulnerability to the cyclist rather than the cyclist's physical environment, treatment and protection on the road relative to other road users. Moreover, taking responsibility for one's vulnerability as a cyclist is portrayed as a plausible means of mitigating this vulnerability. Official recommendations to wear a helmet, high visibility clothing, follow the rules of the road and signal before turning are all proposed as primary measures for reducing the risk of injury or fatality while cycling in Ireland (RSA, 2018c). Although individual conduct may be considered an important aspect of cycling safety, with such directives - which, in part, assume a construction of vulnerability as "individual deficit" (ten Have, 2016, p.256) - the wider conditions of the cycling environment that contribute to one's perceived (and potentially objective) physical vulnerability as a cyclist are obscured. In other words, the external structures that produce or contribute to a cyclist's sense of vulnerability are obscured.

As a concept emerging from systematic procedures of data collection and analysis, precarious entitlement provides an empirically grounded conception of what utility

cyclists in Dublin are primarily concerned with: namely, negotiating the conditions of precarious entitlement to public space as a road user. Rather than a narrow concern with their own vulnerability as an unprotected individual, precarious entitlement as an emergent main concern shows that a complex of factors — material (insecure space), social (spatial disregard) and institutional (police neglect) — contribute to a sense of vulnerability and precariousness for cyclists in Dublin. This complicates the aforementioned often individualised and isolated construction of a cyclist's vulnerability as purely emergent from their mode of transport and their ability to cycle 'safely' by incorporating aspects external to the individual cyclist that heavily impinge on their cycling experience and conduct. In this way, precarious entitlement potentially reveals a structural vulnerability (ten Have, 2016) that cyclists in Dublin must navigate. Conceptually, then, precarious entitlement provides a concept that can be used to designate a particular kind of structural vulnerability in which one has a legal entitlement to a good that is situated in potentially risky or unreliable material, social and/or institutional conditions, thus rendering the entitlement precarious to exercise.

ii. State Responsibilisation without State Responsibility

In his seminal lecture on 'Governmentality', Foucault (1991) argued that during the 16th century questions of governance – of the state, of things in the state, of oneself and of others - became a major consideration for those in power, leading to a variety of approaches to problems of governance: a variety of 'arts of government'. These various approaches all aimed at some particular end, and, crucially, involved the application of 'economy' in attempting to achieve or maximise such an end. In contrast to exercises of state sovereignty in which subjects were compelled by law to submit to the 'common good' defined by the sovereign, the art of government lay in "a right manner of disposing things so as to lead not to the form of the common good...but to an end which is 'convenient' for each of the things that are to be governed." (p.95). In this way, government is more about disposing things and people toward convenient ends for the state rather than coercing them to behave in a certain way by law. Government, then, relies more on tactics than legal force. With the emergence of the concept of 'population' as an object for the exercise of governance (and the scientific means of measuring its status and interventions upon it), the primary preceding object - the family – was incorporated and overridden. In this shift, the art of government gave way to political science.

Closely related to these observations on the emergence and development of government, Foucault (1978) advanced that, in the early 17th century with the emergence of 'governmentality', states were moving away from the exercise of sovereign power – in which rulers had the power to put their subjects to death – and moving toward the exercise of 'biopower' – the power to protect and enhance the health and life capacities of its subjects. In this way, "the ancient right to *take* life or to *let* live was replaced by a power to *foster* life or *disallow* it to the point of death" (p.138). With the expansion of such power, laws, initially founded to ensure submission to the sovereign by its subjects, were increasingly adapted to define particular 'norms' and therefore to 'normalise' behaviour in the name of life. In relation to the exercise of this form of power, two general techniques of governance were put into action: first, that of the *disciplining* of bodies; second, that of the *regulation* of the population.

'Safety' has been noted as the primary discourse for disciplining mobile subjects such as motorists (Packer, 2003). There is ample evidence that cyclists in Ireland are, much like drivers and other road users, targeted with governmental techniques of discipline in the name of the 'safety' of oneself and of others. As mentioned in the above section, the Irish RSA (2018c) makes various recommendations toward cyclists regarding their behaviour as a means of mitigating their vulnerability on the road. Indeed, the rules of the road laid out by the RSA (2018b), which are applicable to all road users, are manifestly about producing 'responsible' mobile subjects: "The rules ask us to take personal responsibility for our use of the road, and in doing so become better, safer and more socially responsible road users... It's our responsibility. It's our choice." (p.7). Relatively recent introductions of fixed charge cycling offences, such as breaking a red light or cycling in a pedestrianised area (Citizens Information, 2018) may be viewed as an extension of the aforementioned rules and recommendations and, more notably, an extension of governmental techniques of disciplining cyclists in the name of 'safety'.

However, perhaps most notably of all, efforts in promoting cycling and improving cyclist safety in Ireland have involved the introduction of 'Cycle Right' training (Cycling Ireland, 2018). This training is designed to provide "practical cycle safety and skills training to promote competent and confident cyclists" and, overall, offer participants "the skills to cycle confidently on the road network, from novice to competent cyclists". In this way, cyclists are taught how to cycle safely under the logic that cycling can be made safe with the right knowledge and practice — and, therefore, a cyclist's vulnerability can be mitigated — through the conduct of the individual. Such an intervention presupposes that vulnerability is, for the most part, *personal* and is

therefore capably managed *personally* due to its emphasis on the importance of skill and technique in producing 'competent and confident' cyclists. This is not to disparage the ardent efforts and value of 'Cycle Right' in empowering some groups to adopt cycling as a mode of transport over other modes in what is often acknowledged by trainers to be a hostile cycle environment. Rather, it is to point out that this intervention, in the absence of clear interventions to address the conditions of cycling mode (i.e. conditions of *precarious entitlement*), is insufficient and overly-individualised as a policy measure to improve cycle safety and promote cycling.

Accordingly, through the recommendations of the RSA, the rules of the road, fixed charge cycling offences and 'Cycle Right' training, cyclists as road users are exposed to a high number of disciplinary techniques regarding their behaviour in the name of 'safety' ranging from education and training to punishment. These various approaches to improving the 'safety' of cycling focuses on improving the individual practices of cyclists by improving their 'responsibility' and 'knowledge'. In this way, they can be seen as methods of state *responsibilisation* harnessing a neoliberal ontology of the autonomous subject (Rose, 1996).

Drawing heavily upon Foucauldian conceptions of power and the subject, Rose (1996) argues:

Governing in a liberal-democratic way means governing *through* the freedom and aspirations of subjects rather than in spite of them. The possibility of imposing 'liberal' limits on the extent and scope of 'political' rule has thus been provided by a proliferation of discourses, practices, and techniques through which self-governing capabilities can be installed in free individuals in order to bring their own ways of conducting and evaluating themselves into alignment with political objectives. (p.155).

Thus, in essence, members of neoliberal societies are governed in primarily indirect ways that leads to their self-governance in harmony with state objectives, as opposed to direct coercion by the state of its members in order to realise such objectives. In this way, this overall method of governance leads to the "regulated freedom of autonomous selves" (p.155) which is achieved, Rose (1996) argues, chiefly through the apparatus of expertise, which provides a link between the power of the state and the subject. Importantly, expertise presents itself in the form of authoritative scientific knowledge and objectivity distant from state manipulation rather than being a politicised institution

designed for manifest political purposes. In appearing and presenting itself as such, expertise acts as a powerful tool in regulating the "conduct of conduct" (p.156) of such neoliberal selves. The process, then, of producing self-governing neoliberal subjects significantly through the deployment of authoritative expertise can be seen as a process of responsibilisation. In responsibilising subjects, neoliberal political rationality aims to bring about a positive state of affairs not from direct political action but through a promotion of desirable "enterprising activities and choices of autonomous entities" (p.153).

In relation to cycling in Dublin, the disciplinary discourses of 'safety' and the instructions that follow relating to the 'conduct of conduct' proclaimed by various bodies of safety experts (Cycling Ireland, 2018; RSA, 2018c) suggest that the responsibilisation of cyclists in Ireland is a heavily employed governmental technique. Whilst all the aforementioned modes of responsibilising cyclists may be considered valuable as components of creating more precisely choreographed road environments and improving the confidence of cyclists (and, through doing so, potentially promoting cycling), the emergent core category of precarious entitlement indicates that the material, social and institutional conditions in which Dublin cyclists must deal with and respond to constitute a complex of structural vulnerabilities which require multifaceted structural interventions and are thus beyond the scope of the individual. With such a structural perspective in mind, neoliberal governmental techniques of responsibilisation, then, are of limited scope in coping with the road environment as a cyclist and for improving perceived (and potentially physical) safety. One can perhaps see resonances with ten Have's (2016) claim regarding neoliberal approaches to vulnerability and of the seemingly prioritised Irish state responsibilisation approach to cycle safety:

Even when vulnerability is clearly the result of circumstances beyond individual control, the solution is to articulate personal responsibility and individual agency. (p.155).

Precarious entitlement, then, as a concept, can be usefully employed and conceived as a type of structural vulnerability particularly emerging from, and/or concealed by, neoliberal forms of governance in which particular individuals or groups are legally entitled to something (in this case, public space) but are unable to exercise this entitlement securely due to precarious structural factors. These structural elements are left unaddressed through neoliberal responsibilisation tactics that emphasise individual

action and governance over state action and governance (Rose, 1996). To put this more concisely: precarious entitlement can potentially be viewed as a structural vulnerability unique to neoliberally governed societies.

iii. A State of Nature within a State of Civilisation

Social contract theory in political philosophy (Hobbes, 1968; Rousseau, 2004; Locke, 2016) theorises the origins and legitimacy of a civil society arising from a 'state of nature'. It is argued that, in a pre-civilised state, human beings are driven by their own self-preservation in which every human being has complete liberty to do as they wish and take what they want. In such a 'state of nature', no law or conception of justice exists since no one formally has a 'right' to anything or obligation towards anyone. According to Rousseau (2004), one's 'natural liberty' – that is, the freedom to do as one desires without impediment – is determined by one's physical power or 'force'. In contrast, when one explicitly or implicitly contracts to the grouping together of various individuals to pool together their collective forces into a 'common power', one obtains 'civil liberty' but at the expense of 'natural liberty':

What man loses by the social contract is his natural liberty and the absolute right to anything that tempts him and that he can take; what he gains with the social contract is civil liberty and the legal right of property in what he possesses. (Rousseau, 2004, p.21).

Civil society, then, emerges out of a collective agreement to join together into a 'body politic' as an alternative to the anxiety ridden existence of a 'state of nature'. Accordingly, the allocation of property to a citizen and protection of a citizen's property by law supplants possession by force. Locke (2016) describes the rationale behind such a coming together of individuals:

If Man in the state of Nature be so free, as has been said; if he be absolute Lord of his own Person and Possessions, equal to the greatest and subject to no Body, why will he part with his Freedom? Why will he give up this Empire, and subject himself to the Dominion and Controul of any other Power? To which 'tis obvious to answer, that though in the state of Nature he hath such a right, yet the

Enjoyment of it is very uncertain, and constantly exposed to the Invasion of others. (Locke, 2016, p.63)

Namely, civil society is formed, and, consequently, each individual's natural liberty is alienated, as a means of producing a more peaceful and secure existence in which possession and property is clearly delineated by law and protected and enforced by the collective power of the body politic. Ideally, then, the law, which is derived from the general will of the body politic, rules the conduct of its members through the exercise of executive power (Hobbes, 1968; Rousseau, 2004; Locke, 2016), which facilitates for its members the "mutual *Preservation* of their Lives, Liberties and Estates, which I call by a general Name, *Property*." (Locke, 2016, p.63).

Unlike the neoliberal framing of the subject as autonomous and capable of personal responsibility (ten Have, 2016), these early social theorists (Hobbes, 1968; Rousseau, 2004; Locke, 2016) posited that human beings divided without a shared state of civilisation and body of laws are exceptionally vulnerable to harm and loss from the anarchic, egocentric actions of other human beings. The foundation of a state, then, acts as a means of protection and preservation through the aggregated power of its members and its establishment and enforcement of laws. In contrast to the previously discussed neoliberal governance through responsibilisation (Rose, 1996), this original sovereign state primarily rules through the exercise of coercion in relation to laws. Precarious entitlement has the potential to conceptualise the experience of being in a neoliberal state that governs from afar through the promotion of self-governance without application of the collective force of the state directly intervening to enforce and protect the law. One has 'civil liberty' in theory but not in practice. In this way, precarious entitlement provides a conceptualisation for the experience of a state of nature within a state of civilisation. One is a citizen bestowed with particular rights under law, but in the context of trying to enjoy these rights in the absence of state authority and protection, every person must look after themselves in instances of these rights being disregarded by others. Accordingly, the combination of entitlement disregard and police neglect or absence is particularly central to the concept of precarious entitlement when considering it as a state of nature within a state of civilisation, since disregard involves anarchic like actions and police neglect involves the absence of a common power to enforce compliance with the law.

More particular to the substantive area, the routine experience of cyclists in Dublin of spatial disregard by other road users – particularly motorists – and police neglect in protecting cyclists' entitlement to public space in Dublin city (designated or shared), leaves cyclists in Dublin in what can plausibly be called a state of nature situation: they are subject to the 'arbitrary will' (Locke, 2016, p.29) of other members of their society without the 'executive power' of the body politic (Locke, 2016) protecting their 'civil liberty' and the law that is derived from the 'general will' of society (Rousseau, 2004). Accordingly, disregard of a cyclist's entitlement to public space in the city ensues in various forms – illegal infringement of cycle lanes, disrespect of a cyclist's right of way, targeted harassment of a cyclist in a shared space. It is clear that cyclists in Dublin experience their entitlement to space much like how Locke (2016) describes the experience of possessing something in a state of nature – that is, "constantly exposed to the Invasion of others." (p.63). Precarious entitlement conceptualises this experience within supposedly civil conditions.

On this particular point of contribution, precarious entitlement can be plausibly argued to potentially have relevance and use as a concept in relation to different research areas. Viewing precarious entitlement from the perspective of a 'state of nature within a state of civilisation', women who use public space as pedestrians or in other capacities can be considered a group that may experience and deal with precarious entitlement to public space(s), or, more specifically, a precarious entitlement to occupy public space free from harassment and abuses of various kinds. There has been significant research into the prevalence of sexual harassment toward women in public space (e.g., Kearl, 2010; Mellgren, Andersson and Ivert, 2017) as well as a heightened perceived fear of violence (e.g., Sandberg and Rönnblom, 2013) or perceived risk of crime victimisation (e.g., Yavuz and Welch, 2010; Paydar, Kamani-Fard and Etminani-Ghasrohdashti, 2017) amongst women in public space.

In this way, in particular contexts, women may be said to experience precarious entitlement to public space. Namely, they are entitled as citizens to occupy and pass through public spaces safely and relatively undisturbed, yet, the enjoyment of this entitlement is precarious due to the likelihood of being sexually harassed by other members of the public (Kearl, 2010; Mellgren, Andersson and Ivert, 2017), or even the possibility of being raped (Kearl, 2010). Relatedly, one may have such an entitlement to public space yet, as a woman, one *fears* that their entitlement is risky to exercise, as they may be subject to violent assault or other crimes, seemingly vulnerable and without a police presence or alternative form of protection (Yavuz and Welch, 2010; Sandberg and Rönnblom, 2013; Paydar, Kamani-Fard and Etminani-Ghasrohdashti, 2017). Accordingly, from this perspective, one can plausibly claim that women in certain

contexts experience or perceive a 'state of nature within a state of civilisation' in that they can be seen to possess an entitlement to be in public space free from intimidating and/or harmful behaviour, yet this entitlement is threatened by a real or perceived risk of sexual harassment or alternative forms of criminal behaviour that may cause one significant harm, with no protective agency immediately at hand. Instead of the properties of spatial disregard and police neglect, then, with this particular application of precarious entitlement one could conceptualise, perhaps, the more general properties of *entitlement disregard* and *police absence* or even potentially *isolation* (Yavuz and Welch, 2010; Paydar, Kamani-Fard and Etminani-Ghasrohdashti, 2017), with *insecure space* arguably still holding promise (Paydar, Kamani-Fard and Etminani-Ghasrohdashti, 2017). This example shows how the general category of precarious entitlement has potential to be usefully applied to other groups in sensitively tailored ways as an indicator for scenarios that may be described as characterising a 'state of nature within a state of civilisation'.

iv. Sovereign Automobility

The scenarios that resemble the experience of a state of nature for cyclists are arguably more complex than one possessing something under the constant threat of another, of more or less equal force, seizing it. Hobbes (1968) describes this premise of relatively 'equal force' between individuals in a state of nature:

Nature hath made men so equall, in the faculties of body, and mind; as that though there bee found one man sometimes manifestly stronger in body, or of quicker mind than another; yet when all is reckoned together, the difference between man, and man, is not so considerable, as that one man can thereupon claim to himself any benefit, to which another may not pretend, as well as he. For as to the strength of body, the weakest has strength enough to kill the strongest, either by secret machination, or by confederacy with others, that are in the same danger with himselfe. (p.183)

Considering precarious entitlement to public space in the substantive area of cycling in Dublin, the initial relative equality of force in the state of nature proposed by Hobbes (1968) fails to fit the technologically advanced state of nature faced by cyclists when using public space. Namely, the state of nature scenarios encountered by cyclists

deriving from conditions of precarious entitlement are primarily encounters between the *cyclist* and the *car-driver*. They are precarious situations between *hybrids* (Urry 2000). As Urry (2000) argues:

Machine, objects and technologies are neither dominant of, nor subordinate to, human practice, but are jointly constituted with and alongside humans. (p.78)

With this logic, human beings should not necessarily be viewed in isolation from non-human objects such as bicycles and cars, but, instead, as *hybrids* – as part human, part technology – since these non-human objects play a major role in human agency. The physical power of a cyclist – a fusion of the human and the bicycle – in relation to the hybrid of the car-driver, then, is a highly unequal power relation between hybrids. In this way, the car-driver has a much greater ability to exercise their 'arbitrary will' (Rousseau, 2004) in looking to possess public space in comparison to the cyclist, the exercise of which the concept of *spatial disregard* captures.

On top of the relatively greater power that car-drivers possess over cyclists (and pedestrians) that enables a more effective exercise of 'arbitrary will', the relative technological potential for higher speed and insulation from public space (and the people in and exposed to it) that the car provides the driver arguably leads to an increased capacity for a driver to engage in acts of disregard in general. Indeed, car drivers can be seen to be dwelling-in-the-car – a private space – rather than dwelling in public space with other road users occupying and transiting through it (Sheller and Urry, 2000). Sheller and Urry (2000) provide a vivid account of dwelling-in-the-car and its desensitising potential for the car-driver to the outside world and those in it:

The environment beyond the windscreen is an alien other, to be kept at bay through the use of the diverse privatizing technologies incorporated within the contemporary car. These technologies ensure a consistent temperature (the standardization of air-conditioning), large supplies of information, a relatively protected environment, high quality sounds and sophisticated systems of monitoring. They enable the hybrid of the car-driver to negotiate conditions of intense riskiness on high-speed roads (roads are increasingly risky because of the reduced road-space now available to each car). And as cars have increasingly overwhelmed almost all environments, so everyone is coerced to experience

such environments through the protective screen and to abandon urban streets and squares to the metallic cage-on-wheels. (p.746)

Urry (2004), on the other hand, evocatively provides an image of public roads dominated by such empowered and encapsulated car-drivers from outside of the car:

for the non-car-user roads are simply full of moving, dangerous iron cages. There is no reciprocity of the eye and no look is returned from the 'ghost in the machine'. Communities of people become anonymized flows of faceless ghostly machines. The iron cages conceal the expressiveness of the face and the road full of vehicles can never be possessed. There is no distance and mastery over the iron cage; rather, those living on the street are bombarded by the hustle and bustle and especially by the noise, fumes and relentless movement of the car that cannot be mastered or possessed (p.30).

This privatisation of the space within the car and detachment from the public space outside of the car may be seen as a further exacerbating component, then, of a technologically complicated and unequal state of nature experience for cyclists in which spatial disregard is potentially more easily executed by such a segregated and empowered hybrid as a car-driver compared to a pedestrian or cyclist in a shared public space. Hence, without the ethical provocation emerging from the "reciprocity of the eye" described by Urry (2004, p.30) taking place between car drivers and other road users, detachment from the objective existence of these 'other' road users is arguably more achievable than outside of the car. As a result, human beings may be more likely to be perceived as obstacles rather than as fellow occupiers of public space worthy of respect (Nixon, 2014). Indeed, the concepts and accounts emerging from this study attest to the importance of the eye and eye-contact in relation to *spatial disregard*, with cyclists taking various measures to provoke responsibility in drivers – among others – to respect their entitlement to public space such as *indicating transgression* and *accentuating presence*.

Sheller (2008) explores issues of justice and access to public space in relation to 'sovereign freedom': namely, the freedom to control others. From this non-egalitarian notion of freedom, those with sovereign freedom can move at the expense of the movement of others. Sovereign freedom, then, has implications for the mobility of individuals and groups in public space depending on which individual or group has the

freedom to control other individuals or groups. In relation to my preceding discussion regarding the unequal power of the car-driver in relation to the cyclist, and the cardriver's potentially expanded ability to engage in spatial disregard due to the segregation of spaces a car facilitates, one can argue that car-drivers possess sovereign freedom over public space in relation to cyclists under conditions of precarious entitlement. In this light, precarious entitlement can account for what could be called *sovereign automobility* since its properties include the conceptualisation of 'arbitrary will' (i.e. spatial disregard) and the absence of a 'common power' to enforce the general will enshrined in law (i.e. police neglect) thus enabling the exercise of the power to control shared public space. Furthermore, precarious entitlement can conceptualise the experience of sovereign automobility in public space for cyclists in particular but potentially other non-motorised public space users more generally.

Indeed, Sheller and Urry (2000) provide an account that resembles the notion of 'sovereign automobility' in referring to the 'system' of automobility in which the cardriver is situated, along with other users of public space. Such a system involves extensive material configurations that favour and enable the movement of automobiles and, consequently, can marginalise and disable the movement of other users of public space:

As personal times are desynchronized, spatial movements are synchronized to the rhythm of the road. The loose interactions and mobilities of pedestrians are forced to give way to the tightly controlled mobility of machines, especially in the human and machinic density of urban areas. Automobility dominates how both car-users and non-car users organize their lives through time-space...Yet car drivers are excused from the normal etiquette and social coordination of face-to-face interactions. Car travel rudely interrupts the tasksscapes of others (pedestrians, children going to school, postmen, garbage collectors, farmers, animals and so on) whose daily routines are merely obstacles to the high-speed traffic that cuts mercilessly through slower-moving pathways and dwellings. Junctions, roundabouts and ramps present moments of carefully scripted intercar action during which non-car users of the road present hazards or obstacles to the driver's intent on returning to their normal cruising speed. (Sheller and Urry, 2000, p.745).

This dominating system involves not just the car and driver but extensive relations with social arrangements, industries, infrastructures and activities that sustain, enable, and expand automobility, such as capitalism, petrol distribution, roads, and environmental resource use (Sheller and Urry, 2000). Indeed, Urry (2004) argues that modern societies ought to be considered 'societies of automobility' due to the massive material and social implications automobility has brought about in human societies in the West, most notably the reconfiguration of time and space for human social relations, which now necessitate car use. Automobility, as a result, impinges on the personal mobility of others, and can be seen to limit access to public space for other forms of mobility:

It concerns a relationship with the surrounding environment, both institutional and material, that gives some people privileges over others, in particular privileges of movement, travel, and control over space. It is an exercise of power that proclaims: I am free to do this to you, and you can't stop me. (Sheller, 2008, p.28).

Regarding the above quote, *precarious entitlement* accounts for both the material and institutional environment that favours automobility with the property of insecure space. That is, cyclists must negotiate public space that is experienced as insecure due to a lack of maintenance resulting in poor condition, or space that is inherently insecure in its design (e.g. a cycle lane that suddenly disappears; a cycle lane situated beside and exposed to high-speed motor traffic). This design of insecure space is connected with the institutional environment since the designated and shared spaces for cyclists are tied up with particular laws and rules in relation to such spaces (e.g. a cycle lane that can be legally parked in temporarily).

However, precarious entitlement goes beyond such 'privileges of movement' that equate to 'control over space' (Sheller, 2008, p.28) which is particularly put forward in reference to the system of automobility (Sheller and Urry, 2000). First, the property of spatial disregard goes *against* the existing institutions of space for cyclists since the spatial entitlements that are institutionally attributed to cyclists are infringed upon by other road users. Furthermore, the disregard of such spatial entitlements is perceived by cyclists to be neglected by the institution of the police. In this way, car-drivers are perceived to be granted sovereign freedom not necessarily by their more powerful and insulated means of travel or the system of automobility in which they are embedded, but rather by the inaction of the institution of the police to protect the spatial

entitlements of cyclists by punishing acts of spatial disregard. In kind, then, the property of insecure space takes accounts of a system of automobility and, therefore, the institutional and material arrangements that favour automobility over other modes of mobility in public space. The properties of spatial disregard and police neglect, however, expand the conception of the sovereign freedom of car-drivers beyond legitimate material and institutional affordances. Namely, they incorporate perceived behaviours of spatial disregard under institutional conditions of police neglect.

Hence, precarious entitlement brings in elements of not only automobile centred material and institutional design but also automobile user disregarding behaviour and institutional neglecting behaviour suggesting a new cultural and institutional element that may be considered in conceptions of sovereign automobility (Sheller, 2008) or the system of automobility (Sheller and Urry, 2000). It could be said, then, that these existing conceptions of the dominance of automobility detail how automobility dominates in a 'state of civilisation' that could be viewed as a 'society of automobility' (Urry, 2004) whereas precarious entitlement expands to account for the aspects of 'a state of nature within a state of civilisation' with the properties of spatial disregard and police neglect.

Lastly, in particular relation to precarious entitlement for cyclists conceived as a consequence of 'sovereign automobility', one can easily see how the core category of this study may have use as a conceptualisation of pedestrians' experience of public space and as a condition they must continuously negotiate in particular contexts. Indeed, in the theories posited (e.g. Sheller and Urry, 2000; Sheller, 2008) it is clear that automobility is claimed not only to marginalise other modes of transport *on the road* such as public transport and cycling, but also the existence and quality of pavements and pedestrians who may use them. In this way, it is reasonable to claim that pedestrians may also experience *insecure space*, *spatial disregard*, and *police neglect* in the face of what may be a materially, culturally and institutionally dominant 'sovereign automobility' in a given context, thus rendering their entitlement to public space precarious.

Indeed, the degree to which one's entitlement to public space is precarious as a pedestrian may be considered on a spectrum, with those with compromised cognitive and/or motor ability being most vulnerable to the potential risks posed by automobilised public spaces (Sheller and Urry, 2000; Harvey, 2012) and dominating driving behaviours (Sheller, 2008). The prevalence of experiences of spatial disregard for pedestrians with disabilities in Ireland is highlighted by the national 'Make Way Day'

(makewayday.com 2019), in which awareness is raised regarding the obstacles that pedestrians with disabilities are forced to navigate (e.g. illegally parked cars, bins, and bicycles attached to lampposts). Insecure space, on the other hand, may be exampled by the work of Lin et al. (2013), who investigated the relative risk of road crossing between healthy pedestrians and pedestrians with differing severities of Parkinson's disease, in which the greater the severity of Parkinson's symptoms, the greater the risk of road traffic accident. Additionally, the influence of insecure space may be relevant to older pedestrians — Koepsell et al. (2002), for example, found that crosswalk pedestrian markings could potentially increase the likelihood of older pedestrians (65yrs+) being involved in a collision with a driver in the absence of a stop sign or traffic signal for drivers.

These findings, then, indicate possibilities that pedestrians may experience precarious entitlement due to spatial disregard (and perhaps the enabling factor of police neglect) in addition to the insecure design of space which renders their exercise of entitlement hazardous. Beyond pedestrians with Parkinson's disease, older pedestrians, and those with disabilities that may require a wheelchair, insecure, automobilised space that prioritises the movement of drivers over pedestrians could be considered more generally to implicate other pedestrians such as children, who are often forced to occupy public space within the confines of a securely fenced playground or school yard (Harvey, 2012).

v. Indisciplined Mobility

Indeed, there are large bodies of evidence that spatial disregard is a widespread phenomenon that cyclists experience at the hands of car-drivers and a property that researchers from many disciplines have great interest in exploring. Incidents of spatial disregard – i.e., the disregard of the space of a cyclist or the disregard of a cyclist in a particular space – are grouped under different headings that may be seen to reflect different kinds of spatial disregard that contribute to the precarious entitlement of a cyclist in or to a particular space. These variations of spatial disregard include non-injury incidences of perceived 'near misses' in which the cyclist perceives the event of a motorist coming dangerously close to them, most notably in the form of a 'close pass', which are frequently experienced by cyclists in the UK (Aldred and Crosweller, 2015; Aldred, 2016; Aldred and Goodman, 2018) and in Australia where a minimum passing distance law is in effect but is regularly disregarded (Poulos *et al.*, 2017; Haworth,

Heesch and Schramm, 2018) as well as Brazil (Bösehans and Massola, 2018) and harassment and aggression on the road from drivers (Heesch, Garrard and Sahlqvist, 2011; Heesch, Sahlqvist and Garrard, 2011; Heesch *et al.*, 2017; Bösehans and Massola, 2018; Fruhen, Rossen and Griffin, 2019) including intentionally driving too close, verbal abuse, the use of offensive gestures and sexual harassment (Heesch, Sahlqvist and Garrard, 2011; Heesch *et al.*, 2017). More recently, a pilot study carried out by Delbosc *et al.* (2019) suggests the possibility that disregarding behaviour toward cyclists is underpinned by dehumanising perceptions of cyclists as a group of road users. Indeed, there is evidence that incidents of spatial disregard carried out by motorists and pedestrians alike evoke angry responses from cyclists and, therefore, are arguably experienced as disrespectful or transgressive in relation to a cyclist's perceived entitlement to space for safety and mobility (Huemer, Oehl and Brandenburg, 2018).

Thus, spatial disregard can act as a potentially organising concept in the cycling and automobility literature that the seminal automobility related concepts of Sheller (2008) and Sheller and Urry (2000) do not necessarily capture. Namely, it is a concept that can bring together large bodies of diverse research that essentially look to record and describe the myriad of behaviours that involve road users disrespecting the designated spaces of a cyclist or the space required for a cyclists safety and comfort and, therefore, through disregarding cyclists as such, these particular behaviours disregard the cyclists entitlement to public space as a legitimate user of the road. In doing so, spatial disregard reframes a 'near miss' or related incidence of failing to acknowledge a cyclist's designated space or entitlement to space as an instance of disregard of spatial entitlement as opposed to a mere incident of risk or danger. Therefore, spatial disregard reframes such incidents from a critical perspective of entitlement and right rather than safety or perceived hazard.

However, whilst a substantial body of research has been conducted into the policing of cycling and cyclists in urban spaces – most notably in relation to mandatory helmet use (Karkhaneh *et al.*, 2006; Macpherson and Spinks, 2007) – what does not appear to have been explored or documented in any great depth is the phenomenon of police neglect in relation to the enforcement and protection of a cyclist's entitlement to public spaces. Existing studies related to police neglect as a subject area include, for example, research into intentions to report cycle crashes to police in Denmark in which police distrust was examined as a potential attitudinal indicator for considering crash reporting as 'useless' (Kaplan, Janstrup and Prato, 2017). Alternatively, Bösehans and Massola (2018) investigated how the police were implicated in suppressing cycling and cycling

protests as a means of maintaining the dominant mobility of motorised forms of transport, even engaging in acts of spatial disregard themselves as a means of intimidating cyclists. Lastly, it was reported in a recent study by Stanojevic *et al.* (2018) that a lack of police presence and enforcement was associated with angrier, riskier and more aggressive driving behaviour comparing a location in Kosovo with another in Serbia. Across these instances, then, *police neglect*, alike to spatial disregard, can provide an organising concept for otherwise diverging topics of research pertinent to cycling. Though, perhaps more pressingly, in light of the aforementioned research that the concept of spatial disregard can potentially integrate, the concept of police neglect could, instead, orientate cycling researchers toward a phenomenon that has been neglected itself and that warrants exploration. Evidence from this study, in addition to substantial indications of the prevalence of police neglect as an advocacy issue within an Irish context (Dublin Cycling Campaign, 2018) support such an assertion.

The importance of policing in governing mobility in general, however, has been considerably investigated. Examining the governance of automobility in North America in particular, Packer (2003) describes how governmental disciplinary techniques are applied in order to discipline the mobile bodies transiting the diverse road networks of North America. Amongst these techniques there includes "hierarchical observation" (p.147) in which state authorities are enabled to easily observe behaviour and, in doing so, "allows power to be both discreet and omnipresent, since it is known to be everywhere, but rarely is called upon directly" (p.147). In the context of governing automobility, the road traffic police are the primary observers. Additionally, a 'normalising of judgement' is put into action by the police and the legal system that motorists must abide by or face disciplinary action - for example, punishment for transgressions, penalties on one's licence and insurance costs, and/or retraining in order to drive compliantly. Lastly, techniques of examination are put to use for the sake of disciplining these mobile subjects, most notably the test of knowledge, compliance and competency known as the driver's licence. Accordingly, these various disciplinary techniques are put into effect in order to produce 'docile' subjects that drive in a way that is responsible for their own safety and the safety of others and is in compliance with the rules and laws of the road.

The evidence, firstly, of spatial disregard by other road users in relation to the entitlement of cyclists to use public space, and, secondly, of police neglect in enforcing respect for such entitlement and/or punishing instances of disregard, indicates a failure to carry out such discipline in the substantive area. That is, the spatial disregard and

police neglect components of precarious entitlement suggest a failure to apply state disciplinary mechanisms in the service of non-automobilie 'vulnerable' road users resulting in 'indisciplined' as opposed to 'disciplined' mobility. In this way, the exercise of sovereign automobility in particular ensues rather than sovereign state discipline in enforcing the 'general will' set out by the rules of the road and road traffic law. Accordingly, the combination of the 'state of nature' elements of the substantive theory of precarious entitlement - namely, spatial disregard and police neglect - can act to conceptualise as a package the 'indisciplined mobility' of particular road users: road users who disregard the spatial entitlements of others in light of a lack of police protection for such entitlements or punishment for transgressions of such entitlements. These central properties of precarious entitlement highlight the importance of road culture and institutional (in)action that can enable 'indisciplined mobility' when considering the concerns of cyclists in public space. In this way, precarious entitlement can conceptualise not only the experience of 'sovereign automobility' in public space outside of the automobile thus expanding on the seminal literature on automobility (Sheller and Urry, 2000; Urry, 2004; Sheller, 2008) but also a potential outcome of public space where the mobilities of its users are 'indisciplined' since 'indisciplined mobility' is a concept that may not only apply to automobile users but also pedestrians and cyclists road users who can also engage in spatial disregard in relation to a cyclist's entitlement to use public space.

vi. A Problem of Accessibility

Sheller (2008) describes how public space is meant to enable mobility through its accessibility and she proposes that public space is hypothetically:

an accessible space which is open to various entrants, allows free unhindered movement through it, and connects together or bridges between various more private spaces. Public space only becomes public when people access it, but they can only do so temporarily, as it must always be accessible to others as well. It is a space on which no individual has a claim, no one can put down roots, but all can momentarily occupy. (p.32)

However, the emergence of precarious entitlement as a main concern for cyclists in this study, although not relating to a claim of owning particular public spaces, shows how

public space is in fact perceived as a space in which its various users have and/or make varying claims upon regarding entitlement to access and use. Precarious entitlement, then, can be used to conceptualise a problem of *accessibility* to a particular entitlement in which a complex of conditions renders such access precarious. In light of the problematic accessibility that precarious entitlement designates, the concept can be potentially used to raise issues of freedom and social justice in relation to, among other things, urban mobility and accessibility. It can be employed as a critical, as opposed to 'descriptive' or 'neutral', concept, potentially useful for advocacy efforts.

The accessibility of cycling and the variations of factors impinging on the accessibility of cycling for particular groups has been explored across a substantial number of studies carried out across a variety of locations. In the UK, Aldred (2012) has drawn attention to the marginalisation of cycling as a mode of transport by the state and the inequities of ridership for women and older people relative to men and younger people (Aldred, Woodcock and Goodman, 2016), with women in particular stating a strong preference for segregated cycling infrastructure (Aldred *et al.*, 2017). Andrews, Clement and Aldred (2018), additionally, have examined the marginalisation of people with disabilities in cycling promotional efforts and infrastructure design in the UK, whilst Goodman and Aldred (2018) have explored potential inequalities of ridership based on sex, age, disability and ethnicity. In the US, on the other hand, research has revealed inequalities in bicycle lane access based on, among other variables, lower educational attainment across 23 major cities (Braun, Rodriguez and Gordon-Larsen, 2018). Whereas in Montreal, Canada, access to bicycle networks was compromised for children in particular (Houde, Apparicio and Senguin, 2018).

With these studies in mind, considering the accessibility of cycling involves not only attention to the aggregate number of people cycling relative to motorised modes of transport or walking, with higher numbers potentially indicating more accessibility, but also taking into account the accessibility of cycling for particular groups whose inclusion through access measures may be neglected. In Ireland, there is evidence that cycling as a mode of transport is not accessible to all and there have been calls for improving its accessibility (CyclingforAll.ie, 2018). Statistically, the majority of cyclists in Ireland are male (i.e. 74% male versus 26% female). 2.6% of men's journeys were by bicycle in 2016 whereas only 0.9% percent of women journeys were by bicycle. Furthermore, men's journeys by cycling have been increasing since 2013 whereas women's percentage of journeys by bicycle has not changed. One of the stated of reasons for women not travelling was 'no access to transport', which grew for both men and women between

2013 and 2016; however, despite being slightly less reported as a reason by women compared to men in 2013 (1.7% percent compared to 1.8%) by 2016, women reported less access to travel in comparison to men (3.1% to 4.0%) (Central Statistics Office, 2017a).

It is plausible to argue that precarious entitlement to public space via cycling and, therefore, mobility via cycling results in women experiencing less perceived access to transport overall since precarious entitlement in this substantive area, arguably, marginalises cycling as a mode of transport and thus excludes its accessibility to a particular group with a higher tolerance for the perceived uncertainty, discomfort and vulnerability that goes along with using it as a mode. Considerations could also be made, of course, in relation to the accessibility of cycling for those of different ages and with different degrees of (dis)ability. The 'Commuting in Ireland' section of the Census 2016, for example, exhibits a disproportionate growth in rates of commuter ridership between those in younger and older age categories (i.e. 15 - 24 years, 45 - 54 years, 54 - 64 years, and 64 years +) compared to the 25 - 34 and 34 - 45 years age categories (Central Statistics Office, 2017b).

Indeed, as the aforementioned studies show, there are various ways in which accessibility can be framed and assessed in relation to cycling such as measuring relative cycling levels across demographic groups (e.g. Goodman and Aldred, 2018), cycling preferences for different groups (e.g. Aldred *et al.*, 2017), geographic distribution of cycle lanes in relation to the placement of groups (e.g. Braun, Rodriguez and Gordon-Larsen, 2018), and so on. One particularly significant metric for judging the accessibility of cycling for a general population, but also for the relative accessibility of cycling across particular groups, is the degree to which individuals consider cycling safe/unsafe or secure/frightening (Horton, 2007; OECD, 2013). Indeed, there is already evidence that cyclists themselves in Dublin find cycling less safe than driving (Lawson *et al.*, 2013).

One report in particular carried out in the United States of America by the Portland Office of Transportation (2009) demonstrates the primacy of perceived safety on the accessibility and, consequently, the promotion of cycling. This report brings our attention to considering particular groups in relation to their access to cycling based on a categorisation of their tolerance for perceived risk and their overall interest in cycling. First, there are the 'strong & fearless'. These members of Portland will cycle irrespective of conditions – there is no need for segregated infrastructure or tolerant fellow road users. They are thought to make up $1-2\,\%$ of the total population. Second, there are the 'enthused & confident': residents of Portland who cycle due to the small

interventions to promote cycling in the city such as bicycle lanes but who are, for the most part, relatively comfortable mixing with motorised road users (7%). Next, there are the 'interested but concerned': a group that would like to cycle but are intimidated by integration with fast moving vehicles; this group could potentially take to cycling if speed limits were lowered and segregated facilities were made available (60%). Fourth and last, there are the 'No Way No How' group. These individuals have no interest in cycling whatsoever and are calculated to comprise 33% of the population.

Taking the view that fear of cycling is a major accessibility issue and barrier to promotion, as argued by Portland Office of Transportation (2009) - whose ridership at the time was only 5% of the population - precarious entitlement provides a complex perspective on the conditions that can bring about a sense of fear or uncertainty for cyclists transiting and occupying public spaces despite being entitled to do so, and, consequently, provides a way of judging the accessibility of a public space via cycling for the general population and for particular groups. These groups can be categorised based on demographics (e.g. Goodman and Aldred, 2018) or typologies like the Portland Office of Transportation (2009). Either way, precarious entitlement and its properties of insecure space, spatial disregard and police neglect effectively categorise broad perceptions related to safety and danger such as the legal and material design of cycling infrastructure, the behaviour of other road users, and the presence and (in)activity of the police. Accordingly, precarious entitlement can be used to denote a form of entitlement to cycle that is only accessible to a remote segment of a given population and is, therefore, not an entitlement that is truly for all to enjoy. With this in mind, it is plausible to claim that efforts at promoting cycling within such perceived conditions of precarious entitlement are ultimately either symbolic gestures of 'cycling for all' or are markedly finite attempts at increasing cycle ridership within conditions of low accessibility.

Similarly, one may consider precarious entitlement to be a problem of accessibility for the groups mentioned in earlier sections that may be seen to potentially negotiate such conditions themselves; namely, women in public space who experience or perceive conditions of precarious entitlement and pedestrians of varying abilities and ages. Beyond, however, the public space of the street, one can also consider the public spaces of public transport. Indeed, on the one hand, a fascinating study by Jones *et al.* (2013) which explored the experiences of entitlement to concessionary public transport for youth and older people in London suggests that older people in particular may experience a sense of precarious entitlement to seating space on the bus. Namely, they

may encounter spatial disregard from other bus users who occupy seats and do not immediately offer them to the older bus users. In this way, their entitlement to seating space may be experienced as unreliable and uncertain in light of potential entitlement disregard. On the other hand, there is evidence from a U.S. study (Lubitow, Rainer and Bassett, 2017) that particular groups of public transport users may face entitlement disregard in the form of racial harassment whilst on the bus from drivers or other users, and, alike to a study by McDowell and Wonders (2009), be subject to racial profiling behaviours by police; interestingly, such police behaviour indicates a form of precarious entitlement in which the police might play an active, rather than a passive, role in rendering a given group's entitlement to public space precarious. Additionally, bus user groups such as parents with buggies and passengers with mobility aids experience insecure space in light of perceived inadequate spatial provisions based on their needs as bus users. Furthermore, such insecurity may be exacerbated for these groups through bus overcrowding (Lubitow, Rainer and Bassett, 2017). Thus, precarious entitlement conceived as a problem of accessibility may be seen as relevant to particular public transport user groups, potentially relevant to a variety of scenarios they may have to negotiate relating to the public space of the bus.

Accordingly, within this substantive area and in general, precarious entitlement could be viewed as, and could be used as, a particular indicator of covert, as opposed to overt, social exclusion or marginalization of a particular group in relation to their degree of access to a given entitlement. Namely, since cyclists are granted, for the most part, equal spatial entitlement relative to other road users in Dublin (RSA, 2018b), but, in practice, experience high levels of vulnerability and uncertainty due to perceived insecurely designed spaces (e.g. patchy cycle lanes, poor road surface, sharing a space with a bus) and spatial disregard that very frequently goes unpunished by police (e.g. parking in cycle lanes, having one's right-of-way cut off), cycling as a mode can be viewed as marginalised due to a perceived neglect by the state (i.e. urban planning and the police force) and by other road users (e.g. motorists and pedestrians) in treating cyclists as legitimate road users that are entitled to access and use various spaces of the city.

Furthermore, with precarious entitlement designating a gravely limited degree of accessibility to a given entitlement, precarious entitlement or a modified version of such a concept could be useful in evaluating the degree of access to a particular good that an individual or group is entitled to: in this case, the good of public space for cyclists in Dublin. If the promotion of cycling is a goal as stated by the Irish government (Smarter

Travel, 2009) and if cycling as a mode of transport is going to be put on a high pedestal in the hierarchy of road users as is recommended by European bodies (e.g. European Transport Safety Council, 2015), one can assume that as a target for promotion and as a mode that should be given privileged entitlement to public space, robust entitlement ought to be what is afforded to, and experienced by cyclists in Dublin. As an aspiration for the accessibility of one's entitlement to public space via cycling and in light of the current conditions of precarious entitlement, the degree to which robust entitlement is provided could be judged by the extent to which the three properties of secure entitlement are satisfied: namely, the degrees by which secure space, spatial regard and police support are realised in the experience of accessing public space via cycling/as a cyclist. In this way, if the spaces cyclists are provided with are experienced as secure (e.g. well-maintained, continuous and clear, unexposed to high-speed traffic) in which they are frequently regarded by other road users spatially (e.g. no obstruction of spaces for cyclists, respect in relation to passing distance and right-of-way) and the authority of the police are experienced as supportive (e.g. conspicuously punish transgressions of spaces allocated for cyclists, responsive to complaints regarding the conduct of other road users in relation to the spatial entitlements of cyclists), the entitlement to public space granted to cyclists could be judged as secure rather than precarious.

3. Privatising Vulnerability & Provoking Responsibility Contribution

i. Introduction

a) Individualisation Literature

There have been a number of important works articulating or contributing to an understanding of 'individualisation' as a process central to contemporary social life in the West and its substantive expressions in everyday life. Examining these works is helpful in describing contemporary conceptions of individualisation, its origins as a process and its social implications. In looking at these accounts, we are provided with a backdrop from which the importance and significance of precarious entitlement, privatising vulnerability and provoking responsibility can be ascertained and their unique contributions to knowledge regarding modern society and individualisation posited.

Ulrich Beck (1992) is a suitable starting point for such a task, who, in his seminal work 'Risk Society', argues that Western society has shifted from politically revolving around industry and the overcoming of economic scarcity to, instead, focus upon the particular

risks emerging of this highly successful period of wealth generation. In this way, the industrial stage of society which Beck terms 'classical modernity' has led to the origination of the 'risk society' in which the risks produced by modernisation itself increasingly come to bear upon and eventually dominate the content and action of political life. These risks are primarily ecological (i.e. pollutants, toxins, nuclear weaponry) in nature and are thus felt across nations and social classes—no one is entirely insulated from their harmful effects. Therefore, modernization risks have a democratising effect. With these major societal transitions in mind, modernization has not in fact come to an end but, instead, has become increasingly modernized itself. That is, modernity has become 'reflexive'. In other words, the process of classical modernisation has become modernized itself through revealing and tackling its own irrationality—the production of modernization risks that threaten all life. Modernization, then, continues as a reflexive process, in which the management of the risks produced by modernization gradually take centre stage over the production of wealth. Accordingly, Western society enters a period of 'reflexive modernity' in which society is no longer primarily industrial but is, rather, a 'Risk Society'.

With these sociological changes in mind, Beck (1992) comments that the socioeconomic inequalities that dominated politics during classical modernity have, in reflexive modernity, retreated to the background. As forms of consumption have become democratised through the overall decrease of material scarcity in society, then, social inequalities persist but are, instead, tackled personally rather than politically. Accordingly, risk society enables (and compels) its members to be "set free from the social forms of industrial society - class, stratification, family, gender status of men and women" (Beck, 1992, p.87). As the modernization process becomes reflexive, then, so does its subjects, with their social relations and roles becoming matters of choice rather than fate. This process of 'individualisation', thus, emerges as a key process amongst these members of the developing risk society, a process defined by Beck (1992) as a demand from such members for increased individual control over their lives and perspectives against the backdrop of industrial society, in which aspects of one's life and perspective was largely ascribed based on one's inherited social position. In this way, class society gives way to an "individualised society of employees" (Beck, 1992, p.100) in which social identities and groups are increasingly seen to be, and sought to be, chosen rather than ascribed, primarily due to substantial changes in the labour market.

Similar to Beck (1992), Bauman (2000) draws our attention to the social world in the West becoming increasingly characterised by individualised responses to, and

understandings of, phenomena that are social and/or political in their nature. Bauman (2000), however, refers to individualisation in a way that is less about demands regarding individual control but more about individualised action and perception. For Bauman (2000), 'individualisation' denotes the process of human beings in an era of 'liquid' modernity taking increasingly comprehensive responsibility for their lives and approaching an increasing body of problems as problems of the individual rather than problems that are political or social in nature. In this contemporary scenario where people's identities are chronically "disembedded" (Bauman, 2000, p.34) from any stable social mooring, the sphere of political consciousness and action retreats from cognition and, increasingly, societal problems are perceived as personal problems calling for personal solutions. In particular, Bauman (2000), similar to Beck (1992), credits the proliferation of this process to major changes in the development of capitalism and labour relations. According to Bauman (2000), this individualisation of action and perception is a result of the process of modernization becoming individualised. Namely, rather than modernization being a collective societal project as in the past, it has developed into a process that is now undertaken individually by the denizens of liquid modernity.

In understanding Bauman's (2000) account of individualisation, it is helpful to delineate between his two conceptions of capitalism. This, in turn, will help us to judge the influence of precarious entitlement in relation to privatising vulnerability as an individualised form of response. Resembling aspects of Beck's (1992) classical and reflexive modernity, Bauman (2000) argues that Western society has transitioned from 'heavy' to 'light' capitalism, thus giving rise to an escalating process of individualisation. During heavy capitalism, capital was rooted in a particular location and, consequently, its labour force was too.

Fordism was the self-consciousness of modern society in its 'heavy', 'bulky', or 'immobile' and 'rooted', 'solid' phase. At that stage in their joint history, capital, management and labour were all, for better or for worse, doomed to stay in one another's company for a long time to come, perhaps for ever—tied down by the combination of huge factory buildings, heavy machinery and massive labour forces. (Bauman, 2000, p.57).

The challenge for management was finding a way to keep its labour force rooted. In contemporary 'light' capitalism, on the other hand, in which capital has changed from

'hardware' to 'software' (i.e. capital has become portable, global and digitised), has led to a labour force that is coerced into mobility as opposed to immobility.

Nowadays capital travels light—with cabin luggage only, which includes no more than a briefcase, a cellular telephone and a portable computer. It can stop-over almost anywhere, and nowhere needs to stay longer than the satisfaction lasts. (Bauman, 2000, p.58).

This mobile and unsettled world of light capitalism, then, has led to individualisation at a grand scale since the authoritative taken-for-granted ends of heavy capitalism have transformed into a relativist uncertainty of ends in light capitalism in which questions of 'What should I do?' dominate over questions of 'How should I do it?'. In this contemporary scenario of profound mobility and societal uncertainty, Bauman (2000) argues, there is no authoritative source of identity and an endless array of opportunities for identification and action:

There are more – painfully more – possibilities than any individual life, however long, adventurous and industrious, can attempt to explore, let alone adopt. It is an infinity of chances that has filled the place left empty in the wake of the disappearing act of the Supreme Office. (Bauman, 2000, p.61)

Accordingly, the massive social changes brought about by the end of heavy capitalism and the dawn of light capitalism has led social life to become more fragmented and differentiated, as people engage in a 'shopping around' life of consumer freedom, preoccupied with questions relating to themselves and their individual lives. In light of these changes, Bauman (2000) comments, the public sphere—once a place for public issues—becomes gradually overrun with 'private' issues, leading to the decline of politics and issues of the common good and a life in common. Bauman (2000), then, is not necessarily in agreement with Beck in relation to the world of politics in general being alive and well and primarily shifting its focus to modernization risks instead of social inequalities. On the contrary, Bauman (2000) views the political sphere as a sphere in decline in relation to collective problems in general and one that is more and more occupied with questions relating to the problems of individuals—the private sphere.

b) The Sociological Imagination

For both Beck (1992) and Bauman (2000), nevertheless, one thing is clear: social life in the West has profoundly changed due to developments (and the side effects) of modernisation, and, as a result, individualisation as a social process is in full flow in the sense that there is both demand for individualised control of one's life (Beck, 1992) and a growing prevalence of individualised perception of social issues and individualised action toward dealing with them (Bauman, 2000). Mills (1959) says it best: the trend in modern social and political life is away from a sociological imagination and political consciousness and toward a hyper individualistic and apolitical way of thinking about and acting upon the world. Mills describes how a 'sociological imagination' enables one to link one's 'private troubles' with 'public issues'. One can perceive a problem that may seem like an isolated or peculiar incident specific to a given individual as a general problem that exists at large in a public realm. With this imaginative perspective, a private trouble—for example, financial hardship—can be reframed as a signifier for a larger public issue—for example, exploitative labour arrangements. The sociological imagination, then, enables one to interpret one's internal and external life in a socially situated way; in a way that accounts for the influence of social structures as opposed to interpreting biographical phenomena as purely private concerns. The subjects and participants of 'reflexive' (Beck, 1992) or 'liquid' (Bauman, 2000) modernity, consequently, have lost this ability, as perception and action have become more and more individualised. What is left is the "individual de jure" in the place of the individual "de facto" (Bauman, 2000, p.39). That is, individuals who assume autonomy are placed in lieu of individuals with substantive autonomy: "the genuine potency of self-assertion" (Bauman, 2000, p.49). Revitalising the "individual de facto" (Bauman, 2000, p.39), Bauman argues, requires nothing less than a space in which "private problems are translated into the language of public issues and public solutions are sought, negotiated and agreed for private troubles." (Bauman, 2000, p.39). But where could such a forum exist?

c) Public Life

Public space as a forum has been commented on in particular by Bauman (2000) and Sennett (2002); spaces that both Bauman (2000) and Sennett (2002) have claimed are

becoming markedly devoid of interaction between citizens, instead transforming into places of motion to be passed through and left behind. Sennett (2002), in particular, grieves the decline of public life and expression in Western cities. Whilst public communication has undergone a progressive dissolution, the valuation and search for 'intimacy' has snowballed. This, Sennett (2002) judges, constitutes a 'public problem' more specifically, a problem of "social withdrawal" (Sennett, 2002, p.49) and the "erosion of public life" (Sennett, 2002, p.3). Commenting on the destructive consequences of individualisation in his own way, Sennett (2002) argues that the rise in the valuation of intimate feelings has led to an increase in narcissism in the West. In turn, the prevalence of such narcissism has had a corrosive effect on public life and communication since the question of the self reduces instances of interaction of the non-intimate kind and excessively invades in interactions of the potentially intimate variety; thus, the "question about the personal relevance of other people and outside acts is posed so repetitively that the clear perception of those persons and events in themselves is obscured" (Sennett, 2002, p.8) hence erasing "a sense of meaningful social encounter" (Sennett, 2002, p.8) due to the constant presence and invasion of the self; accordingly, "behaviour and issues which are impersonal do not arouse much passion" (Sennett, 2002, p.6). Sennett (2002, p.11) summarises the major problems that this decline of interest and participation in public life presents:

As concern for questions of selfhood is growing greater, participation with strangers for social ends has diminished — or that participation is perverted by the psychological question.

In this study, precarious entitlement to public space was conceptualised as the main concern of utility cyclists in Dublin. With the work of Beck (1992), Bauman (2000), Mills (1959), and Sennett (2002) regarding individualisation and the public sphere in mind, in this study, public space reveals itself as a forum in which *both* individualisation of a public issue takes place (i.e., privatising vulnerability in response to precarious entitlement to public space) *and* negotiation and interaction with other members of the public in dealing with a public issue takes place (i.e., provoking responsibility in response to precarious entitlement to public space). In this way, first, privatising vulnerability provides an in-depth and novel articulation of individualisation in action in dealing with a public issue that substantively adds to the individualisation literature. Provoking responsibility, on the other hand, alludes to a trend *away from* individualisation and

toward negotiation of life in common within shared public space. This demonstrates that processes of negotiating life in common are taking place in public space: spaces that Bauman (2000) and Sennett (2002) have claimed are becoming markedly devoid of interaction between citizens, but rather places of motion to be passed through and left behind. Accordingly, the emergent concepts of this study attest that both individualisation *and* negotiation of life in common are taking place in public spaces.

ii. Individualisation in Public Space

Privatising vulnerability provides a novel conceptualisation of individualisation in response to a particular *public* problem. More precisely, it provides a conceptualisation of the *individualisation* of a *structural vulnerability*: precarious entitlement to public space. Indeed, one could frame this 'problem' in a bare and descriptive individualised fashion itself, such as terming it a problem of objective or perceived 'risk' in public space. However, as I have presented and argued throughout this thesis, the emergent core category of 'precarious entitlement' encompasses perceptions of precariousness across a variety of milieus that constitute part of a social fabric and are most clearly beyond the properties of an individual themselves. Accordingly, precarious entitlement is a conceptualisation of a structural vulnerability and privatising vulnerability is best understood in relation to this core category –that is, as a response to it.

In response to the multifaceted structural conditions of precarious entitlement to public space (that is, the material, cultural, and institutional conditions: insecure space, spatial disregard and police neglect), then, cyclists in Dublin take personal responsibility for their emergent vulnerability as cyclists under such conditions. They look to take this structural vulnerability into their own hands and manage it as best they can. They attempt to individualise it as a problem in their thought and behaviour, forgoing interaction or reliance upon others to the greatest extent possible. In this way, cyclists in Dublin privatise the vulnerability they face emerging from conditions and scenarios of precarious entitlement, thus individualising a structural vulnerability rather than contesting or attempting to change it. This fits with Beck (1992) and Bauman's (2000) accounts of individualisation in the face of structural problems, in which individual such as inequalities in the rights of men compared to women, socio-economic inequalities, and so on (Beck, 1992), since cyclists are faced with a structural problem

that implicates more than themselves yet they take personal responsibility in dealing with, and adapting to it.

However, privatising vulnerability does not only generally 'fit' the aforementioned accounts of individualisation. Rather, it can be seen as an important substantive articulation of individualisation as a process: a form of individualisation that has not yet appeared to have been clearly conceptualised. That is, it shows how one can individualise a structural problem that poses perceived personal risk or threat - in this case precarious entitlement. The properties of privatising vulnerability provide a body of variations of how this unique form of individualisation is enacted in response to precarious entitlement. This can be seen to illuminate the action of Bauman's (2000, p.39) liquid modern "individual de jure" under conditions of structural vulnerability; indeed, precarious entitlement precisely means the problem of having an entitlement to something under conditions of precariousness—highly pertinent, then, to the individual who has autonomy and rights in principle but not in fact (Bauman, 2000). The individual de jure, in the case of this study—the cyclist in conditions of precarious entitlement anticipates disregard of their entitlement to public space from other road users. It is a state of distrust, doubt and anxiety, in which one is constantly on the lookout and adjusting themselves in anticipation for potentially treacherous acts of being spatially ignored or disrespected. The felt responsibility of having to privatise one's vulnerability in such challenging conditions is intensely experienced: the responsibility and pressure of having to deal with and navigate a structural vulnerability as a lone individual. Indeed, one may experience 'no other choice' as cyclists have claimed but to tolerate transgression and waive one's entitlement to public space. Accordingly, one resigns themselves to being mistreated and their entitlement being ignored or disrespected and can even give up the exercise of their entitlement altogether. Lastly, individualising precarious entitlement does not only involve anticipation of disregard, toleration of disregard, and giving up one's entitlement de jure, but also engaging in transgressive behaviour oneself in order to protect oneself from harm and avoid reliance altogether that is, precautionary transgressing. In this way, privatising vulnerability and its variations shows how individualisation can 'play out' and vary in a particular context as a particular response. Consequently, this category provides not only a unique variation of individualisation but also a detailed conceptualisation of individualisation in public space that yields micro-level conceptualisations of individualisation that are absent or lacking in the aforementioned individualisation literature, which primarily employs macro-level concepts of such a process (Beck, 1992; Bauman, 2000) or detailed, conceptually thin, historical accounts (Sennett, 2002).

Indeed, in relation to the substantive area, privatising vulnerability can potentially be used to make sense of various practices of cycling reported in existing studies such as Bösehans and Massola (2018) and Jachyra, Atkinson and Bandiera (2015). In the case of Bösehans and Massola (2018), for example, cycling on the pavement and breaking red lights were described as 'risk' behaviours engaged in by cyclists in Sao Paolo perhaps in response to 'precarious' traffic conditions. Privatising vulnerability provides a body of concepts to interpret such acts, specifically accounted for in this case as potential incidents of precautionary transgressing. As opposed to conceiving of such acts solely as 'risk' behaviours in public space, then, they can also be interpreted as safety or precautionary behaviours in response to conditions of precarious entitlement. Alternatively, looking at the study of Jachyra, Atkinson and Bandiera (2015), cyclists in Toronto were found to respond differently in their cycling practices following the experience of being involved in a collision. One important factor in post-collision accounts of behaviour was that of locus of control. It was coded that certain participants adopted an internal locus of control, assuming they could conceivably control the risk of cycling (i.e. of collision) through their behaviour whilst others assumed an external locus of control, with their behaviour inadequate as a means of controlling risk of collision. Accordingly, the cyclists who resisted behavioural change post-collision were interpreted to assume an external locus of control whereas the cyclists that attempted behavioural change were interpreted to assume an internal locus of control. Interestingly, behaviour change by these cyclists could be adopted despite the incident of collision being perceived as the fault of the driver - what could be seen as spatial disregard. In this way privatising vulnerability can be usefully applied to interpret these findings, with the anticipatory behaviours reportedly adopted easily understandable as instances of anticipating disregard. Lastly, the emergence of privatising vulnerability demonstrates, in contrast to Barnfield and Plyushteva (2016), that cycling in challenging and ambiguous conditions does not necessarily lead to the development of 'public sensibilities' through the increased negotiation between other publics that may have to occur, but, instead, can lead to an extreme withdrawal from interaction or negotiation with others of any kind – namely, to individualisation in public space.

As a concept more generally, privatising vulnerability has the potential to be of relevance, alike to precarious entitlement, regarding street harassment and women in considering patterns of individualisation in public space. Kearl (2010) describes in-depth

the advice often given to girls and women in particular contexts in order to deal with the risk of potential incidents of street harassment or sexual assault, such as avoiding certain public spaces altogether, only travelling during the day on one's own, dressing in an inconspicuous fashion, refraining from eye contact, and so on. Such prescribed strategies squarely put a burden of responsibility for the risk of illegal harassment and/or sexual assault on women subject to such behaviour themselves - they can be seen to encourage a privatisation of vulnerability within conditions of precarious entitlement to public space. In public space, then, Kearl's (2010) study of street harassment demonstrates the range of safety behaviours women may engage in, such as being 'on guard', which may involve maintaining a permanent scowl facial expression in public space (which can be seen as a variation of privatising vulnerability framed as anticipating harassment) and 'careful planning', which often involves avoid certain locations in the name of safety; this strategy can also be seen as a variation of privatising vulnerability in that women waive their entitlement to particular public spaces. Interestingly, in contrast to accentuating presence as a means of provoking responsibility, one can see in this study what could be conceptualised as masking presence to divert the attention of potential within a given public space, by changing the way one dresses as a women and avoiding a potential harasser's gaze. Furthermore, wearing earphones in order to pretend one does not hear harassment can be seen as a form of tolerating transgression in which one is in fact actively ignoring harassment but appears to be unaware and unfazed. Accordingly, privatising vulnerability, in its formulation as a response to precarious entitlement, appears to have a promising potential fit with matters of precarious entitlement to public space for women in general, subject to modifications.

iii. Adapting to a State of Nature

Seen another way, the variations of privatising vulnerability show the potential consequences of individualisation in one form: ongoing fear and vigilance and behaviour that assumes others are not to be trusted, the renunciation and abandonment of entitlement *de jure*, the acceptance and toleration of illegal or unjust activity that fails to respect entitlement, and the engagement in illegal or normatively unaccepted behaviour borne out of perceived necessity – put another way: adapting to a state of nature within a state of civilisation. Indeed, privatising vulnerability suggests behaviour resembling the egocentric actions of human beings as described in a 'state of nature' in which a

common power does not exist and self-preservation is the only end of action (Hobbes, 1968; Rousseau, 2004; Locke, 2016). Much like anticipating disregard, Hobbes (1968) has referred to action in a state of nature centred upon securing oneself in the anticipation of the threat of harm or loss from others. Being in the presence of other human beings in this state of nature is experienced as precarious "where there is no power able to over-awe them all." (Hobbes, 1968, p.185). Hobbes (1968, p.186) specifically refers to this state as a state of war, "wherein men live without other security, than what their own strength, and their own invention shall furnish them withall." Thus, human beings must rely on their own 'strength' or 'invention' for their security. The parallels between this statement and the concept of privatising vulnerability clearly resonate with one another; most notably, like human beings in a state of war, cyclists take their vulnerability into their own hands and use their own privatised strategies to shield themselves from the threat of others—at least when anticipating disregard, in an emotional state of "continuall feare, and danger of violent death" (Hobbes, 1968, p.186).

What is interesting about privatising vulnerability, however, is not that it conceptualises behaviour in a state of nature, but, rather, it conceptualises behaviour in a state of nature within a state of civilisation (i.e. within conditions of precarious entitlement). Accordingly, it adds actions beyond anxious vigilance and egotistical competition/preservation relating to the skeleton of civilised life: legal and moral obligations and entitlements. In this relative (rather than absolute) state of nature, concerns with self-preservation emerge and lead to an alienation of one's entitlements (i.e. waiving entitlement, tolerating transgression), an expectation and accommodation of entitlement being disregarded (i.e. anticipating disregard) and, interestingly, an alienation of one's obligations (i.e. precautionary transgressing) in the name of security. Accordingly, the reverse of the foundation of the social contract takes place. Namely, instead of individuals alienating their natural liberty to join together into society as a means to enjoy civil liberty and the peace and order it may afford, individuals alienate their civil liberty and reclaim their natural liberty, in this way doing what they see fit to preserve their own security and safety irrespective of the law or collective moral standards that are meant to bind their actions for the common good (Hobbes, 1968; Rousseau, 2004; Locke, 2016). Hobbes (1968, p.189) eloquently describes this original liberty which resonates markedly with cyclists' efforts to privatise their vulnerability in conditions of precarious entitlement:

the Liberty each man hath, to use his own power, as he will himselfe, for the preservation of his own Nature; that is to say, of his own Life; and consequently, of doing anything, which in his own Judgement, and Reason, hee shall conceive to be the aptest means thereunto.

Entitlement and obligation, then, mean very little in a state of nature under the guise of a state of civilisation since laws are merely unenforced gestures and disregard of them is widespread. Consequently, from a particular perspective, privatising vulnerability can be seen as a logical and adaptive choice in the face of conditions perceived as immutable and futile to resist where 'force' often overrules 'right' (Rousseau, 2004). With this point in mind, privatising vulnerability as a response to/way of dealing with precarious entitlement to public space suggests a novel origin for individualisation and individualised behaviour that does not necessarily solely originate from changes in economic and social arrangements as claimed by Bauman (2000), Beck (1992) and Sennett (2002). Rather, privatising vulnerability can also be a response to threatening civic/public situations when one's rights are precarious and risky to exercise due to a variety of external factors. In other words, individualisation can originate from fear of harm and/or distrust in the reliability of institutions and others bearing on one's rights.

Referring to the work of Sennett (2002), privatising vulnerability does indeed indicate a form of "social withdrawal" (Sennett, 2002, p.44) from public space (e.g. waiving entitlement) and public life (e.g. tolerating transgression); however, this withdrawal does not appear to originate from "the conditions of ordinary life which have propelled people into this romantic search for self-realisation." (Sennett, 2002, p.6) but, rather, lived experiences of precariousness in relation to one's entitlement to public space as a cyclist: a precariousness or vulnerability that taps into the drive to self-preservation posited by Hobbes (1968), Rousseau (2004) and Locke (2016) that human beings would hypothetically experience in a state of nature. Indeed, most recently, Standing (2011) has commented upon the significance of precarious labour rights and individualisation amongst the 'precariat', defined as a distinct social group that do not possess fundamental forms of labour-related security, and, consequently, inhabit and negotiate a precarious everyday existence both economically and in relation to their labour identity, which is essentially absent.

To conclude, the concept of privatising vulnerability and its variations challenge in particular the claims of Sennett (2002) that in the contemporary social condition

"behaviour and issues which are impersonal do not arouse much passion" (Sennett, 2002, p.6), instead suggesting that, on the contrary, the 'social withdrawal' and 'erosion of public life' commented upon by Sennett in general, at least for cyclists in public space, is guided by a passion of profound fear and uncertainty as opposed to mere indifference. Indeed, in the following segment, I will demonstrate evidence that—for cyclists in Dublin—forms of public communication and expression and indications of passion for the impersonal are very much alive and kicking, directly in contrast with the patterns of individualisation in public space and beyond delineated by Beck (1992), Bauman (2000), Sennett (2002) and this study.

iv. Submitting to Spatial Domination

Lastly, in addition to the available contributions relating to individualisation in public space and adaptation to a relative state of nature, privatising vulnerability in the substantive area of this study can productively be seen to conceptualise submission to a form of domination that is particularly spatial in character. Namely, submission to hegemonic (Sheller and Urry, 2000) or, as described in the earlier section of this chapter in relation to sovereign freedom of movement (Sheller, 2008), sovereign automobility. Drawing from the perspective, then, that automobility can be seen to dominate the design of space for mobility (Sheller and Urry, 2000) and can also dominate space through the exercise of arbitrary will when operating an automobile, the category and variations of privatising vulnerability contributes to an understanding of how such design (i.e. insecure space) and power (i.e. spatial disregard in the context of police neglect) impinges on the behaviour of vulnerable road users: i.e., cyclists.

Most notable of the variations of privatising vulnerability is *waiving entitlement*. In the context of spatial domination and the vulnerability it produces for a cyclist, cyclists give up their entitlement to a given shared or exclusively designated public space, thereby relinquishing their presence in such spaces, effectively leaving them free to be occupied (or dominated) by primarily motorised road users. In this way, instead of challenging or boldly looking to prevent potential incidents of spatial disregard by, for example, asserting one's entitlement to a given space, spatial entitlement is forfeited in the name of one's sense of personal security. Thus, the spatial domination of automobility could be seen to be unchallenged in such instances and enabled to continue in such domination of public space.

Indeed, tolerating transgression, likewise, constitutes a form of submission and, therefore, a tacit allowance to the spatial domination of automobility. In contrast to indicating or punishing acts of transgression (i.e. spatial disregard), thus resisting, in some cases, exercises of sovereign automobility in public space, instances of disregard are passively tolerated as one resigns themselves to privatise their vulnerability exacerbated in some cases by acts of disregard. So, not only is space given up – and therefore one's entitlement to space is surrendered under conditions of precarious entitlement – but also acts of disregard whilst occupying public space are endured without retaliation.

Lastly, instead of attempting to provoke responsibility in other road users to show spatial regard in light of one's spatial entitlement, one not only waives entitlement and tolerates transgression but may engage in transgression themselves as a means of privatising one's vulnerability: that is, one engages in *precautionary transgressing*. Accordingly, the price of avoiding dependence or reliance on dominating road users is enduring their disregard, submitting one's entitlement to space altogether and then potentially practicing disregard of the spaces of others (e.g. pedestrians) in order to avoid occupying space in which one's entitlement can be disregarded by motorised road users.

These concepts taken together as variations of privatising one's vulnerability as a cyclist, then, can clearly be seen to hold relevance as one particular sort of response to the spatial domination of automobility in particular (but perhaps also/alternatively a response to spatial marginalisation of velomobility): that is, a response characterising different ways of enacting submission to the spatial domination of automobility.

However, from the perspective of submission to spatial domination, privatising vulnerability may also hold relevance in relation to the domination of pavements by particular groups of pedestrians, particularly in considering the act of *waiving entitlement* to public space. One can clearly see fruitful similarities in the description of typical 'public encounters' on the pavement resembling racist interactions between white and black Americans in the 19th century and the notion of spatial disregard of cyclists by some automobile users, in which a hesitancy to waive one's entitlement to the pavement in exchange for the gutter could precipitate a coercive response:

Acts of deference were negotiated as people passed each other. Deferring to someone meant stepping off the sidewalk and into the roadway or gutter. Deference

by low-status individuals was expected and even demanded, while an uninterrupted walk reflected high status. (Loukaitou-Sideris and Ehrenfeucht, 2009, p.89).

v. Negotiating Life in Common

Privatising vulnerability in response to precarious entitlement, however, is not the last word in responding to conditions of precarious entitlement to public space. Indeed, the alternative sub-core category, as detailed in chapter seven, contrasts with the tendency to withdraw and individualise inherent in privatising vulnerability. Instead, when provoking responsibility, cyclists in Dublin are not individualising in response to precarious entitlement but, rather, *negotiating life in common* with other users of public space.

Provoking responsibility challenges and complicates the claims of Bauman (2000) and Sennett (2002) regarding the dissolution of public life and expression in the present historical circumstances and reveals efforts to communicate with other members of the public as means of negotiating a shared existence in shared space: namely, public space. In this way, the "art of negotiating common interests and shared destiny" is not necessarily "falling into disuse" (Bauman, 2000, p.106) but is in fact being actively put into practice in various ways by cyclists in Dublin in response to precarious entitlement. In contrast to Sennett (2002), also, provoking responsibility signals the clear presence of "participation with strangers for social ends" (Sennett, 2002, p.11) rather than its absence. Accordingly, provoking responsibility shows that whilst public issues are being converted into and tackled as private troubles (i.e. privatising vulnerability), private troubles are also being translated and taken on as public issues (Mills, 1959). Indeed, cyclists in Dublin engage in *both* privatising vulnerability *and* provoking responsibility in relation to precarious entitlement. Both processes of individualisation and adaptation, and negotiation, then, are shown to co-exist rather than take place in separation.

Provoking responsibility yields a body of concepts that captures a number of varied ways in which negotiation of life in common and, consequently, public expression is carried out within and in relation to public space, ranging from soft measures to hard measures aimed at provoking responsibility in other road users to practice spatial regard toward the spatial entitlements of cyclists. According to these variations, negotiation and public communication involves, firstly, making one more conspicuous as a means of garnering the attention of others in space. In doing so, others are unable to deny such

co-presence and are therefore provoked to accept their responsibility to this other road user (accentuating presence). Second, negotiating a life in common with other road users that engenders respect and responsible behaviour toward one another is modelled and encouraged through personal example (displaying responsibility). Namely, cyclists look to show their adherence to the rules of the road (e.g. stopping at lights, only cycling in legal public spaces) in order to provoke responsibility in other road users within vision that they, as cyclists, are playing their part in producing a harmonious and respectful life in common in the hope that they, in turn, will encourage other road users to do the same, therefore reducing incidents of spatial disregard and increasing incidents of spatial regard. Third, claims of entitlement to public space are signalled by cyclists through ways of occupying and transiting public space amongst other road users (asserting entitlement). Through the use of the body, cyclists communicate an entitlement to space engendered primarily by an assertive riding style and a resolute unyielding occupation of space that exhibits a confident claim to entitlement in which one's vulnerability can be exploited. Fourth, negotiation and public communication takes place through explicitly signalling through gestures of one's body or verbal indications to another road user that they have disregarded one's spatial entitlement as a cyclist as a way of negotiating spatial regard in the immediate present or future (indicating transgression). Fifth and last, then, punitive communications (such as use of the middle finger, shouting, cursing) and uses of the body and positioning (e.g. banging on a car, slowing a transgressor down through assertive positioning) are means of negotiating regard and respect in the future primarily through fear of retaliation/sanctions (punishing transgression).

Interestingly, alike to the variations of privatising vulnerability which indicate the passion of fear, provoking responsibility also shows that, contrary to the claims of Sennett (2002), impersonal matters do indeed evoke powerful emotional responses – namely, the impersonal matter of spatial regard in public space. The variations of provoking responsibility can entail powerful emotions such as fear (accentuating presence), shame/guilt (displaying responsibility) and indignation (asserting entitlement, indicating transgression, punishing transgression).

Accordingly, provoking responsibility can be seen as a conceptualisation of contemporary public expression and communication in public space directed toward the impersonal end of negotiating a harmonious life in common. This can be brought to bear on the literature precisely proclaiming a decline and disappearance of such activity in the wake of mass individualisation (Bauman, 2000; Sennett, 2002). In a more targeted

sense, within the substantive area, Brown (2012) provides a fascinating interpretation of cycling and walker interactive corporeal practices in enacting their rights to outdoor access and 'choreographing' their encounters in Scotland. This study clearly describes incidences of provoking responsibility such as asserting entitlement through particular positioning and use of speed by mountain bikers employed as a means of negotiating co-existence in outdoor public spaces. With this study in mind, provoking responsibility as a response to precarious entitlement in particular extends the understanding of cyclists negotiating life in common amongst other public space users in an urban context that is arguably more precarious and less 'choreographed' (Brown, 2012). Furthermore, in relation to the aforementioned study regarding cycling in the post-socialist city by Barnfield and Plyushteva (2016), provoking responsibility conceptualises 'public sensibilities' being exercised through the enactments of public entitlements and the provocation of public responsibilities (i.e. through negotiating life in common), thus extending Barnfield and Plyushteva's (2016) observations regarding informal negotiation between cyclists and pedestrians in the context of Sofia, Bulgaria.

Of more general significance, then, returning to the phenomenon of street harassment of women in public space, provoking responsibility may be promising in understanding and conceptualising a distinct way of dealing with such an issue, an issue that, as mentioned earlier in this chapter, may likewise be seen as a problem of precarious entitlement, albeit involving a different form of disregard better labelled as harassment. As an alternative to privatising vulnerability in response to precarious entitlement, women may attempt to provoke responsibility in potential male harassers to respect their entitlement to be in public space free from unwanted advances and general harassment. Indeed, it is plausible that, alike to cyclists, indirect and direct ways of provoking others to treat one with respect are employed, although these are not documented in great detail by Kearl (2010). Nevertheless, what is commented upon are potential strategies for 'ending' street harassment involving 'educating men' and 'engaging male allies' – actions which could likely take place on the street in response to incidents of harassment, such as *indicating transgression*, along with other modes of privatising vulnerability.

vi. Moulding a State of Civilisation

Indeed, the 'harmonious life in common' I speak of can be understood in contrast to precarious entitlement: a state of nature within a state of civilisation; an experience of having an entitlement to something under precarious conditions that make exercising such an entitlement risky and unpredictable. In this case, for cyclists in Dublin, the social end that they individually look to attain is responsibility from other road users in relation to their entitlement to public space. The enactment of this responsibility manifests as spatial regard. Thus, provoking responsibility, along with having use as a conceptualisation of negotiation of life in common in public space, can also be seen, as mentioned earlier, as a conceptualisation of reinstating a state of civilisation within a relative state of nature through the provocation of civilised behaviour from others (i.e. spatial regard)—in other words, it may be viewed as a means of moulding a state of civilisation in the form of spatial regard from others under conditions of precarious entitlement. Provoking responsibility can be viewed, then, as a form of citizenship or activism by drawing on the civic impulses of others that pertain to enacting perceived civic responsibilities and respecting perceived civil entitlements. Alike to the claims regarding how provoking responsibility challenges and complicates claims regarding widespread individualisation and social withdrawal, provoking responsibility attests that citizenship is not necessarily in a state of "corrosion and slow disintegration" (Bauman, 2000, p.36) but is actually being put into practice alongside individualisation and adaptation. Provoking responsibility, then, can be seen as a practice of citizenship invoking one's status as a citizen with legal entitlements (Isin and Wood, 1999). On the contrary to Isin and Wood's (1999, p.15) claim that "many rights often first arise as practices and then become embodied in law as status.", provoking responsibility is more akin to a practice of citizenship to remould a state of civilisation within conditions in which the legal components of citizenship are already present but not necessarily respected or enforced (i.e. conditions of precarious entitlement).

Accordingly, within the public space of the city, the "human settlement in which strangers are likely to meet" (Sennett, 2002, p.39), responsibility is provoked in strangers appealing to them as fellow citizens through the aforementioned variations in which life in common is negotiated and communicated. Provoking responsibility exhibits a commitment to citizenship/civil behaviour in public space as opposed to solely an individualised concern with safety (i.e. privatising vulnerability) under conditions of

precarious entitlement. It can be seen, then, as a *formative* mode of behaviour; one that is aimed at moulding structural conditions of secure entitlement, targeting spatial disregard in particular. In this way, it offers a contribution to the social contract literature (Hobbes, 1968; Rousseau, 2004; Locke, 2016) and literature relating to practices of citizenship (e.g. Isin and Wood, 1999; Norcliffe, 2015) in conceptualising a mode of action that is orientated toward moulding a state of civilisation within relative state of nature conditions in which people disregard the entitlement of one another and the responsibilities that these entitlements generate in the absence of a 'common power' to enforce civil behaviour.

More specifically, then, provoking responsibility as a practice promoting civility offers a mode of understanding the expression of anger by cyclists which has been reported in other cycling studies (e.g., Møller and Haustein, 2017). Furthermore, the category extends the body of literature on cycling and citizenship through conceptualising how "citizenship is actively constructed through movement and mobility" (Spinney, Aldred and Brown, 2015, p.327), indeed, conceptualising the "negotiation and articulation of citizenship through everyday mobile practices" (Spinney, Aldred and Brown, 2015, p.327). This is distinctive amongst a literature which has arguably focused empirically to date on the aspects of citizenship pertinent to one's adoption cycling as a mode of transport (Aldred, 2010; Green, Steinbach and Datta, 2012) as opposed to how claims to urban citizenship are enacting during the practice of cycling itself – i.e. by *provoking responsibility*.

Beyond the practice of cycling, such a category may additionally hold relevance and use in considering how citizenship is negotiated by individuals with disabilities that may be excluded from full citizenship due to their mobility impairments relative to other citizens, whose mobility may be prioritised (Phillips, 2010; Bezmez, 2013; Gaete-Reyes, 2015). One can clearly see, for example, the potential relevance of *precarious entitlement* and the variation of provoking responsibility *asserting entitlement* in one particular scenario depicted by Gaete-Reyes (2015). That is, Sandy, a disabled woman, must assert her entitlement to priority boarding on the bus. She asserts this entitlement in light of spatial disregard by other more able-bodied persons and what could be considered a form of *police neglect* by the bus driver – acting as the 'common power', granting and denying entry for particular passengers – who does not in this case make efforts to ensure the Sandy's entitlement is respected and that she is given priority, therefore allowing spatial disregard to take place:

'[in] rush hour, you have to be really assertive. . ..because the kind of rules are, of London Transport, is that wheelchair users should get priority. The reality is that [if] the bus is crowded, they let on the foot passengers, the ambulant passengers, and then tell you it's full up, which makes it a real hassle'. Sandy's testimony illustrates how official designations include disabled people as citizens through mobility policy but the reality as practiced shows that they are excluded. (Gaete-Reyes, 2015, p.355).

Indeed, another similar scenario can be seen to take place in which the designated space for a wheelchair user, Rebecca, is disregarded by other passengers such as mothers, with the authority – the bus driver – failing to protect and secure this entitlement. Accordingly, Rebecca is effectively left in a situation where she may be plausibly compelled to provoke responsibility by asserting entitlement or otherwise (e.g. indicating transgression):

'there are other people who use the buses. . . who like to take the space for people in wheelchairs, and that's usually mothers, parents with buggies and their children, but there are signs on the bus that say that priority should be given to people in wheelchairs, but often drivers don't want to get involved in asking people to fold up their buggies to make way for the person in the wheelchair. So occasionally I've had problems with that, and sometimes drivers won't let me on the bus if there's a mother with a buggy on the bus already'. Rebecca's testimony illustrates that, on some occasions, buses represent a kind of 'no man's land'. Although the wheelchair user's space is clearly demarcated, the driver, who in this case represents the service provider, and as such, should ensure disabled people's access under the Equality Act (2010), avoids taking control of the situation, and sometimes deals with it by denying wheelchair users' mobility rights. (Gaete-Reyes, 2015, p.355).

These illustrations are but a few amongst many of potential relevance included in the work of Gaete-Reyes (2015). These considerations regarding citizenship and space in the city in particular and in general, then, open up questions regarding the potential contribution of provoking responsibility in relation to notions of producing an urban 'common' (Harvey, 2012) and enacting the 'right to the city' (Lefebvre, 1996).

vii. Producing a 'Common' and Enacting the 'Right to the City'

In relation to urban citizenship, Harvey (2012) in particular has commented extensively on the matter of life in common and the notion of the urban 'Commons'. According to Harvey (2012, p.67), "The city is the site where people of all sorts and classes mingle, however reluctant and agonistically, to produce a common if perpetually changing and transitory life." From this view, then, life in common is indeed subject to ongoing negotiation in an urban context. Public spaces and public goods however, do not necessarily constitute a 'common' despite appearing to be produced for some sort of 'common good'. Rather, such public goods add to the potential for a common, a potential that is only realised to a significant extent by their *appropriation* by particular groups in order to make them so:

There is always a struggle over how the production of and access to public space and public goods is to be regulated, by whom, and in whose interests. The struggle to appropriate the public spaces and public goods in the city for a common purpose is ongoing. But in order to protect the common it is often vital to protect the flow of public goods that underpin the qualities of the common. As neoliberal politics diminishes the financing of public goods, so it diminishes the available common, forcing social groups to find other ways to support the common (education, for example).

The common is not to be construed, therefore, as a particular kind of thing, asset or even social process, but as an unstable and malleable social relation between a particular self-defined social group and those aspects of its actually existing or yet-to-be-created social and/or physical environment deemed crucial to its life and livelihood. There is, in effect, a social practice of *commoning*. This practice produces or establishes a social relation with the common whose uses are either exclusive to a social group or partially or fully open to all and sundry...Plainly, many different social groups can engage in the practice of commoning for many different reasons. This takes us back to the foundational question of which social groups should be supported and which should not in the course of commoning struggles. The ultrarich, after all, are just as fiercely protective of their residential commons as anyone, and have far more fire-power and influence in creating and protecting them. (Harvey, 2012, p.73).

A common, consequently, is a kind of social relation that a particular social group establishes with a key component of their social/physical environment. Furthermore, a common for one group can be protected from practices of appropriation by another group and there can be unequal power dynamics in such a process, as Harvey (2012) points out in relation to wealthy groups having a greater capability to appropriate and preserve a residential common from appropriation by poorer groups. These notions of the 'common' and the practice of 'commoning' or appropriation can be fruitfully brought to bear on the concept of precarious entitlement and the notion of 'sovereign automobility' proposed in the earlier sections of this chapter. Indeed, one can see public space – in this study, the object of precarious entitlement for cyclists – being a common for automobile users to the greatest extent and cyclists to a far lesser extent, with automobile users - much like the rich referred to by Harvey (2012) - plausibly having a far greater ability to preserve such a social relation with public space. This leaves cyclists, on the other hand, with relatively less (at least, immediate) power to appropriate public space as a common. Harvey (2012) remarks on this himself, also referring to the dominance of automobility dissolving a common altogether:

Through their daily activities and struggles, individuals and social groups create the social world of the city, and thereby create something common as a framework within which all can dwell. While this culturally creative common cannot be destroyed through use, it can be degraded and banalized through excessive abuse. Streets that get clogged with traffic make that particular public space almost unusable even for drivers (let alone pedestrians and protesters), leading at some point to the levying of congestion and access charges in an attempt to restrict use so that it can function more efficiently. This kind of street is not a common. Before the car came along, however, streets were often a common — a place of particular sociality, a play space for kids (I am old enough to remember that was where we played all the time). But that kind of common was destroyed and turned into a public space dominated by the advent of the automobile (prompting attempts by city administrations to recover some aspects of a "more civilized" common past by organising pedestrian precincts, sidewalk cafes, bike paths, pocket parks as play spaces, and the like). (Harvey, 2012, p.74).

With this perspective of the practice of 'commoning' in relation to public space, and the domination and deterioration of the 'common' of the street for other road users by automobile use and automobility, on the other hand, provoking responsibility can be seen to conceptualise a particular practice of commoning that does not necessarily take place on a collective, but on an individual, level, carried out by cyclists in their everyday cycling practice. That is, cyclists engage in the variations of provoking responsibility in order to appropriate the public space that they perceive they are entitled to but that other road users may not regard. Through asserting entitlement, for example, a cyclist clearly and intentionally occupies a given shared or designated space on the road in order to communicate implicitly or explicitly: "This is my space and I am aware that I am entitled to occupy it" as a means of provoking responsibility in another road user to respect this entitlement by enacting spatial regard. Through acting as such in light of precarious entitlement, in which spatial disregard is perceived to be highly likely to occur, a cyclist can be seen to be appropriating this space from another road user who may, through spatial disregard, occupy it regardless of the cyclist's entitlement to it, whether that entitlement be the right of way or an exclusive cycle lane in which that road user is not permitted to enter. Likewise, indicating transgression can be seen as a way, similar to asserting entitlement, of making a clear claim in relation to one's entitlement to public space in response to the disregard committed by another road user. Through pointing out directly or indirectly another road user's wrongdoing and failure of responsibility, a cyclist makes a clear claim on a given public space as theirs in the particular instant of spatial disregard and, through doing so, works toward promoting spatial regard in the future. In doing so, the cyclist labours to produce a stronger social relation regarding access to particular public spaces for cyclists overall: that is, producing public space as a 'common' for cyclists as a distinct social group of road users rather than a space that is plausibly only a 'common' for motorised road users.

Indeed, the emergence of provoking responsibility in this study lends evidence to a view that public space in Dublin is contested between road users. In other words, public space as a material resource can be seen to be an aspect of different groups (i.e. of road users) physical environments central to their everyday activities that is the site of practices of 'commoning', in which distinct groups may engage in attempts to appropriate this public good over another. It is important to note, however, that this is merely a proposal and one must exercise caution in creating a struggle between imaginary groups that does not rest on sound bodies of evidence. Indeed, the vast majority of the cyclists in this study were also licenced drivers who owned their own vehicle. Nevertheless, tentatively using such a perspective, oppositional commoning

practices signify in the public spaces of Dublin what the seminal urban theorist Henri Lefebvre (1996) would consider to be a sign of urban health and activity in which the city is valued and felt as one's own rather than an indicator of undesirable social conflict. Lefebvre (1996) describes his vision regarding conflict in the city in relation primarily to his Marxist theoretical overview which is centred on 'class conflict' embedded in produced spaces of the city:

Violent contrasts between wealth and poverty, conflicts between the powerful and the oppressed, do not prevent either attachment to the city nor an active contribution to the beauty of the *oeuvre*. In the urban context, struggles between factions, groups and classes strengthen the feeling of belonging. Political confrontations between the 'minuto popolo' the 'popolo grosso', the aristocracy and the oligarchy, have the city as their battle ground, their stake. These groups are rivals in their love of the city. (Lefebvre, 1996, p.67).

One could equally argue then, in light of sovereign automobility and precarious entitlement, the road user group of cyclists are looking to make their claim on the spaces of the city, attempting to produce them not as public spaces of precarious entitlement for their group but, instead, as public spaces of *secure entitlement* that are regarded by other road users and thus can be spaces that are confidently used and occupied by cyclists. In this view, the struggle is not between social classes, but, alternatively, between classes of road users of which cyclists can plausibly be viewed as the 'lower' of these classes, in light of precarious entitlement. Indeed, Norcliffe (2015, p.239) describes the cycle as the "the orphan of the street, unwanted and unwelcome" in comparison to pedestrians and motorists.

Central to Lefebvre's (1996) philosophy on cities relates to the notion of the city as an *oeuvre*: a work of art by a collective of individuals that is valuable in its use by such individuals rather than solely or primarily a product to be consumed or exchanged for another value. With this theoretical lens of Lefebvre (1996) in mind, provoking responsibility on the part of cyclists can be seen as not only as an indication signalling that the city is at present, to some extent, a living *oeuvre* but also delineates a practice in which the city as a *oeuvre* is crafted through the (attempted) social production of robustly entitled space by the provocation of responsibility in other road users by cyclists. Urban life – the social reality within the materiality of the city – is, in this view, active and ongoing in terms of spatial construction in the social sense of the term

(Lefebvre, 1974), as cyclists try to change the meaning of public space to encompass cyclists, along with other road users, as legitimate users of such space. This brings into play Lefebvre's (1996) seminal idea of 'the Right to the City', elaborated as:

the right of citizens and city dwellers, and of the groups they (on the basis of social relations) constitute, to appear on all the networks and circuits of communication, information and exchange. This depends neither upon an urbanistic ideology, nor upon an architectural intervention, but upon an essential quality or property of urban space: centrality. Here and elsewhere we assert that there is no urban reality without a centre, without a gathering together of all that can be born in space and can be produced in it, without an encounter, actual or possible, of all 'objects' and 'subjects'.

To exclude the *urban* from groups, classes, individuals, is also to exclude them from civilisation, if not from society itself. The *right to the city* legitimises the refusal to allow oneself to be removed from urban reality by a discriminatory and segregated organization. This right of the citizen (if one wants, of 'man') proclaims the inevitable crisis of city centres based upon segregation and establishing it: centres of decision-making, wealth, power, of information and knowledge, which reject towards peripheral spaces all those who do not participate in political privileges... It does not abolish confrontations and struggles. On the contrary! (Lefebvre, 1996, p.195).

Indeed, precarious entitlement can be seen to constitute Lefebvre's (1996) claim regarding a group's 'removal from urban reality' – that group being cyclists. However, provoking responsibility does not constitute the presence and participation of a collective of cyclists on "all networks and circuits of communication, information and exchange" (Lefebvre, 1996, p.195) but rather their individualised activity interacting with other road users within and across public spaces of a city. So, provoking responsibility does not necessarily conceptualise an enactment of the right to the city in the sense of a social group in union acting toward their right to be included and empowered in the production of space in the city but, rather, posits the general action of *individual* cyclists engaging in what could be seen as both obvious and subtle acts of individualized activism or everyday protest. This potentially reveals a detailed uncovering of how the right to the city can be enacted in what may initially seem to be isolated or trivial actions such as the raised arms of a cyclist in response to spatial disregard from another road user (i.e. provoking responsibility by indicating

transgression). This is all the more salient and interesting in light of the conspicuous and well documented ways in which cyclists as a group of road user enact their right to the city through mass protest — most notably 'Critical Mass', in which cyclists take to the streets en masse and thereby dominate it in order to assert their right to the city and protest against the regular dominance of automobility across the spaces of the city (Norcliffe, 2015). As Norcliffe (2015, p.235) argues "Urban activism is key to cyclists to claiming their right to the street". Provoking responsibility uncovers that activism does not only take place at a collective level but is also engaged in at a micro, individual level — a sort of 'micro-activism', one could say, in the face of precarious entitlement to the city.

Through provoking responsibility in other road users, then, cyclists individually act toward producing spaces of secure entitlement for cyclists across the public spaces of the city, chiefly through trying to change the meaning of public space and the perspectives of those legitimately entitled to it to integrate cyclists as road users. This challenges acts of spatial disregard toward cyclists from other road users, who may view public spaces as spaces in which cyclists are not legitimately entitled users worthy of respect. However, additionally, by provoking responsibility such as claiming spaces in order to assert entitlement, cyclists may also challenge their provisions of insecure space which contribute to precarious entitlement by claiming more space with other road users. In this way, looking to stimulate spatial regard is not the only means of producing space; space is also claimed in the place of other, potentially insecure, space (e.g. asserting entitlement).

To conclude, Harvey (2009) argues for the importance of the right of the city and how its implications go beyond mere 'access to urban resources':

The question of what kind of city we want cannot be divorced from that of what kind of social ties, relationship to nature, lifestyles, technologies, and aesthetic values we desire. The right of the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of collective power to reshape the process of urbanization. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights. (Harvey, 2009, p.316).

Precarious entitlement, however, shows that access (in theory) may be considered a complicated phenomenon that does not equate to perceived access in practice. Therefore, provoking responsibility can be seen as a means of transforming the meaning of space or producing spaces of secure entitlement so that cycling can be more accessible and secure in practice. In light of precarious entitlement and provoking responsibility, enacting the right to the city which entails producing space, then, is not necessarily neatly separable from asserting one's right to access urban resources (i.e. public space), which, according to this study, indeed requires changing the city.

This particular angle of provoking responsibility as way of producing a 'commons' or enacting one's 'right to the city' arguably holds potential relevance in considering other substantive areas including the previously mentioned research relating to disability, citizenship and public space (i.e., Phillips, 2010; Bezmez, 2013; Gaete-Reyes, 2015) but can also be considered in relation to other groups who may be marginalised in their access to public space or in their 'right to the city', such as is described by Loukaitou-Sideris and Ehrenfeucht (2009) regarding, as mentioned earlier, black Americans interacting with white Americans on the sidewalk; situations in which a given black American would often waive entitlement in order not to disrupt the mobility of the approaching white American. Although this instance may be seen as a case of privatising vulnerability, Loukaitou-Sideris and Ehrenfeucht (2009) also describe incidents when such waiving of entitlement would not occur and, instead, action could take place that could be seen as a form of provoking responsibility in the sense of struggling to produce a 'common' and enact one's 'right to the city'; namely, refusal to waive entitlement despite the risks – therefore asserting entitlement to this public space. Indeed, other instances are signalled including a refusal by black Americans to abide by laws relating to only being allowed to board on certain parts of public transportation and to sit certain seating areas. Furthermore, incidents of accidental 'tripping' of white Americans on sidewalks by black Americans (Loukaitou-Sideris and Ehrenfeucht, 2009) can be seen as a form of resistance and spatial appropriation akin to a punishment or backlash to being denied entitlement to spatial - resembling, to some extent, provoking responsibility by punishing transgression.

However, one need not only view provoking responsibility as a concept that can expand an understanding of how public space may be appropriated to become a 'common' or how the 'right to the city' may be enacted through provocative everyday acts, but, in addition, such provocation of responsibility can be seen as relevant to

understanding how particular groups may struggle for recognition and integrity under conditions of precarious entitlement.

viii. Struggling for Recognition

I have argued, then, for the conceptual contribution that provoking responsibility can bring to understanding how life in common is negotiated in public space as well as how space is produced and appropriated in the city individually by cyclists as a social group. To conclude this chapter, I will argue, finally, that provoking responsibility shows how users of public space engage in a struggle for recognition of their perceived or institutionalised entitlements. This way of framing a theoretical contribution of provoking responsibility can be seen as potentially integrated with, yet distinct from, provoking responsibility as a unique way of producing a common and enacting the right to the city. In understanding provoking responsibility as a novel way of producing a common and enacting the right to the city, one could argue that the provocation of responsibility is a means of affecting a distribution of space fair to cyclists through influencing the conduct of other road users. Seen from the point of view as a conceptualisation of a struggle for recognition, alternatively, but perhaps simultaneously, provoking responsibility for other road users to practice spatial regard toward the spatial entitlement of cyclists revolves around a concern less with the distributional element of spatial regard and more with the recognition element of spatial regard. In other words, provoking responsibility can be seen to be not only a means of securing more space in order to secure entitlement for cyclists but separately/also a mode of action instrumental to acquiring due respect for cyclists as a road user – for acquiring recognition of their right to the road.

Honneth (1995) has argued how disrespect plays a key role in motivating social conflict/struggle, generally referring to struggle in the collective and political sense much like the claims of Lefebvre (1996) regarding the exercise by social groups of the right to the city. The significance of disrespect in relation to such struggle, Honneth (1995) argues, has been neglected in the social sciences with the notion of 'interests' as the most significant aspects to analyse when considering the dynamics of social struggle between social groups (e.g. class material interests):

Thus, within academic sociology, the internal connection that often holds between the emergence of social movements and the moral experience of disrespect has, to a large extent, been theoretically severed at the start. The motives for rebellion, protest, and resistance have generally been transformed into categories of 'interest', and these interests are supposed to emerge from the objective inequalities in the distribution of material opportunities without ever being linked, in any way, to the everyday web of moral feelings. (Honneth, 1995, p.161)

By placing everyday experiences of disrespect in a prime position regarding the initiation of social struggles, Honneth (1995) argues that social struggle ought to be reconsidered or, rather, expanded to encompass not just a struggle orientated toward distributive justice (e.g. satisfying the just distributive requirements of material class 'interests') but also, or even chiefly, a struggle for expanded relations of mutual recognition in the forms of either recognition via the law or by esteem of one's value in a given group. Accordingly, the 'interest' (or distributive) based model of 'social struggle' is based on a "competition for scarce goods" (Honneth, 1995, p.165) whereas the 'recognition' model, in contrast, is based on adapting "the intersubjective conditions for personal integrity" (Honneth, 1995, p.165). Indeed, Honneth (1995) articulates that one kind of struggle does not invalidate the other and whether a social struggle can be defined as one based around redistributive concerns or concerns with social recognition is a matter of extent not category. Many redistributive struggles, Honneth (2002) argues, are not necessarily based around a manifest goal of material equity or equality, but, rather, are often enacted in the name of respect for a particular group's 'dignity'. Accordingly, these explicit redistributive struggles may be seen as implicit struggles for recognition. The same could be argued for cyclists in this study, who can be viewed to provoke responsibility in order to effect a just redistribution of space from other road users (i.e. one that respects their entitlement to such space); namely, that such provocative behaviour is orientated toward being treated with respect as road users with dignity, with spatial regard acting only or partially as a symbolic gesture of this respect.

Honneth (1995) claims that legal recognition is, in fact, a basic requirement for the positive self-relation of self-respect. Although, as we have discussed, cyclists have, legislatively speaking, considerable legal recognition as legitimate road users, this recognition is frequently disregarded in a spatial manner and such disregard often goes unpunished. So, cyclists in Dublin encounter precarious entitlement, which clearly falls short of a relation of full legal recognition that Honneth (1995) discusses as a requirement for the positive self-relation of self-respect. Consequently, from this perspective, cyclists are not only deprived to some extent of what could be called a

distributive justice concern regarding a common of public space and the shaping of it, but, more psychologically or inter-subjectively, they are deprived of the conditions of recognition necessary for self-respect in the form of legal recognition. Indeed, Taylor (1994) argue a similar point of view, claiming that:

misrecognition shows not just a lack of due respect. It can inflict a grievous wound, saddling its victims with a crippling self-hatred. Due recognition is not just a courtesy we owe people. It is a vital human need. (Taylor, 1994, p.26).

Non-recognition, then:

can inflict damage on those who are denied it... The projection of an inferior or demeaning image on another can actually distort and oppress, to the extent that the image is internalized... the withholding of recognition can be a form of oppression (Taylor, 1994, p.36).

In this light, provoking responsibility can be viewed as a struggle for legal recognition in the form of spatial regard from other road users under conditions of precarious entitlement.

Through provoking responsibility, then, cyclists take varied form of actions to reshape and expand relations of recognition across public space between co-present roads users, in the hope of transforming present spatial disregard into future spatial regard - present disrespect into future respect for cyclists as road users. As Honneth (1995, p.162) claims "individual experiences of disrespect are read as typical for an entire group, and in such a way that they can motivate collective demands for expanded relations of recognition". Provoking responsibility as a category captures the way the social group of cyclists may deal with individual experiences of disrespect that are interpreted as typical for them as a class of road user with an entitlement to public space. Through provoking responsibility, recognition and respect of spatial entitlement and the precarious conditions cyclist must navigate may follow. Through indicating transgression, one may apologise and recognise their spatial disregard, thereby recognising the spatial entitlement of a cyclist. Through asserting entitlement, another road user may refrain from spatial disregard and view cyclists in a new light, as road users that are aware of their entitlement and worthy of recognition. Through punishing transgression, a given road user may be fearful of disregarding a cyclist again and, in a

future encounters, may be cautious to recognise a cyclist as a legitimate road user worthy of respect.

At the same time, however, provoking responsibility depicts a collective demand for expanded relations of recognition made individually rather than en masse, since there can indeed be an awareness under conditions of precarious entitlement to public space for one as a cyclist in particular that one's entitlement to public space is not being recognised by others. Provoking responsibility, which can be seen as a form of 'microactivism' as I termed it earlier, ensues on the part of an individual cyclist in order to challenge precarious entitlement and spatial disregard in particular as opposed to adapting to such disregard and the misrecognition associated with it. This adds to existing literature regarding identity politics/struggles for recognition taking place in cities (Davis and Libertun de Duren, 2011) by not only delivering a unique way in which struggle is enacted within public space of the city (i.e. provoking responsibility) but also imparting a novel 'identity group' engaging in such struggle that can be viewed as a hybrid between technology and human (Urry, 2000) as mentioned in the earlier section of the chapter – namely, the identity group of cyclists.

From the point of view of a struggle for recognition carried out at an individual level, provoking responsibility can perhaps most usefully contribute as an empirically grounded conceptualisation of a struggle for recognition not necessarily in the name of personal integrity or identity (Taylor, 1994; Honneth, 1995) but more in the name of status. As Fraser (2000, p.24) proposes in her status model of recognition:

what requires recognition is not group specific identity but rather the status of group members as full partners in social interaction. Misrecognition, accordingly, does not mean the deprecation and deformation of group identity. Rather, it means *social subordination* in the sense of being prevented from *participating as a peer* in social life. To redress the injustice requires a politics of recognition to be sure, but this no longer means identity politics. In the status model, rather, it means a politics aimed at overcoming subordination by establishing the misrecognised party as a full member of society, capable of participating on par with other members.

Accordingly, from this perspective, cyclists can be seen to act toward recognition in the form of being given full and equal status as a road user entitled to transit and occupy public space in relation to other road users by provoking responsibility. Provoking

responsibility, then, can be seen as an individualised medium for changing such status and establishing cyclists as peers in the social life of public space rather than inferiors.

Interestingly, in relation to the study of Delbosc *et al.* (2019) regarding the dehumanisation of cyclists, provoking responsibility reveals a struggle by cyclists for recognition as human beings. This process, can be seen, in part at least, to be an effort toward *humanising* oneself as a cyclist to others who may dehumanise them; for example, by looking at a driver to *accentuate presence*, by confronting someone who has disregarded one's entitlement to space as a cyclist by knocking on the window in order to converse, face-to-face (*indicating transgression*). Namely, one could say that, in a struggle for recognition, cyclists "find creative ways to show their faces to drivers so they are seen as persons, not darting mechanical obstacles" (Delbosc *et al.*, 2019, p.689). Furthermore, in a struggle to be recognised as equal citizens and human beings, *punishing transgression* as mode of provoking responsibility reveals that cyclists indeed may engage in aggressive behaviour in the face of dehumanising or disregarding behaviours by others, as noted by (Delbosc *et al.*, 2019). However, *displaying responsibility* shows that an alternative approach to garner favour as a means of provoking responsibility may be employed also.

Lastly, considering provoking responsibility as means of struggling for recognition, one can see the scope for its contribution of how a "precarious" (Butler 2014, p.111) population – or, rather, a group that are subject to conditions of precarious entitlement to public space – "mobilize vulnerability" (Butler 2014, p.109) in order to have their legal or perceived entitlements recognised; with incidents of asserting entitlement, accentuating presence, punishing transgression, among others often involving marked degrees of experiencing and exploiting vulnerability in the name of recognition. Similar to other sections, such reflections on the contribution of provoking responsibility arguably apply to some degree to other groups that may be subject to precarious entitlement to public space (e.g., Loukaitou-Sideris and Ehrenfeucht, 2009; Kearl, 2010; Phillips, 2010; Bezmez, 2013; Gaete-Reyes, 2015).

4. Conclusion

In this chapter, I have extensively explored the potential contributions of the theory both overall and with a focus on its core (precarious entitlement) and sub-core categories (privatising vulnerability and provoking responsibility) more specifically. I have argued that the concepts of this grounded theory have something to offer diverse

fields, proposing their potential in relation to theoretical work in areas relating to the state (e.g., Hobbes, 1968), mobility and automobility (Sheller and Urry, 2000), individualisation (Bauman, 2000), citizenship (Harvey, 2012), and so on. Likewise, I have posited that the concepts of 'precarious entitlement' could be useful for distinct – albeit related – empirical subject areas beyond the field of cycling, most notably in spheres of research aiming to understand the experience of mobility for other groups in public spaces, such as wheelchair users (Gaete-Reyes, 2015) and women (Kearl, 2010). Building on the extended argument of contribution put forward in this chapter, then, in the following and final chapter I will conclude the thesis by subjecting the grounded theory of 'precarious entitlement' to an evaluation in order to judge its overall quality and worth.

Chapter 8:

The Quality of the Theory

1. Introduction

In this concluding chapter, I judge the quality of the grounded theory of 'precarious entitlement'. To begin, I examine qualitative perspectives on evaluating qualitative research arguing that classical grounded theory (Glaser and Strauss, 1967) can hold up to the criteria for good qualitative research as posited by Seale (1999). Therefore, good grounded theory can be considered good qualitative research. Following this, then, I judge the theory using the four criteria proposed by Glaser (1978) that must be realised to qualify one's theory as 'good' grounded theory: fit, relevance, work, and modifiability. Addressing these criteria in relation to my theory, I argue, first, that the concepts and theory of 'precarious entitlement' fit the data systematically gathered over the study; second, the theory works to explain in a nuanced way the everyday perceptions and practices of utility cyclists in Dublin; third, the theory is relevant to utility cyclists in Dublin, matters of utility cycling in the city in general and potentially relevant to other groups in different contexts (e.g. wheelchair users in public spaces) in its insight and applications; fourth, the theory is modifiable, in which I give examples of how it can be modified in the future for different applications and with additional data from the same substantive area. In addressing these four criteria in this chapter, which, as mentioned, involves making further propositions for the potential of the theory (i.e. in terms of its relevance for cyclists and other groups from similar and/or different contexts and how it can be modified and developed in the future), I robustly demonstrate how this theory ought to be considered an example of both 'good' grounded theory and 'good' qualitative research.

2. Qualitative Evaluation

There has been extensive debate in the field of qualitative research regarding how one ought to judge the quality of a given qualitative research product (Seale, 1999; Hammersly, 2008; Lincoln, 2010; Barbour, 2014; Lichtman, 2014). Various criteria have been suggested and employed in judging the quality of qualitative research. These range from those underpinned by epistemologically 'positivist' concerns with *objectivity* (Lichtman, 2014) and *rigor* (Lincoln, 2010), with criteria such as internal validity, external validity and reliability (Seale, 1999; Lincoln, 2010; Lichtman, 2014), to more

constructivist leaning concerns with the *trustworthiness* of a given qualitative work (Lincoln, 2010; Lichtman, 2014) such a credibility and transferability (Seale, 1999).

On the one hand, there has been a call for universal quality criteria applicable across the methodological boundaries of different qualitative approaches (Seale, 1999; Hammersly, 2008; Barbour, 2014). Simultaneously, there has been a call for caution in applying universal schemes at all, or, rather, in a formulaic or rigid manner, abstracted from the contextual aspects of the substantive qualitative research project in question, that require a flexible and nuanced approach in their application for judging quality (Seale, 1999; Hammersly, 2008; Barbour, 2014; Lichtman, 2014). Hammersly (2008) in particular has argued that despite the great challenges in developing or striving for universal qualitative criteria, one ought not to give up on the endeavour and settle for a methodological pluralism that is unable to distinguish the relative quality of qualitative researches that are produced from different methodological approaches. Lichtman (2014), on the other hand, argues for a highly personalised means of judging the quality of one or another's qualitative work, thus emphasising the importance of the researcher engaging in active and creative judgments of qualitative work, in contrast to an inherited checklist orientated way of assessing quality.

However, at the same time, Hammersly (2008) stresses the inescapability of the primacy of the researcher's judgement in light of background criteria. Namely, rather than conceiving of criteria in a more quantitative sense as a "finite set of observable indicators that can tell us whether or not the findings of a study are valid, or are of value in broader terms" (Hammersly, 2008, p.159), Hammersly (2008) argues against the unreflective use of such explicit and abstract criteria, instead urging for more implicit, contextualised considerations, which resemble reminders for judgement rather than requirements. Accordingly, in doing so, Hammersly (2008) proposes a notion of quality criteria that is more achievable in practicing judgments of quality as well as more appropriate for the judgement of qualitative research in particular. Thus, from this perspective, criteria in a checklist format cannot be used as substitute for *judgement* of quality; "local used criteria" (p.160), then, are to be employed as 'guidelines' for judgement.

Seale (1999), alike to Hammersly (2008), convincingly argues in favour of general 'guiding ideals' as opposed to strict 'criteria' for judging the quality of qualitative research. Seale (1999) provides an influential perspective for judging the 'quality' of qualitative research. In his view, good qualitative research ought to be rigorous and systematic in its implementation so that its author's fundamental claims are justified.

Indeed, Seale (1999, p.15) advocates for a "strong authorial presence" in the researcher's writing when presenting these claims. In arguing for such a presence to be developed and exercised, Seale (1999) is arguing that the researcher ought to take a position of transcendence or objectivity relative to a layperson in a particular field. The researcher's findings or claims, then, are to be considered as somewhat authoritative. This is in contrast to post-modernist research tendencies in which a weaker authorial presence is favoured in respect of a more relativist epistemology: that is, the researcher does not claim to have a broader or more authoritative view to a layperson in a particular field (Seale, 1999).

However, at the same time, Seale (1999) stresses that, in making claims relating to one's research in a somewhat authoritative (as opposed to uncertain) tone, one is not claiming absolute 'objectivity' or authority. Rather, the claims one makes as a qualitative researcher who has garnered results or concepts through systematic means ought to be privileged but, at the same time, considered *fallible*. In this way, strong, authoritative, but fallible claims are made by the researcher following a process of rigorous enquiry. Through such a nuanced epistemological stance, one avoids the questionable value of communicating qualitative research that adopts a relativist epistemology (i.e. the value of a perspective equal but different to that of a layperson) but without assuming a position of unquestionable objectivity.

This nuanced position on the epistemology of qualitative research which Seale (1999) denotes as 'subtle realism' mirrors aspects of classical grounded theory (Glaser and Strauss, 1967); namely, that a grounded theory should not to be seen as a fixed truth, but, rather as a working hypothesis that is abstracted from the substantive area yet grounded in data gathered from it. Accordingly, a grounded theory is posited as a perspective that goes beyond, or, rather, transcends, the view of a layperson in a given substantive area due to the systematic methodological procedures involved in developing it. In this way, the perspective offered by a given grounded theory ought to be seen as more authoritative rather than relatively equal to a layperson's view, whilst, at the same time, incorporating aspects of fallibility into its concepts through their ongoing openness to modification in light of new data (Glaser and Strauss, 1967).

In the face of what he calls 'criteriology', Seale (1999) argues that when considering one's 'guiding ideals' for the quality of a one's work, one can benefit most from a methodological awareness in one's research practice rather than aligning with strict fidelity to one epistemological position or another. This originates from Seale's (2004, p.380) view of "social research as craft skill, rather than a realization of philosophical or

political schemes." Accordingly, "a good study should reflect underlying methodological awareness" (Seale, 1999, p.31), as opposed to rigid adherence to a body of rules, on the one hand, or complete and uninhibited creativity and improvisation, on the other. As Seale (1999, p.33) argues:

Anarchic moments have a place within a disciplined context, emphasizing principled, methodic and systematic thinking.

Accordingly, Seale (1999) leaves space for structure and flexibility in his conception of 'good' qualitative research, which is fundamentally underpinned by a conception of qualitative research as a 'craft skill' in which the practitioner not need fully adopt specific epistemological positions during or in advance of a given research endeavour or, relatedly, resolve epistemological problems relevant to qualitative practice. Instead, then, a degree of general methodological awareness and sensitivity can be fruitfully brought into one's research practice without the need to commit oneself to a particular epistemological position, which is not necessary or even desirable for good practice:

good-quality research does not depend on the adoption of a particular philosophical or theoretical position, or on the commitment to particular political goals. Consideration of all of these things is relevant for research practice, but it is a mistake to allow any one of them to over-determine practice. (Seale, 2004, p.388).

Glaser (1998, p.1) repeatedly argues for the researcher to "Just do it" in the wake of the "rhetorical wrestle" (Glaser, 1998, p.35) one finds oneself in when trying to justify their research methodology and its associated epistemological position. Engaging in this wrestle, Glaser (1998) argues, is a waste of time and energy; time and energy that would be better spent learning experientially by *doing* grounded theory and *showing* the power of the concepts and theory produced afterward. By being overly concerned with epistemological problems in one's working conception of grounded theory, then, the simplicity and practical value of the method is lost and over-formalised, thus potentially stifling the grounded theory product, which requires a good degree of flexibility and openness to be effectively generated. Classical grounded theory, in this sense, can thus be argued to incorporate the position of research as a 'craft skill' that does not require a commitment to a "free standing rational scheme" (Seale, 1999, p.20), therefore further adhering to Seale's (1999; 2004) conception of 'good' qualitative research.

As I have shown, then, grounded theory research stands up in part to the claims regarding 'good' qualitative research advocated by Seale (2004; 1999); grounded theory, nevertheless, is described as a general method of generating theory from data. This data does not necessarily have to be qualitative data (Glaser and Strauss, 1967); although, in this study, as in many grounded theory studies, qualitative data were exclusively gathered and analysed. Accordingly, having set the scene for judging the quality of this theory in relation to the ambiguity and conflict in judging qualitative research in general, and in relation to the influential arguments and suggestions for judging qualitative research proposed by Seale (1999; 2004) in particular, in this section of the thesis, I will judge the quality of my grounded theory drawing upon the revised criteria posited by Glaser (1978) for 'good' grounded theory; namely, fit, relevance, work, and modifiability.

These criteria provide a simple yet powerful means of judging the quality of a grounded theory in a way that does not necessarily align with one epistemological research position or another. Rather, these criteria provide a pragmatic guide for judging a grounded theory product that ensures the research process of producing concepts has been systematic (fit), sensitive to the concerns of the participants (relevance), substantially integrated as a body of concepts (work), yet open to modification in light of new data (modifiability). With these criteria, or, one could say, guidelines, one is not overly transfixed on the truth or objectivity of the concepts or with concerns relating to their constructed nature. Instead, these criteria draw attention to the practical value or use of the concepts in fitting with the data of the study, the concerns of participants, their applicability and flexibility as a theory, and this theory's openness to modification in light in new, potentially conflicting, data. Indeed, despite claiming a distinct epistemological position to classical grounded theory, Thornberg and Charmaz (2014) argue that these criteria can indeed be used to evaluate the quality of grounded theory research in general, despite suggesting alternatives.

3. Grounded Theory Evaluation

Ultimately, 'good' grounded theory is defined as grounded theory that yields productive and useful concepts to the field from which it emerges and potentially beyond. It's 'use' is emphasised as opposed to its 'truth' or 'reality'. Four criteria are defined by Glaser (1978) in evaluating and producing a grounded theory of good quality, the first of which is *fit*.

i. Fit

'Fit' as a criterion denotes that "the categories of the theory must fit the data." (Glaser, 1978, p.4): namely, the categories must fit the data gathered from the substantive area of study that the grounded theorist claims these categories conceptualise. Importantly, the criterion of fit is meant to be understood as a remedy to the forcing of concepts or theoretical perspectives on data as elaborated notably in Glaser and Strauss (1967). Accordingly, fit is achieved through extensive use of the grounded theory constant comparative method extensively discussed in the methodology chapter of this thesis. Through comparing data incidents with other incidents gathered from the substantive area, one generates concepts to conceptualise patterns in the data (i.e. open coding). When a core category is identified, one enters the selective coding and theoretical sampling phase, and data is collected and coded to develop the conceptual variations of the generated categories that relate to the core category. This is done, as mentioned in the methodology chapter, with a view to theoretically saturate the core category of the study. Throughout this phase, then, one engages in constant comparison between incidents and concepts in order to ensure the concepts adequately fit (and refit) the data as the analysis develops and the saturation point approaches. Such a fit can be achieved with one's autonomously generated categories or existing categories in the literature that demonstrate "emergent fit" (Glaser, 1978, p.4,) with the data. Thus, it does not only have to be one's own concepts that fit the data, rather, the concepts used must fit the data and comparative analysis must be rigorously employed throughout the conduct of the study in order to ensure this. Each concept used, then, must 'earn its way' into the emerging theory (Glaser, 1978, p.4). The point of 'theoretical saturation' is reached, then, when data collection no longer aids the development of conceptual variations relating to the core category of the theory – the theory fits and accounts for data from the substantive area in a multitude of ways relating to the core category.

Throughout the process of this study, I engaged in these various stages of doing grounded theory intensively in order to generate and maintain concepts that fit data gathered from the substantive area (i.e. from utility cyclists in Dublin) and for the purposes of theoretical sampling when developing the variations of ways of dealing with the core category (i.e. privatising vulnerability and provoking responsibility). Accordingly, in generating concepts in the early stages, I entertained a range of different concepts for particular patterns identified in the data and, as data collection continued, the concepts generated, disposed of and, for the most part, refined, to fit patterns in the

data became more accommodating of new data: that is, the concepts were increasingly capable of accounting for a range of variations in patterns of data incidents – they 'fit' broader bodies of data. In this way, ensuring the 'fit' of the concepts was an ongoing task and the concepts themselves grew increasingly effective at conceptualising particular data from the substantive area. This reflexive process I engaged in of comparing data incidents and patterns with concepts is difficult to exhibit. However, I believe that it is most readily demonstrated through examining the development of my conceptual memos.

In the memo attached (appendix E) one can see my memoing as a reflection and exploration of the conceptual possibilities of *internalising responsibility, externalising responsibility* and *segregating responsibility* as three variations of how utility cyclists in Dublin can deal with the problem of *precarious entitlement*. These precedent concepts laid the groundwork for future data collection and analysis that eventually led to the similar but arguably more fitting final concepts of *privatising vulnerability* and *provoking responsibility* (appendices F & G). Through comparing appendix E to appendices F and G, one can clearly identify the conceptual explorations and transformations that lead to the final concepts of the study; or, in other words, one can track a process of comparative analysis of concepts to patterns of data incidents that facilitated the production and refinement of concepts that 'fit'. Most notably, one can see the conceptual reflections and alterations made from *internalising responsibility* to *privatising responsibility* to *privatising responsibility* to *privatising vulnerability*, as well as from *externalising responsibility* to *provoking responsibility*.

More generally, the 'fit' of my concepts is manifest in my writing of the three central chapters of this thesis in which I have elaborated my primary concepts (i.e. precarious entitlement, privatising vulnerability & provoking responsibility) and their various properties/variations. In presenting these concepts I, first, explain what I mean by them — that is, how I mean them to be understood. Second, following such explanations, I describe how they fit and work to provide an abstracted view of patterns in the substantive data; or, more generally, I describe how they provide a productive theoretical perspective on the experiences and behaviour of utility cyclists in Dublin in relation to a particular, central main concern (i.e. precarious entitlement). I achieve this by providing my perspective on different incidents provided by the utility cyclist interviewees through the generated concepts of the theory. Accordingly, my write-up of the concepts developed in this grounded theory study comprises of my explanation of such concepts and a demonstration of how such concepts 'fit' patterns of data incidents

through putting these concepts into dialogue with such incidents. Each concept, then, is transparently 'grounded' in data, as Glaser and Strauss (1967, p.5) direct: "grounded theory is derived from data and then illustrated by characteristic examples of data".

ii. Work

Along with 'fitting' the data, the concepts produced from a grounded theory study must also 'work' with the data (Glaser and Strauss, 1967). Namely, the concepts and overall theory must provide explanatory power over the substantive body of data from which it emerged through the analytic work of the grounded theorist. Importantly, work is somewhat different from fit in that Glaser (1998) emphasises not only the effectiveness of individual concepts that fit particular patterns of data incidents in explaining such patterns but also the integration of concepts into hypotheses that provide a theoretical perspective on how participants from the substantive area continually resolved their main concern. In this way, it is not just isolated concepts that work to explain patterns of behaviour in the substantive area but rather the integration of concepts that make up the theory. Over the course of this study, diagrams were repeatedly used and modified in order to integrate concepts with one another. One can observe in Appendix H the final diagram of all the concepts amongst one another.

My theory of how utility cyclists in Dublin negotiate conditions of 'precarious entitlement' works in a multitude of ways to explain how utility cyclists in Dublin resolve, or rather, deal with or negotiate their main concern of 'precarious entitlement' to space as a road user, and, through doing so, explains broad patterns of utility cyclist behaviour in Dublin. For example, privatising vulnerability as a sub-core category explains behaviour such as a lack of responsiveness or indifference from a cyclist in the face of being subject to blatantly disregarding or disrespectful behaviour from another road user (i.e. tolerating transgression); a meek or deferent style of positioning oneself on the road and/or interacting with other road users as a cyclist (i.e. waiving entitlement); and, additionally, incidents of cycling on the pavement when there is a road or cycle lane nearby which a given cyclist may be entitled or obliged to cycle upon (i.e. precautionary transgressing). This action is made sense of by the interrelated concepts of 'privatising vulnerability'. 'Privatising vulnerability', then, is made sense of as a response to the conditions of 'precarious entitlement' cyclists in Dublin must negotiate.

On the other hand, provoking responsibility can be seen to usefully explain incidents such as what could be considered by some as 'road rage' or 'militancy' from a cyclist, such as insisting on occupying near the centre line of a shared traffic lane, or forcefully continuing straight ahead despite a road user being likely to infringe on the cyclist's right of way in a way that may in fact endanger the cyclist (i.e. asserting entitlement). Likewise, incidents of cyclists communicating with other road users who have infringed on their space in what may seem to be an excessively indignant way over what might appear to some to be a trivial slight is conceptualised and made sense of as a response to conditions of precarious entitlement (i.e. indicating and/or punishing transgression). Hence, alike to privatising vulnerability, incidents captured as provoking responsibility are made sense of as responses to overall conditions of precarious entitlement. In relation to privatising vulnerability, then, provoking responsibility makes sense as a clearly opposing way of dealing with precarious entitlement in which communication with other road users becomes central instead of social withdrawal.

iii. Relevance

A good grounded theory ought to be *relevant* to people in the substantive area. Namely, Glaser (1998, p.11) claims the grounded theory research is particularly useful in producing:

hypotheses that can be used to help participants in a substantive area, grounded theory is well suited to discovering the participants' problem and then generating a theory accounting for the processing of the problem. Other methods may be more suitable for studying the researcher's preconceived research interest whether or not it is relevant to the participants.

Central to grounded theory, then, is the discovery and conceptualisation of the participants 'main concern'. Through doing this, one produces a theory that is relevant to people in the substantive area of research in contrast to the use or generation of theory in a manner that does not ensure its relevance to the layperson but rather its relevance to the researcher. In this way, Glaser (1998) envisages grounded theory as having a somewhat emancipatory function through a grounded theory's capability to transcend the limitations of a layperson's perspective and provide a more overarching view that a layperson can understand and apply, thus enabling more enlightened and

creative action and response to a particular main concern or problem. Indeed, this is precisely how Glaser and Strauss (1967) describe their theory of awareness contexts being put to use by medical professionals following its generation — people in the substantive area from which it was produced.

The preceding 'Contribution of the Theory' chapter can be viewed as a comprehensive argument for and in-depth exploration of the relevance of the theory for utility cyclists in Dublin in particular, but, also, potentially for other groups from other substantive areas.

Within the substantive area, the grounded theory of 'precarious entitlement' through conceptualising the experiences, main concern, actions and interactions of cyclists in the urban context of Dublin - is clearly relevant to transport and city planners, driver and cycle trainers, road safety educators and authorities, everyday cyclists and road users, and, perhaps most significantly, public policy makers looking to promote cycling and produce harmonious, accessible public spaces. Offering a framework for interpreting the problems faced by cyclists in Dublin and their private (or privatised) and public behaviour, such a grounded construction provides a transcending abstraction of, on the one hand, what may seem at first glance to be matters of trivial and isolated occurrence, such as a minor incident of spatial disregard, a badly maintained cycle lane (insecure space), or an illegally parked car that has not shifted from a given cycle lane for days (police neglect). The theory of precarious entitlement positions these various experiences within a broader set of complex social, material and institutional conditions of 'precarious entitlement' to public space. On the other hand, mundane and often subtle behaviours such as an extended gaze from a disregarded cyclist to another road user (indicating transgression) and a cyclist dismounting from their cycle in a high speed space (waiving entitlement) can be seen from a different point of view as responses to conditions of precarious entitlement, as variations of wider patterns of action and interaction (e.g. provoking responsibility; privatising vulnerability). The fresh and expansive conceptualisations of cycling experiences and practices emerging from this study are plainly of import in the field of cycling and mobility studies (Lawson et al., 2013; Spinney, Aldred and Brown, 2015; Aldred, 2016) which can feed into the activities of and interventions toward the various groups mentioned.

For the 'layperson' cyclist, precarious entitlement as a theory can clarify, integrate and articulate the conditions they must negotiate and experience as 'normal', along with the actions and interactions they may regularly engage in or witness as cyclists. Through the conceptualisations that precarious entitlement as a theory provides, cyclists are

empowered with a more abstract, transcending and integrated view of what they may already 'know' on an intuitive level and are 'experts' in dealing with. Such clarity could lead to more informed and conscious responses to, and ways of dealing with, conditions of precarious entitlement. For example, instead of 'punishing transgression' by shouting at a close passing motorist, having judged their reactive and habitual effort of provoking responsibility to be futile, a cyclist may resolve to 'tolerate transgression' in the future, or perhaps even find a non-confrontational way of 'indicating transgression', such as taking a picture of a driver's registration number within their view. Likewise, having been exposed to the theory, a cyclist may realise that they have an unconscious tendency to 'waive entitlement' to other road users out of fear of disregard. Now wielding the transcending view of 'precarious entitlement', they may judge their behaviour to be insufficient, and, in the name of provoking responsibility to challenge conditions of precarious entitlement, adopt various measures to 'assert entitlement' in the future. Regardless of its adoption by layperson cyclists, the theory will enable such persons to transcend their "finite grasp of things" (Glaser, 1978, p.13), thereby extending their agency to tackling their main concern - precarious entitlement - in an explicit, reasoned and effective way (Glaser 1978).

Indeed, there is scope, relatedly, for cycle activists – who may be argued to provoke responsibility on a collective level – to use the theory to articulate a major problem cyclists face and want resolved, using the category of precarious entitlement. Through the use of this well-designed category that captures various interconnected precarious conditions that cyclists must negotiate, campaigners can clearly communicate what they want resolved to politicians, policy makers and fellow citizens; and, potentially, what they want instead: 'robust' or 'secure' entitlement to public space as road users. In this way, as a concept that may have critical use, precarious entitlement could be used similar to Henri Lefebvre's (1996) 'Right to the City', or as a subsidiary claim/critique put forward as part of mobilising such an expansive right.

Outside of the substantive area, then, the significance of 'precarious entitlement' as a main concern and integrated theory is most notably of potential relevance for groups that may be considered particularly vulnerable users of public space (e.g. women in public space and street harassment, individuals with disabilities or compromised function and problems of accessibility and risk, stigmatised groups in public space and subjection to potential abuse by others etc.). Accordingly, with the contribution chapter in mind and this brief summary of points, the relevance of 'precarious entitlement' as a

theory for both the participant group within the substantive area and for groups beyond the substantive area holds promise.

iv. Modifiability

Having demonstrated the quality of this theory on the grounds of the 'fit' of its concepts with data from the substantive area, how it 'works' as a theory to explain the resolution of the main concern of participants, and how it is relevant to participants from the substantive area and has potential for groups beyond the substantive area, we come to the final and most recent criterion (Glaser, 1978): *modifiability*. This is arguably a less demanding criterion compared to the preceding three already discussed, as, on the way to producing abstract concepts, the concepts at hand must be altered and changed – they must be modified – to better fit growing patterns of data. Built into the process of making concepts that fit, then, is the process of modifying older concepts to fit better. As Glaser (1998, p.4) states: "Built into grounded theory is its own constant verification through modifying by constant comparison."

Thus, over the course of this study, the initially accumulating and increasingly refined concepts were continuously modified in order to ensure their 'fit' with expanding bodies of diverse data incidents. Consequently, throughout the study, the concepts produced from start to finish were modifiable. This leaves the concepts of the end grounded theory product modifiable. Just as the concepts generated before the point of 'theoretical saturation' was reached were modified and modifiable to fit the patterns of data collected, so too for the concepts integrated in the final grounded theory. Therefore, if new data emerged that challenged the 'fit' of the concepts (e.g. provoking responsibility), then these concepts could be modified to fit, having already conceptualised a large body of data patterns, to accommodate a new pattern. Indeed, this open-endedness of a grounded theory is central to Glaser and Strauss's (1967, p.32) notion of a grounded theory being an "ever-developing entity". This theory of 'precarious entitlement' ought to be considered just the same: not as a theory that can be potentially 'wrong' or 'incorrect' (Glaser, 1998), but, instead, is a theory that fits, works and is relevant but, at the same time, is open to modification in light of new data from either the substantive area itself, or in application to other substantive areas where it may also be relevant, through the constant comparative method (Glaser, 1998).

By the same token, then, it is important to note the limitations of this grounded theory – limitations which are applicable to any given grounded theory in general.

Namely, this theory ought not be interpreted as a 'true' or 'objective' rendering of cyclist experience and behaviour in Dublin. In claiming that cyclists experience conditions of 'precarious entitlement' and engage in various patterned forms of action and interaction I am offering, as promised, a transcendent abstraction, not a mirror image or 'description' (Glaser, 1998). In the spirit and philosophy of pragmatism (e.g. James, 2009), then, this grounded theory is a useful, fallible and hypothetical conceptualisation of the main concern of cyclists in Dublin, which comprises of negotiating conditions of precarious entitlement to public space, and their patterns or action and interaction in response to such perceived conditions. This integrated conceptualisation has been systematically generated and empirically grounded. In this way, it cannot, at the same time, be said to be of relativist value equal to that of a laypersons interpretation or a body of concepts derived from a loose, impressionistic analysis of data (Glaser and Strauss, 1967). Rather, it can be used to understand the experience and behaviour of cyclists in Dublin and it can be applied with potential impact in the confidence that its concepts and their relations have been extensively generated via analysis of data: although not 'verified', the ideas are not baseless or intuitively derived - they are 'grounded' (Glaser and Strauss, 1967). Thus, provided that the user does not endorse the theory naively as infallible truth or a complete rendering of all cycling behaviour and experience in Dublin or beyond, this limited research product is valuable and may be used to good effect. In light of these limitations, it is all the more important, therefore, to keep the criterion (and capability) of modifiability in mind.

With modifiability in mind, there are some promising avenues for further research with respect to the theory of precarious entitlement. Glaser and Strauss (1967) and Glaser (1978) differentiate between 'substantive' to 'formal' grounded theory. Substantive grounded theory emerges from and is applicable to a "specific area" (Glaser and Strauss, 1967, p.79) whereas formal theory grounded theory transcends a given substantive area to incorporate/conceptualise data and grounded concepts from other substantive theories. Accordingly, formal theory is more abstract and conceptually driven than substantive theory, which is peculiar to a given empirical area of study (Glaser, 1978). Future research building on this grounded theory study could involve formalising the theory of precarious entitlement so that it may encompass a number of relevant substantive areas. Glaser (1978) articulates three ways one can work toward formal grounded theory: rewriting, new data, and existing substantive theory.

First, rewriting involves the removal or substitution of concepts peculiar to the empirical/substantive area (i.e. in this case, utility cycling) in order to render the concepts of the substantive theory more abstract - hence, more formal. An example in relation to this substantive theory of precarious entitlement could be altering the property of 'spatial disregard' into 'entitlement disregard'. In doing so, the concept is rewritten in more abstract terms without losing the essential component of disregard crucial to the category of precarious entitlement. One can see how such a reformulation could make precarious entitlement more applicable to other substantive areas, such as precarious entitlement experienced by wheelchair users due in part to disregard of their entitlement to priority boarding and designated spaces on the bus (Gaete-Reyes, 2015). Furthermore, with this alternate substantive area in mind, 'police neglect' may in fact be abstract enough to 'fit' data from the substantive area - for example, the lack of policing of the bus driver to ensure others regard the entitlement of the disabled person to priority boarding the bus (Gaete-Reyes, 2015). However, it could potentially be reframed in a slightly more abstract way to conceptualise neglect from persons in authority in the enforcement of regard in general, as bus drivers may engage in policing but would not necessarily be described as police. Accordingly, rewriting the theory could be one step toward developing a formal theory of precarious entitlement - at least a more formal theory of precarious entitlement that transcends the single substantive area of utility cycling. However, much more is needed to generate formal theory: alike to substantive grounded theory, comparative analysis is essential in order to ensure that it is 'grounded (Glaser, 1978).

Second, then, is the comparative analysis of new data. One can expand one's substantive theory to a higher level of abstraction, thereby producing greater generalisability, through comparing data from other substantive areas in relation to the original concepts, and modifying them accordingly (Glaser, 1978). Indeed, the example above of 'entitlement disregard' could plausibly be generated from such comparative analysis from other substantive areas with which precarious entitlement to public space may hold relevance (e.g. pedestrians in heavily automobilised environments). Theoretical sampling, then – much like the selective coding phase of this study – can be employed by collecting data from other substantive areas.

However, the third way – comparative analysis with other substantive theories – is arguably more effective at generating formal theory. It enables greater abstraction due the more abstract level of comparison; that is, comparison at a conceptual rather than purely empirical, level. The substantive theory one wishes to develop more formally,

then, acts as an entry point for further abstraction. In step with comparative analysis of a variety of potentially relevant substantive theories that appear promising in terms of 'fit', the substantive theory requires substantial modification of its concepts primarily in the form of greater abstraction in order to ensure renewed 'fit' (Glaser, 1978). Thus, with precarious entitlement, substantive theory emerging from the work of Kearl (2010) and Loukaitou-Sideris and Ehrenfeucht (2009) could be subjected to comparative analysis with the framework of concepts from the substantive theory of precarious entitlement. Categories such as 'provoking responsibility' and 'privatising vulnerability' could be adapted to fit the expanded substantive areas covered, thus conceptualising precarious entitlement to public space and strategies for negotiating such conditions across the substantive areas of pedestrians (Loukaitou-Sideris and Ehrenfeucht, 2009), women in public space (Kearl, 2010) and utility cycling. From this discussion, then, there are clear ways to progress and develop this existing substantive grounded theory into a formal theory with greater 'generality of scope' through modification (Glaser, 1978, p.152). Such an effort, Glaser (1978, p.148) argues, enables the development of 'cumulative knowledge' and prevents the theoretical and conceptual yield of grounded theory studies from the status of becoming "respected little islands of knowledge" that gradually fall out of use and relevance. Of course, I have only proposed here a limited degree of expansion; namely, to transcend the basic group of cyclists to incorporate potential other groups subject to conditions of precarious entitlement to public space as a pedestrian and on public transport such as women, older people, and disabled people. Nevertheless, the degree to which the theory of precarious entitlement could be abstracted from the substantive area of cycling could likely far exceed the limited related but alternative areas mentioned.

Irrespective of future efforts to expand the generality of scope for the theory through formal theory generative processes, the concepts of precarious entitlement could be researched in a quantitative capacity in an Irish context. Such research could be done in relation to utility cyclists in Dublin, and/or, in keeping with the developed of more general, formal theory, for other who may experience and deal with conditions of precarious entitlement to public space or beyond (e.g., makewayday.com, 2019). Accordingly, a measure of perceived precarious entitlement could be produced in order to ascertain the accessibility and evaluate the quality of user experience of a given public space, or, more generally, a particular entitlement one has as a citizen (e.g., to vote, to use one's medical card, to avail of various universal public services).

4. Conclusion: Product Proof

Glaser is adamant that, despite all the aforementioned criteria for judging quality, the real, most compelling indicator of the quality of a given grounded theory is the product itself; what he calls "Product Proof" (Glaser, 1998, p.16). In exposing oneself to a grounded theory study in a given field, and comparing it to other work in the field, the quality of the study should "speak for itself" (Glaser, 1998, p.18), as its "merit emerges with the impact and relevance of the generated theory" (Glaser, 1995, p.8). Accordingly, comparing the grounded theory method to other methodologies as a means of judging its likely quality or trustworthiness is of little value relative to seeing the product itself in a given field. Indeed, these claims resemble those of Seale (1999, p.7) regarding the quality of qualitative research; namely, that "quality is a somewhat elusive phenomenon that cannot be pre-specified by methodological rules". Instead, quality emerges from good craftsmanship (Seale, 1999).

In summary, the grounded theory of precarious entitlement integrates concepts that explain and provide a way of thinking about and interpreting the experience and action/interaction of utility cyclists in Dublin, and potentially beyond Dublin, in other cities where precarious entitlement to public space may be experienced, such as Sao Paolo (Bösehans and Massola, 2018). It provides a new way to understand cyclist behaviour beyond models of 'risk management' and 'compensation' (Adams, 1995; Green, 2009), revealing a broader concern with spatial entitlement and public space. Furthermore, the theory conceptualises processes of both individualisation and social withdrawal and negotiating citizenship amongst other citizens within public space, and, therefore, makes a novel contribution to an understanding of how urban mobility and interaction may 'play out' in heavily automobilised public spaces (Sheller and Urry, 2000; Spinney, Aldred and Brown, 2015). Such a theory may inform efforts to change the behaviour of cyclists or other users of public space, understand and resolve conflicts in public space, and promote cycling by 'producing' cycle spaces in a way that is sensitive to cultural, material and institutional elements. Beyond cycling, then, precarious entitlement as a theory – subject to modification – arguably holds promise in relation to intervention, interpretation, design and policing in the service of promoting healthy public life and harmonious, safe and accessible public spaces for groups who may be subject to conditions of precarious entitlement due to disregard or harassment, such as individuals with disabilities, older people, marginalised ethnic groups, and women.

Alongside these claims, having witnessed the nodding heads, the excited comments, and the personal anecdotes from colleagues and acquaintances knowledgeable in the substantive area from Dublin and beyond, the value of this theory has been and will be further ascertained with its exposure to a wider audience in the future. With your judgement and the judgement of others, hopefully it will prove itself to be a useful and valuable product that will benefit not only cyclists subject to precarious entitlement in the public spaces they regularly find themselves, but also for other marginalised groups of people whose entitlement to public space may be precarious to exercise due to neglect by institutions, the disrespect of other people, or otherwise.

Appendices:

CYCLING AND RISK STUDY



A CALL FOR RESEARCH VOLUNTEERS

Dear Dublin cyclist,

I am a PhD student from Dublin City University conducting research into cycling and matters of risk. The basis for the study is that those who cycle for transport in Dublin may commonly deal with various matters of risk. These matters may involve being put 'at risk', such as by other road users; 'taking risks', which could include breaking a red light at a busy junction; and putting others 'at risk', perhaps by cycling on a pavement full of pedestrians. I want to find out what matters of risk are relevant to Dublin cyclists and how they are dealt with.

I am looking for participants for an interview in which the issues mentioned above will be explored. This will last no longer than one hour and can take place in a DCU office or a more convenient public location. Participants must be 18 years of age or older and must, at times, cycle as a mode of transport.

Any information shared will be treated as confidential and will be protected (subject to legal limitations). Participation is entirely voluntary and you may withdraw at any stage without consequence. More information will be provided to you before direct involvement in the study.

If you have experienced a traumatic road accident, there may be a risk that recalling this event in an interview may cause you distress. In terms of benefits, this project could possibly help you reflect on how you, as a cyclist, deal with matters of risk in your cycling practice. Also, in taking part you will be able to voice the concerns of those who cycle in Dublin. These concerns may contribute to future road policy and sustainable transport developments. If you find this project interesting and would like to take part, please contact me by email or phone call.

Email: robert.egan8@mail.dcu.ie

Phone: 01-7006992

Kind Regards,

Robert Egan

DCU PhD Candidate

PhD Supervisor: Dr Mark Philbin

This research is funded by the DCU School of Nursing and Human Sciences and has been approved by the Dublin City University Research Ethics Committee.

Appendix B)

27.04.18 - Obliging Regard

Obliging – morally or legally compelling someone to do something Regard – attention, consideration, care.

Obliging regard means to morally or legally compel someone to pay attention to you and treat you considerately (in the context of precarious space and recognition).

This involves imploring regard, which appears too limited to someone begging, which does not in fact appear to fit the data abstractly enough.

Since precarious entitlement is made up of *both* precarious space and precarious recognition and not *only* precarious recognition, regard does not only mean spatial entitlement recognition but can also mean recognition of vulnerability in precarious space.

Obliging regard, then, is a means of provoking responsibility: making another morally or legally compelled to pay attention to you and treat you with respect (for either your spatial entitlements or vulnerability).

Is obliging regard just provoking responsibility directly and garnering favour just provoking responsibility indirectly (another means of obliging regard)?

Provoking responsibility (legally for one to respect spatial entitlements and morally for one to respect the relative vulnerability of cyclists in precarious space) may not require obliging regard as regard does not refer to the sense of responsibility. However, obliging regard or, perhaps, *compelling* regard could refer to the acts of cyclists trying to get the attention of other road users.

Appendix C)

INTERVIEW GUIDE

Research Title: Utility cyclists' perspectives on, and responses to, the

risks of road use in Dublin: a grounded theory study

School: DCU Nursing and Human Sciences

Principal Investigator: Robert Egan, PhD Candidate

Email: robert.egan8@mail.dcu.ie

Phone: 0863454057

Supervisor: Dr. Mark Philbin

Greeting and Briefing

OPENING QUESTIONS

- "Could you tell me about cycling in relation to your daily life?"
- "What's your experience of cycling in Dublin?"
- "What's on your mind when you are cycling?"
- "What sorts of problems do you encounter when you are cycling?"

RISK QUESTIONS

- "Do you ever feel that you are in danger or unsafe when cycling on Dublin roads?"
- "When you are cycling, are there ever times when you 'take-risks' on the road?"
- "How do you deal with threats to your safety when cycling on Dublin roads?"
- "How do you protect yourself from danger when cycling on Dublin roads?"

What emerges as a potential main concern and process of dealing with this concern from any of the participant's responses will be extensively probed in order to gather data as rich and diverse as possible. In addition, the interviewer will clarify their own interpretations of what the interviewee is saying to ensure mutual understanding.

Potential Follow Up Questions:

- "That's interesting. Could you tell me more about..?"
 - -who else is involved
 - -where and when it happens
 - -what they do
 - -what you do
- "Could you describe in more detail what you mean by...?"
- "Could you tell me, in your own words, how would you describe this?"

- "Could you explain to me how you deal with/responded to...?"
- "Could you describe to me what happened next?"

Risk Management Questions:

If the interviewee becomes distressed, they will be asked:

- "Are you comfortable talking about this?"
- "Are you feeling ok?"
- "Do you want to carry on or would you prefer to end the interview?"
- "We can end this interview at any stage."

For those who were distressed at some stage during the interview, the following questions will be asked to end the interview positively:

- "What do you enjoy about cycling for transport in Dublin?"
- "From your perspective, what kind of benefits has cycling given you?"
- "What's your favourite place to cycle through in Dublin?" "Why?"

Appendix D)

Interview Guide

Greeting and Briefing (data practices, duration, explain that you start off with some broad, open questions relating to cycling).

OPENING QUESTIONS

- Experience of cycling in Dublin.
- Problems you encounter when cycling in Dublin
- Times/situations when you feel vulnerable
- Cycling infrastructure
- Failure of other road users to notice you
- Intimidation / conscious disregard by others

SELECTIVE QUESTIONS

Privatising Vulnerability

- Anticipating Disregard 'Watching Out', 'High Alert'
- Enduring Disregard 'Letting Go', 'No Point'
- Suppressing Indignation 'Just Contuing On'
- Internalising Inferiority 'Own Worst Enemy' 'Be Careful'
- Waiving Entitlement 'Playing it Safe'
- Precautionary Transgressing

Provoking Responsibility

- Indicating Disregard 'Confronting, Interacting, Communicating, Indicating'
- Punishing Disregard 'Shouting, Cursing, Gesturing, Reporting'
- Diffusing Indignation
- Amplifying/Forcing Accountability 'Not Letting Away With'
- Exploiting Vulnerability 'They have to unless they're a psychopath'
 put yourself in vulnerable postions?
- Asserting Entitlement 'Making a Point' 'Trying to Communicate Entitlement'
- Ensuring Recognition
- Displaying Responsibility 'Try to earn respect'

Potential Follow Up Questions:

Probes

- "That's interesting. Could you tell me more about..?"
- "You mentioned...Could you tell me more about that?
- "Could you describe in more detail what you mean by ...?"

- "You talked about...Do you have any specific examples/experiences of that?"/"Could you give me some examples?"
- "Your view about...Are there any personal experiences that view is based on?"
 - -who else is involved
 - -where and when it happens
 - -what they do
 - -what you do

Clarifications

- "Could you tell me, in your own words, how would you describe this?"
- "Could you explain to me how you deal with/responded to...?"
- "Could you describe to me what happened next?"

Risk Management Questions:

If the interviewee becomes distressed, they will be asked:

- "Are you comfortable talking about this?"
- "Are you feeling ok?"
- "Do you want to carry on or would you prefer to end the interview?"
- "We can end this interview at any stage."

For those who were distressed at some stage during the interview, the following questions will be asked to end the interview positively:

- "What do you enjoy about cycling for transport in Dublin?"
- "From your perspective, what kind of benefits has cycling given you?"
- "What's your favourite place to cycle through in Dublin?" "Why?"

Appendix E)

05.10.17 - Internalising, externalising and segregating responsibility

Three potential ways to differentiate the three categories: first, internalising involves suppressing the expression of one's indignation and taking responsibility for precarious entitlement through a heavily risk-avoidant, submissive and distrustful style of riding; externalising involves discharging indignation and an entitled, defensive style of riding; segregating involves an indifferent style of riding which could perhaps involve high degree of risk-taking — perhaps segregating involves more alienating agency — "delimiting agency", "relinquishing or renouncing control" could be an aspect of this delimitation which leads to a sense of alienation perhaps — and externalising could be more about blaming others. I should keep in mind that these processes could operate simultaneously and that a given participant may present aspects of all three.

In fact, in a purer conceptual sense, it may be more useful to regard segregating responsibility as the renouncing of control over precarious entitlement - this could be associated with my own style of riding and process of dealing with it, parts of P4's and P5's accounts of dealing with precarious entitlement in which they do not argue with others and instead adopt an indifferent attitude as possible – phrases like 'that's not my responsibility deal with', 'I can't influence or control that', 'there's no way I can make a difference about that - so I just don't bother thinking about it or acting on it': these can be seen as aspects of segregating responsibility when dealing with precarious entitlement. Externalising responsibility, then, can be seen as purely orientating responsibility away from the self and towards another (e.g. another road user or the government). One aspect of externalising responsibility may be being unable to take responsibility for any of one's own actions ("alienating agency") which, with the reverse of internalising responsibility one "intensifies agency" without the medium of "delimiting agency"; so, the one hand, one takes the problem squarely on their shoulders, and, on the other hand one shifts the problem squarely on to another shoulders – the one who segregates, then, does what they believe they can practically do: they are orientated towards practical results and put idealism and potentially destructive impulses second.

Further to add, "internalising responsibility" could be a distinct sympathy for drivers – like the sympathy that P6 has due to the complexity of the task of driving (mediated by her personal experience of driving and the sympathy with drivers). In this way, her perceived condition of precarious entitlement is not so much caused by 'irresponsibility' on the part of drivers, whereas, due to the simple task of being a pedestrian, they can be afforded such a label and thus externalising is seen as an appropriate way of dealing with their contribution to the cyclist's precarious entitlement. Is this tendency to not blame and sympathise/empathise prevalent in other accounts that appear to be orientated towards internalising responsibility? Is segregating, then, when one feels another *is* blameworthy and acting irresponsibly but one recognises that they cannot control this person so they adopt an attitude of indifference?

A property of internalising responsibility (or perhaps a precursor to it) could be a feeling that no one is at fault and that one is solely responsible for dealing with the circumstances they are dealt. This contrasts with externalising responsibility, where another is clearly perceived to be at fault and that other is not the individual themselves. Segregating responsibility involves elements of both and that one does feel others are at fault but recognises that they cannot influence this therefore internalises

some aspect of responsibility for dealing with precarious entitlement but suppresses their indignation in the process – an indignation that would not be prevalent in a total internalising of responsibility.

Appendix F)

18.01.18 - Privatising versus Provoking and Enforcing Responsibility

Privatising responsibility works better than internalising responsibility and provoking works better than projecting responsibility. First, the word 'privatising' is easily understandable; one renders their particular responsibility for dealing with a task or risk/situation as their own to deal with. It becomes a private matter for the individual rather than a matter concerning the individual and others - a matter between individuals with mutual involvement and coordination. This movement away from any intercourse is what characterises privatisation of responsibility and can be seen in Bauman (2000) in his discussion of public spaces as opposed to civil spaces. One can argue civility is eroded with increased privatisation of responsibilities amongst strangers in the city. Importantly, the sense of responsibility is also privatised - one may never feel that anyone other than themselves is responsible for their safety (thus they may not perceive vulnerability or dependence on others). Once again everything becomes a matter for the individual and nothing is a shared problem between individuals. Privatising, then, is a useful world as a contrast with the public sphere – the sphere of other strangers in a shared space relying on shared actions and distinct responsibilities toward each other – one of which is respecting the entitlements of others, entitlements created by the state for the interaction between strangers. Another way to say this is that responsibility has been individualised (Beck, 1992; Bauman, 2000).

Provoking responsibility fractures privatisation. One does not accept that the problem of their safety created by conditions of precarious entitlement is one for them and them alone to deal with. Instead, they recognise the issue as an issue of disregard *by others* requiring, in light of the lack of state enforcement or impunity, the provocation of a sense of responsibility in others — responsibility to respect the entitlements of the cyclist. This is the action taken by the individual having perceived an interactional problem that transcends themselves.

Lastly, enforcing responsibility can be seen as the last attempt to secure transit/secure entitlement but, indeed for many, this proves impotent without committed state intervention. In this way, orientating responsibility ranges from privatising it, somewhat gently provoking it in others without the availability of threats, and enforcing it with the use of incentivising force.

Appendix G)

15.02.18 - Privatising Vulnerability versus Provoking Regard/Responsibility

In conditions of precarious entitlement when exercising one's entitlement becomes a matter of personal risk as others may not respect this entitlement or the entitlement is by its very nature precarious and, relatedly, the individual that is in a particular position of vulnerability from the beginning and nothing is done to mitigate this vulnerability, privatising this vulnerability is one way of dealing with the problem of precarious entitlement. In this case, privatising means to make a particular issue a *personal*, or *private* issue as opposed to a public or political issue. Accordingly, cyclists at times take the problem of vulnerability created by conditions of precarious entitlement to be their own problem – not the problem of others, or, at least, not a problem that can be solved by the individual's efforts with others. Rather, the way the problem can be manage best is by the individual taking measures to protect themselves and stay safe and, overall, *avoid* interaction with others.

Provoking regard, on the other hand, *reaches out* to the other and others. Contrary to the internalising and withdrawing tendencies of privatising vulnerability, provoking regard means compelling others to pay one attention, to acknowledge one's vulnerability and to take measures to respect it. In this particular case – the case of precarious entitlement – provoking regard means taking measures to provoke other road users (i.e. the public) and government bodies (i.e. political institutions) to regard the entitlements (and vulnerabilities) of cyclists to the road and to considerate treatment. In this sense, privatising vulnerability is characterised by a *withdrawal* from the public and provoking regard is characterised by a *reaching out* to the public.

Key aspect, then, is whether *my* vulnerability is *my* problem or *your* problem to deal with (i.e. to be responsible for).

Appendix H)

Core Category: Precarious Entitlement

- Insecure Space
- Spatial Disregard
- Police Neglect

Sub-core Category 1: Privatising Vulnerability

- Anticipating Disregard
- Waiving Entitlement
- Tolerating Transgression
- Precautionary Transgressing

Sub-core Category 2: Provoking Responsibility

- Accentuating Presence
- Asserting Entitlement
- Indicating Transgression
- Punishing Transgression
- Displaying Responsibility

References

Adams, J. (1995) Risk. England; Bristol: UCL Press.

Ahlstrom, D. (2016) 'Why cycling safety is a two-way street', *The Irish Times*, 3 October. Available at: https://www-irishtimes-com.dcu.idm.oclc.org/opinion/why-cycling-safety-is-a-two-way-street-1.2815097 (Accessed: 1 July 2017).

Albrecht, Y. (2019) 'The Contemporaneity of Grounded Theory: Data and Emotional Reflexivity', *Sociological Focus*. doi: 10.1080/00380237.2018.1544516.

Aldred, R. (2010) "On the outside": constructing cycling citizenship, *Social & Cultural Geography*, 11(1), pp. 35–52. doi: 10.1080/14649360903414593.

Aldred, R. (2016) 'Cycling near misses: Their frequency, impact, and prevention', *Transportation Research Part A*, 90(Journal Article), pp. 69–83. doi: 10.1016/j.tra.2016.04.016.

Aldred, R. and Crosweller, S. (2015) 'Investigating the rates and impacts of near misses and related incidents among UK cyclists', *Journal of Transport & Health*, 2(3), pp. 379–393. doi: 10.1016/j.jth.2015.05.006.

Aldred, R. and Dales, J. (2017) 'Diversifying and normalising cycling in London, UK: An exploratory study on the influence of infrastructure', *Journal of Transport & Health*, 4(Journal Article), pp. 348–362. doi: 10.1016/j.jth.2016.11.002.

Aldred, R., Elliott, B., Woodcock, J. and Goodman, A. (2017) 'Cycling provision separated from motor traffic: a systematic review exploring whether stated preferences vary by gender and age', *Transport Reviews*, 37(Journal Article), pp. 29–55.

Aldred, R. and Goodman, A. (2018) 'Predictors of the frequency and subjective experience of cycling near misses: Findings from the first two years of the UK Near Miss Project', *Accident Analysis and Prevention*, 110(Journal Article), pp. 161–170. doi: 10.1016/j.aap.2017.09.015.

Aldred, R., Woodcock, J. and Goodman, A. (2016), 'Does More Cycling Mean More Diversity in Cycling?', *Transport Reviews*, 36(Journal Article), pp. 28–44.

Andrews, N., Clement, I. and Aldred, R. (2018) 'Invisible cyclists? Disabled people and cycle planning – A case study of London', *Journal of Transport & Health*, 8(Journal Article), pp. 146–156.

Attewell, R.G., Glase, K. and McFadden, M. (2001) 'Bicycle helmet efficacy: A metaanalysis', *Accident Analysis and Prevention*, 33(3), pp. 345-352.

Bakker, J. I. (2019) 'Grounded Theory Methodology and Grounded Theory Method: Introduction to the Special Issue', *Sociological Focus*. doi: 10.1080/00380237.2019.1550592.

Barbour, R. 2014. Chapter 34: Quality of Data Analysis *IN* Flick, U. (ed.) *The SAGE Handbook of Qualitative Data Analysis*. City Road, London: SAGE Publications Ltd, pp. 496–549.

Barnfield, A. and Plyushteva, A. (2016) 'Cycling in the post-socialist city: On travelling by bicycle in Sofia, Bulgaria', *Urban Studies*, 53(9), pp. 1822–1835. doi: 10.1177/0042098015586536.

Bauman, Z. (2000) Liquid modernity. Cambridge, UK: Polity.

Beck, U. (1992) Risk society: towards a new modernity. London: SAGE.

Bezmez, D. (2013) 'Urban Citizenship, the Right to the City and Politics of Disability in Istanbul', *International Journal of Urban and Regional Research*, 37(1), pp. 93–114. doi: 10.1111/j.1468-2427.2012.01190.x.

Bigazzi, A.Y. and Figliozzi, M.A. (2014) 'Review of urban bicyclists' intake and uptake of traffic-related air pollution', *Transport Reviews*, 34(2), pp. 221-245.

Bíl, M. et al. (2018) 'Cycling fatalities: When a helmet is useless and when it might save your life', *Safety Science*, 105(Journal Article), pp. 71–76. doi: 10.1016/j.ssci.2018.02.005.

Blickstein, S. G. (2010) 'Automobility and the Politics of Bicycling in New York City', *International Journal of Urban and Regional Research*, 34(4), pp. 886–905. doi: 10.1111/j.1468-2427.2010.00914.x.

Bösehans, G. and Massola, G. M. (2018) 'Commuter cyclists' risk perceptions and behaviour in the city of São Paulo', *Transportation Research Part F: Psychology and Behaviour*, 58(Journal Article), pp. 414–430. doi: 10.1016/j.trf.2018.06.029.

Bowers, B. and Schatzman, L. (2008) 'Dimension Analysis' in Morse, J. (eds.) *Developing Grounded Theory: The Second Generation*. 1st ed. Walnut Creek, Calif: Left Coast Press.

Braun, L., Rodriguez, D. and Gordon-Larsen, P. (2018) 'Social (in)Equity in Access to Cycling Infrastructure: Examining the Distribution of Bike Lanes with Respect to Area-Level Sociodemographic Characteristics in 23 Large U.S. Cities', *Journal of Transport & Health*, 9(Journal Article), S28, pp. 9—21.

Briggs, C.L. (1986) *Learning how to ask: A sociolinguistic appraisal of the role of the interview in social science research.* Cambridge: Cambridge University Press.

Brown, K. M. (2012) 'Sharing public space across difference: attunement and the contested burdens of choreographing encounter', *Social & Cultural Geography*, 13(7), pp. 801–820. doi: 10.1080/14649365.2012.728614.

Bryant, A. and Charmaz, K. (2007) 'Grounded Theory in Historical Perspective: An Epistemological Account' in Bryant, A. and Charmaz, K. (eds.) *The SAGE Handbook of Grounded Theory.* 1st ed. London: SAGE.

Butler, J. (2014) 'Bodily Vulnerability, Coalitions, and Street Politics', *Critical Studies*, 37(Journal Article), pp. 99-119.

Castro, A., Kahlmeier, S. and Götschi, T. (2018) 'Exposure-Adjusted Road Fatality Rates for Cycling and Walking in European Countries: Discussion Paper', in *International Transport Forum Discussion Papers*. Paris: OECD Publishing.

Central Statistics Office (2017a) *National Travel Survey*. Available at: https://www.cso.ie/en/releasesandpublications/ep/p-nts/nts2016/ (Accessed: November 2018).

Central Statistics Office (2017b) *Census of Population 2016 – Profile 6 Commuting in Ireland.* Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp6ci/p6cii/p6mtw/ (Accessed: July 2019).

Charmaz, K. (2000) 'Grounded Theory: Objectivist and Constructivist Methods' in Denzin, N. and Lincoln, Y. (eds.) *Handbook of Qualitative Research*. 2nd ed. Thousand Oaks, California: Sage Publications, Inc., pp. 509-535.

Charmaz, K. (2006) *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. London: SAGE Publications Ltd.

Charmaz, K. (2008a) 'Constructionism and the Grounded Theory Method' in Holstein, J.A. and Gubrium, J.F. (eds.) *Handbook of Constructionist Research*. New York: The Guilford Press, pp. 397-412.

Charmaz, K. (2008b) 'Shifting the Grounds – Constructivist Grounded Theory Methods' in Morse, J. (ed.) *Developing grounded theory: the second generation.* 1st ed. Walnut Creek, California: Left Coast Press.

Charmaz, K. (2014) Constructing grounded theory. 2nd ed. Los Angeles: SAGE.

Charmaz, K. (2017) 'Constructivist grounded theory', *The Journal of Positive Psychology*, 12(3), pp. 299-300.

Citizens Information (2018) *Cycling Offences*. Available at: http://www.citizensinformation.ie/en/travel_and_recreation/motoring_1/driving_offences/cycling_offences.html (Accessed: November 2018).

Clarke, A. (2008) 'Grounded Theory to Situational Analysis' in Morse, J. (eds.) *Developing Grounded Theory: The Second Generation*. 1st ed. Walnut Creek, Calif: Left Coast Press.

Conway, R. *et al.* (2019) 'The Current State of Cycling Infrastructure in Dublin and Copenhagen; A Comparison of Cycling Infrastructure in 8 Radial Routes into the City Centre of Dublin and Copenhagen', *Irish medical journal*, 112(1), p. 856.

CyclingForAll.ie (2018) *A national campaign for cycling for all ages and abilities in Ireland.* Available at: http://cyclingforall.ie/ (Accessed: November 2018).

Cycling Ireland (2018) Cycle Right. Available at:

http://www.cyclingireland.ie/page/programmes/cycle-right/cycle-right1 (Accessed: November 2018).

Deenihan, G. and Caulfield, B. (2014) 'Estimating the health economic benefits of cycling', *Journal of Transport & Health*, 1(2), pp. 141-149.

Delbosc, A. *et al.* (2019) 'Dehumanization of cyclists predicts self-reported aggressive behaviour toward them: A pilot study', *Transportation Research Part F: Psychology and Behaviour*, 62(Journal Article), pp. 681–689. doi: 10.1016/j.trf.2019.03.005.

Dublin Cycling Campaign (2018) THE ROLE OF THE IRISH POLICE THE HEALTH & SAFETY OF PEOPLE WHO WANT TO CYCLE. Available at:

http://policereform.ie/en/POLREF/Dublin%20Cycling%20Campaign.pdf/Files/Dublin%20Cycling%20Campaign.pdf (Accessed: December 2018).

National Transport Authority and Dublin City Council (2018) *Canal cordon report 2016:*Report on trends in mode share of vehicles and people crossing the canal cordon 2006 - 2017. Available at: https://www.nationaltransport.ie/wp-content/uploads/2018/05/Canal Cordon Report 2017.pdf (Accessed: March 2019).

Elvik, R. (2011) 'Publication bias and time-trend bias in meta-analysis of bicycle helmet efficacy: A re-analysis of attewell, glase and McFadden, 2001', *Accident Analysis and Prevention*, 43(3), pp. 1245-1251.

Elvik, R. and Bjørnskau, T. (2017) 'Safety-in-numbers: A systematic review and metaanalysis of evidence', *Safety Science*, 92(Journal Article), pp. 274-282.

Esmaeilikia, M. *et al.* (2019) 'Bicycle helmets and risky behaviour: A systematic review', *Transportation Research Part F: Psychology and Behaviour*, 60(Journal Article), pp. 299–310. doi: 10.1016/j.trf.2018.10.026.

European Commission (2018) *Annual accident report 2018*. Available at: https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/statistics/dacota/asr2018.pdf (Accessed: March 2019).

European Transport Safety Council (2015) *Making walking and cycling on Europe's roads* safer: PIN Flash Report 29. Available at: https://etsc.eu/wp-content/uploads/etsc-pin_flash_29_walking_cycling_safer.pdf (Accessed: January 2019).

Fishman, E., Schepers, P. and Maria Kamphuis, C.B. (2015) 'Dutch cycling: Quantifying the health and related economic benefits', *American Journal of Public Health*, 105(8), pp. e13 – e15.

Foley, J., Cronin, J., Gheorghescu, A., Chetrit, D., Evoy, D. and Ryan, J. (2016) 'Cycling injuries presenting to an irish emergency department', *Irish Medical Journal*, 109(6), p. 418.

Fontana, A. and Prokos, A.H. (2007) *The interview: from formal to postmodern.* Walnut Creek, California: Left Coast Press.

Foucault, M. (1978) *The History of Sexuality Volume 1: An Introduction*. New York: Pantheon Books.

Foucault, M. (1991) 'Chapter 4: Governmentality' in Burchell, G., Gordon, C. and Miller, P. (eds.) *The Foucault Effect: Studies in Governmentality with two lectures by and an interview with Michel Foucault*. Chicago: University of Chicago Press.

Fraser, N. (2002) 'Recognition without Ethics?' in Lash, S. and Featherstone, M. (eds.) *Recognition and Difference: Politics, identity, Multiculture.* London: SAGE Publications, pp. 21-42.

Fruhen, L.S., Rossen, I. and Griffin, M.A. (2019) 'The factors shaping car drivers' attitudes towards cyclist and their impact on behaviour', *Accident Analysis and Prevention*, 123(Journal Article), pp. 235–242.

Fyhri, A. *et al.* (2018) 'Risk compensation theory and bicycle helmets – Results from an experiment of cycling speed and short-term effects of habituation', *Transportation Research Part F: Psychology and Behaviour*, 58(Journal Article), pp. 329–338. doi: 10.1016/j.trf.2018.06.025.

Gaete-Reyes, M. (2015) 'Citizenship and the embodied practice of wheelchair use', *Geoforum*, 64(Journal Article), pp. 351–361. doi: 10.1016/j.geoforum.2014.09.010.

Ginty, C. (2016) 'Dublin fire brigade recommends a bicycle helmet after tweeting about a leg injury', *Irish Cycle*, 8 August. Available from:

http://irishcycle.com/2016/08/08/dublin-fire-brigade-recommends-a-helmet-after-tweeting-about-a-leg-injury/ (Accessed: 1 July 2017).

Ginty, C. (2017) 'TIMELINE: MANDATORY USE OF CYCLE TRACKS', Irish Cycle, 7 February. Available from: https://irishcycle.com/2017/02/07/timeline-mandatory-use-of-cycle-tracks/ (Accessed: August 2017).

Ginty, C. (2018) "CONSTITUTIONAL" ISSUES HIT ROSS'S PROMISE ON CYCLING PASSING DISTANCE', *Irish Cycle*, 31 July. Available from:

https://irishcycle.com/2018/07/31/constitutional-issues-hit-rosss-promise-on-cycling-passing-distance/ (Accessed: March 2019)

Glaser, B. (1978) Theoretical Sensitivity: Advances in the Methodology of Grounded Theory. Mill Valley, CA: Sociology Press.

Glaser, B. (1995) Grounded theory: 1984 - 1994. 1st ed. Mill Valley, Calif: Sociology Press.

Glaser, B. (1998) *Doing Grounded Theory: Issues and Discussions.* Mill Valley, CA: Sociology Press.

Glaser, B. (2002) 'Constructivist grounded theory?', Forum: Qualitative Social Research, 3(3).

Glaser, B. and Strauss, A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Mill Valley, CA.: Sociology Press.

Goodman, A., and Aldred, R. (2018) 'Inequalities in utility and leisure cycling in England, and variation by local cycling prevalence', *Transportation Research Part F: Psychology and Behaviour*, 56 (Journal Article), pp. 381–391.

Goodman, A., van Sluijs, E. M. F. and Ogilvie, D. (2016) 'Impact of offering cycle training in schools upon cycling behaviour: a natural experimental study', *The international journal of behavioral nutrition and physical activity*, 13(1). doi: 10.1186/s12966-016-0356-z.

Götschi, T. *et al.* (2018) 'Towards a comprehensive safety evaluation of cycling infrastructure including objective and subjective measures', *Journal of Transport & Health*, 8(Journal Article), pp. 44–54. doi: 10.1016/j.jth.2017.12.003.

Götschi, T., Garrard, J. and Giles-Corti, B. (2016) 'Cycling as a part of daily life: A review of health perspectives', *Transport Reviews*, 36(1), pp. 45-71.

Green, J. (2009) 'Is it time for the sociology of health to abandon "risk"?', *Health, Risk & Society*, 11(6), pp. 493–508. doi: 10.1080/13698570903329474.

Green, J., Steinbach, R. and Datta, J. (2012) 'The Travelling Citizen: Emergent Discourses of Moral Mobility in a Study of Cycling in London', *Sociology*, 46(2), pp. 272–289. doi: 10.1177/0038038511419193.

Gubrium, J.F. and Holstein, J.A. (2003) '4. Active Interviewing' in Gubrium, J.F. and Holstein, J.A. (eds.) *Postmodern Interviewing*. Thousand Oaks: SAGE Publications.

Hagel, B.E., Romanow, N.T.R., Morgunov, N., Embree, T., Couperthwaite, A.B., Voaklander, D. and Rowe, B.H. (2014) 'The relationship between visibility aid use and motor vehicle related injuries among bicyclists presenting to emergency departments', *Accident; Analysis and Prevention*, 65(Journal Article), pp. 85-96.

Hammersly, M. (2008) *Questioning Qualitative Inquiry*. City Road, London: SAGE Publications Ltd.

de Hartog, J.J., Boogaard, H., Nijland, H. and Hoek, G. (2010) 'Do the health benefits of cycling outweigh the risks?' *Environmental Health Perspectives*, 118(8), pp. 1109-1116.

Harvey, D. (2009) Social Justice and the City. Athens: University of Georgia Press.

Harvey, D. (2012) *Rebel Cities: From the Right to the City to the Urban Revolution*. London; New York: Verso.

Hatfield, J. et al. (2017) 'On the use of naturalistic methods to examine safety-relevant behaviours amongst children and evaluate a cycling education program', *Accident Analysis and Prevention*, 108(Journal Article), pp. 91–99.

doi: 10.1016/j.aap.2017.08.025.

ten Have, H., (2016) Vulnerability: challenging bioethics. Routledge, London.

Haworth, N., Heesch, K.C. and Schramm, A. (2018) 'Drivers who don't comply with a minimum passing distance rule when passing bicycle riders', *Journal of Safety Research*, 67(Journal Article), pp. 183–188.

Heesch, K.C., Garrard, J. and Sahlqvist, S. (2011) 'Incidence, severity and correlates of bicycling injuries in a sample of cyclists in Queensland, Australia', *Accident Analysis and Prevention*, 43(Journal Article), pp. 2085–2092.

Heesch, K.C., Sahlqvist, S. and Garrard, J. (2011) 'Cyclists' experiences of harassment from motorists: Findings from a survey of cyclists in Queensland, Australia', *Preventive Medicine*, 53(Journal Article), pp. 417–420.

Heesch, K.C., Schramm, A., Debnath, A.K. and Haworth, N. (2017) 'Cyclists' perceptions of motorist harassment pre- to post-trial of the minimum passing distance road rule amendment in Queensland, Australia', *Health Promotion Journal of Australia: Official Journal of Australian Association of Health Promotion Professionals*, 28(Journal Article), pp. 247–250.

Hobbes, T. (1968) Leviathan. London, England: Penguin Group.

Holstein, J.A. and Gubrium, J.F. (1995) *The active interview.* Thousand Oaks: SAGE Publications.

Honneth, A. (1995) *The Struggle for Recognition: The Moral Grammar of Social Conflicts*. Cambridge, Massachusetts: Polity Press.

Honneth, A. (2002) 'Recognition or Redistribution? Changing Perspectives on the Moral Order of Society' in Lash, S. and Featherstone, M. (eds.) *Recognition and Difference: Politics, identity, Multiculture.* London: SAGE Publications, pp. 43-55.

Horton, D. (2007) 'Chapter 7: Fear of Cycling' in Horton, D., Rosen, P., andCox, P. (eds.) *Cycling and Society.* Hampshire, England: Ashgate Publishing Limited.

Hosford, P. (2017) 'Poll: Should cyclists have to wear high-vis clothes and helmets by law?', thejournal.ie, 13 April. Available at: http://www.thejournal.ie/cyclists-poll-hi-vis-3338278-Apr2017/ (Accessed: 1 July 2017).

Houde, M., Apparicio, P. and Séguin, A.M. (2018) 'A ride for whom: Has cycling network expansion reduced inequities in accessibility in Montreal, Canada?', *Journal of Transport Geography*, 68(Journal Article), pp. 9–21.

Høye, A. (2018a) 'Bicycle helmets – To wear or not to wear? A meta-analyses of the effects of bicycle helmets on injuries', *Accident Analysis and Prevention*, 117(Journal Article), pp. 85–97. doi: 10.1016/j.aap.2018.03.026.

Høye, A. (2018b) 'Recommend or mandate? A systematic review and meta-analysis of the effects of mandatory bicycle helmet legislation', *Accident Analysis and Prevention*, 120(Journal Article), pp. 239–249. doi: 10.1016/j.aap.2018.08.001.

Huemer, A. K., Oehl, M. and Brandenburg, S. (2018) 'Influences on anger in German urban cyclists', *Transportation Research Part F: Psychology and Behaviour*, 58(Journal Article), pp. 969–979. doi: 10.1016/j.trf.2018.07.026.

Isin, E. F. and Wood, P. K. (1999) *Citizenship and Identity*. London; Thousand Oaks, Calif.: Sage.

Jachyra, P., Atkinson, M. and Bandiera, G. (2015) 'Urban cyclists' perspectives on post-collision behaviour change: A qualitative study', *Transportation Research Part F:*Psychology and Behaviour, 31(Journal Article), pp. 133–145.

doi: 10.1016/j.trf.2015.04.004.

Jacobsen, P.L. (2003) 'Safety in numbers: More walkers and bicyclists, safer walking and bicycling', *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention*, 9(3), pp. 205-209.

Jacobsen, P.L., Ragland, D.R. and Komanoff, C. (2015) 'Safety in numbers for walkers and bicyclists: Exploring the mechanisms', *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention*, 21(4), pp. 217-220.

James, W. (2009) *On a Certain Blindness in Human Beings*. London, England: Penguin Books Ltd.

Jeroen Johan de Hartog *et al.* (2010) 'Do the Health Benefits of Cycling Outweigh the Risks?', *Environmental Health Perspectives*, 118(8), pp. 1109–1116. doi: 10.1289/ehp.0901747.

Jones, A. *et al.* (2013) 'Entitlement to concessionary public transport and wellbeing: A qualitative study of young people and older citizens in London, UK', *Social Science & Medicine*, 91(Journal Article), pp. 202–209. doi: 10.1016/j.socscimed.2012.11.040.

Kaplan, S., Janstrup, K. H. and Prato, C. G. (2017) 'Investigating the reasons behind the intention to report cycling crashes to the police and hospitals in Denmark', *Transportation Research Part F: Psychology and Behaviour*, 44(Journal Article), pp. 159–167. doi: 10.1016/j.trf.2016.11.009.

Karkhaneh, M., Kalenga, J., Hagel, B.E. and Rowe, B.H. (2006) 'Effectiveness of bicycle helmet legislation to increase helmet use: A systematic review', *Injury Prevention*: *Journal of the International Society for Child and Adolescent Injury Prevention*, 12(2), pp. 76-82.

Kearl, H. (2010) Stop Street Harassment: Making Public Places Safe and Welcoming for Women. Santa Barbara, Calif.: Praeger.

Kelly, P., Kahlmeier, S., Götschi, T., Orsini, N., Richards, J., Roberts, N., Scarborough, P. and Foster, C. (2014) 'Systematic review and meta-analysis of reduction in all-cause mortality from walking and cycling and shape of dose response relationship', *International Journal of Behavioral Nutrition and Physical Activity*, 11(1), p. 132.

Kim, J., Kim, S., Ulfarsson, G.F. and Porrello, L.A. (2007) 'Bicyclist injury severities in bicycle–motor vehicle accidents', *Accident Analysis and Prevention*, *28(Journal Article)*, pp. 238–251.

Koepsell, T. *et al.* (2002) 'Crosswalk Markings and the Risk of Pedestrian–Motor Vehicle Collisions in Older Pedestrians', *JAMA*, 288(17), pp. 2136–2143. doi: 10.1001/jama.288.17.2136.

Kvale, S. and Brinkmann, S. (2009) *InterViews: learning the craft of qualitative research interviewing.* 2nd ed. Thousand Oaks: Sage Publications.

Kwan, I. and Mapstone, J. (2006) 'Interventions for increasing pedestrian and cyclist visibility for the prevention of death and injuries', *The Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd.

Lahrmann, H. *et al.* (2018) 'The effect of a yellow bicycle jacket on cyclist accidents', *Safety Science*, 108(Journal Article), pp. 209–217. doi: 10.1016/j.ssci.2017.08.001.

Lally, C. (2017) 'Gardai say cyclists must change attitude and wear safety gear', *The Irish Times*, 12 April. Available at: https://www-irishtimes-com.dcu.idm.oclc.org/news/crime-and-law/garda%C3%AD-say-cyclists-must-change-attitude-and-wear-safety-gear-1.3046390 (Accessed: 1 July 2017).

Lawson, A.R., Pakrashi, V., Ghosh, B. and Szeto, W.Y. (2013) 'Perception of safety of cyclists in dublin city', *Accident Analysis & Prevention*, 50(Journal Article), pp. 499-511.

Lefebvre, H. (1974) The Production of Space. Oxford, U.K.: Blackwell Publishers.

Lefebvre, H. (1996) Writings on Cities. Oxford, U.K.: Blackwell Publishers.

Lee, R.S., Hagel, B.E., Karkhaneh, M. and Rowe, B.H. (2009) 'A systematic review of correct bicycle helmet use: How varying definitions and study quality influence the results' *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention*, 15(2), pp. 125-131.

Lichtman, M. (2014) *Qualitative Research for the Social Sciences*. City Road, London: SAGE Publications Ltd.

Lin, C.-H. *et al.* (2013) 'Predictors of road crossing safety in pedestrians with Parkinson's disease', *Accident Analysis and Prevention*, 51(Journal Article), pp. 202–207. doi: 10.1016/j.aap.2012.11.018.

Lincoln, Y.S. (2010) 'Emerging Criteria for Qualitative in Qualitative and Interpretive Research' in Atkinson, P. and Delamont, S. (eds.) *SAGE Qualitative Research Methods*. City Road, London: SAGE Publications Ltd, pp. 275 – 289.

Lindsay, G., Macmillan, A. and Woodward, A. (2011) 'Moving urban trips from cars to bicycles: Impact on health and emissions', *Australian and New Zealand Journal of Public Health*, 35(1), pp. 54-60.

Locke, John (2016) Second Treatise of Government and A Letter Concerning Toleration.

New York, United States of America: Oxford University Press.

Loukaitou-Sideris, A. and Ehrenfeucht, R. (2009) *Sidewalks: conflict and negotiation over public space*. Cambridge, MA: MIT Press.

Low, J. (2019) 'A Pragmatic Definition of the Concept of Theoretical Saturation', *Sociological Focus*. doi: 10.1080/00380237.2018.1544514.

Lubitow, A., Rainer, J. and Bassett, S. (2017) 'Exclusion and vulnerability on public transit: experiences of transit dependent riders in Portland, Oregon', *Mobilities*, 12(6), pp. 924–937. doi: 10.1080/17450101.2016.1253816.

Macpherson, A. and Spinks, A. (2007) 'Bicycle helmet legislation for the uptake of helmet use and prevention of head injuries' *The Cochrane Database of Systematic Reviews*, (2), p.CD005401.

makewayday.com (2019) *Get Involved!*. Available at: http://makewayday.com/ (Accessed: March 2019).

Mandic, S. et al. (2018) 'Effects of cycle skills training on children's cycling-related knowledge, confidence and behaviours', *Journal of Transport & Health*, 8(Journal Article), pp. 271–282. doi: 10.1016/j.jth.2017.12.010.

McDowell, M. G. and Wonders, N. A. (2009) 'Keeping Migrants in Their Place: Technologies of Control and Racialized Public Space in Arizona', *Social Justice*, 36(2 (116)), pp. 54–72.

Mellgren, C., Andersson, M. and Ivert, A.-K. (2017) "It Happens All the Time": Women's Experiences and Normalization of Sexual Harassment in Public Space', *Women & Criminal Justice*, (Journal Article), pp. 1–20. doi: 10.1080/08974454.2017.1372328.

Miller, P.D., Kendrick, D., Coupland, C. and Coffey, F. (2017) 'Use of conspicuity aids by cyclists and risk of crashes involving other road users: Population based case-control

study', *Journal of Transport & Health,* 7(Journal Article), pp. 64–74. doi: 10.1016/j.jth.2017.03.008.

Mills, C. W. (1959) *The sociological imagination*. Harmondsworth, Eng.; New York: Penguin Books.

Møller, M. and Haustein, S. (2017) 'Anger expression among Danish cyclists and drivers: A comparison based on mode specific anger expression inventories', *Accident Analysis and Prevention*, 108(Journal Article), pp. 354–360. doi: 10.1016/j.aap.2017.09.016.

Mueller, N. *et al.* (2015) 'Health impact assessment of active transportation: A systematic review', *Preventive Medicine*, 76(Journal Article), pp. 103–114. doi: 10.1016/j.ypmed.2015.04.010.

Mulvaney, C. A. *et al.* (2015) 'Cycling infrastructure for reducing cycling injuries in cyclists', *The Cochrane database of systematic reviews*, (12), p. CD010415. doi: 10.1002/14651858.CD010415.pub2.

de Nazelle, A., Bode, O. and Orjuela, J. P. (2017) 'Comparison of air pollution exposures in active vs. passive travel modes in European cities: A quantitative review', *Environment International*, 99(Journal Article), pp. 151–160. doi: 10.1016/j.envint.2016.12.023.

Nixon, D.V. (2014) 'Speeding capsules of alienation? Social (dis)connections amongst drivers, cyclists and pedestrians in Vancouver, BC', *Geoforum*, 54, pp. 91–102.

Norcliffe, G. (2015), *Critical Geographies of Cycling: History, Political Economy and Culture*. Burlington, VT: Ashgate Publishing Company.

OECD (2013) *Cycling, health and safety*. Available from: http://www.oecd-
http://www.oecd-
<a href="mailto:library.org/transport/cyclin

Oja, P., Titze, S., Bauman, A., de Geus, B., Krenn, P., Reger-Nash, B. and Kohlberger, T. (2011) 'Health benefits of cycling: A systematic review', *Scandinavian Journal of Medicine & Science in Sports*, 21(4), pp. 496-509.

Oliver, J., Esmaeilikia, M. and Grzebieta, R. (2018) 'PW 1341 A systematic review of the impact of bicycle helmet legislation on cycling exposure', *Injury Prevention*, 24(Suppl 2), p. A228. doi: 10.1136/injuryprevention-2018-safety.631.

Olivier, J. and Creighton, P. (2017) 'Bicycle injuries and helmet use: a systematic review and meta-analysis', *International journal of epidemiology*, 46(1), pp. 278-292. doi: 10.1093/ije/dyw153.

Olivier, J. and Walter, S. R. (2013) 'Bicycle helmet wearing is not associated with close motor vehicle passing: a re-analysis of Walker, 2007', *PloS one*, 8(9), p. e75424. doi: 10.1371/journal.pone.0075424.

Packer, J. (2003) 'Chapter 6: Disciplining Mobility - Governing and Safety' in Bratich, Jack Z., Packer, Jeremy and MacCarthy, Cameron (eds.) *Foucault, Culutral Studies, and Governmentality*. Albany: State University of New York Press.

Paydar, M., Kamani-Fard, A. and Etminani-Ghasrodashti, R. (2017) 'Perceived security of women in relation to their path choice toward sustainable neighborhood in Santiago, Chile', *Cities*, 60(Journal Article), pp. 289–300. doi: 10.1016/j.cities.2016.10.002.

Pedroso, F. E. *et al.* (2016) 'Bicycle Use and Cyclist Safety Following Boston's Bicycle Infrastructure Expansion, 2009-2012', *American journal of public health*, 106(12), pp. 2171-2177. doi: 10.2105/AJPH.2016.303454.

Phillips, S. D. (2010) *Disability and Mobile Citizenship in Postsocialist Ukraine*. Bloomington: Indiana University Press.

Phillips, R. O., Fyhri, A. and Sagberg, F. (2011) 'Risk Compensation and Bicycle Helmets', *Risk Analysis*, 31(8), pp. 1187–1195. doi: 10.1111/j.1539-6924.2011.01589.x.

Poulos, R.G., Hatfield, J., Rissel, C., Flack, L.K., Shaw, L., Grzebieta, R. and McIntosh, A.S. (2017), 'Near miss experiences of transport and recreational cyclists in New South Wales, Australia. Findings from a prospective cohort study', *Accident Analysis and Prevention*, 101(Journal Article), pp. 143–153.

Portland Office of Transportation (2009) *Four Types of Cyclists*. Available at: https://www.portlandoregon.gov/transportation/44597?a=237507 (Accessed: November 2018).

Prati, G. (2018) 'The effect of an italian nationwide mandatory visibility aids law for cyclists', *Journal of Transport & Health*, 9(Journal Article), pp. 212–216. doi: 10.1016/j.jth.2018.03.007.

Pucher, J., Buehler, R., Bassett, D.R. and Dannenberg, A.L. (2010) 'Walking and cycling to health: A comparative analysis of city, state, and international data', *American Journal of Public Health*, 100(10), pp. 1986-1992.

Pucher, J. and Buehler, R. (2016) 'Safer Cycling Through Improved Infrastructure', *American journal of public health*, 106(12), pp. 2089–2091. doi: 10.2105/AJPH.2016.303507.

Radun, J. *et al.* (2018a) 'Risk compensation and bicycle helmets: A false conclusion and uncritical citations', *Transportation Research Part F: Psychology and Behaviour*, 58(Journal Article), pp. 548–555. doi: 10.1016/j.trf.2018.06.038.

Radun, I. *et al.* (2018b) 'Bicycle helmet law does not deter cyclists in Finland', *Transportation Research Part F: Psychology and Behaviour*, 58(Journal Article), pp. 1087–1090. doi: 10.1016/j.trf.2018.06.022.

Road Safety Authority (2013) *Road safety strategy 2013 - 2020.* Ballina, Mayo: Road Safety Authority.

Road Safety Authority (2014) *Cyclist injuries: A review of 2012 casualties*. Available at: http://www.rsa.ie/Documents/Road%20Safety/Crash%20Stats/Review of Cyclist Injuries 2012.pdf (Accessed: February 2016).

Road Safety Authority (2018a) *Provisional review of fatal collisions: January to December* 31st 2018. Available at:

http://www.rsa.ie/Documents/End%20of%20year%20review%202018.pdf (Accessed: February 2019).

Road Safety Authority (2018b) *Rules of the Road*. Available at: http://www.rulesoftheroad.ie/Rules of the road.pdf (Accessed: February 2019).

Road Safety Authority (2018c) *Cycling Safety*. Available at: http://www.rsa.ie/en/RSA/Pedestrians-and-Cyclists/Cycling-safety/ (Accessed: November 2018).

Rodner, V. (2019) 'My Love Affair with Grounded Theory: Making the Passion Work in the "Real" World', *Sociological Focus*. doi: 10.1080/00380237.2018.1544517.

Rojas-Rueda, D., de Nazelle, A., Tainio, M. and Nieuwenhuijsen, M.J. (2011) 'The health risks and benefits of cycling in urban environments compared with car use: Health impact assessment study', *BMJ (Clinical Research Ed.)*, 343(Journal Article), p. 4521.

Rose, N. (1996) *Inventing our selves: psychology, power, and personhood*. Cambridge: Cambridge University Press.

Rousseau, J. (2004) The Social Contract. London, England: Penguin Group.

Royal, S., Kendrick, D. and Coleman, T. (2007) 'Promoting bicycle helmet wearing by children using non-legislative

interventions: Systematic review and meta-analysis', *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention*, 13(3), pp. 162-167.

Rubin, H.J. and Rubin, I. (2005) *Qualitative interviewing: the art of hearing data.* 2nd ed. London: SAGE.

Sælensminde, K. (2004) 'Cost-benefit analyses of walking and cycling track networks taking into account insecurity, health effects and external costs of motorized traffic', *Transportation Research Part A: Policy and Practice*, 38(8), pp. 593-606.

Sandberg, L. and Rönnblom, M. (2013) 'Afraid and restricted vs bold and equal: Women's fear of violence and gender equality discourses in Sweden', *The European Journal of Women's Studies*, 20(2), pp. 189-2013.

Sanz, C. (2019) 'Cyclists can ride in the middle of the lane, motorists told', *The Times,* 4 June. Available at: https://www.thetimes.co.uk/article/cyclists-can-ride-in-middle-of-the-lane-motorists-told-

x8dn3kfcz?fbclid=lwAR0lFA0_LiWQrQoe8WCW1tb5bPFxa0UpG3ZDDSPjl_48h9pzyrNZJm ZP8Ug (Accessed: 1 July 2019).

Schleinitz, K., Petzoldt, T. and Gehlert, T. (2018) 'Risk compensation? The relationship between helmet use and cycling speed under naturalistic conditions', *Journal of Safety Research*, 67(Journal Article), pp. 165–171. doi: 10.1016/j.jsr.2018.10.006.

Scholes, S. *et al.* (2018) 'Fatality rates associated with driving and cycling for all road users in Great Britain 2005–2013', *Journal of Transport & Health*, 8(Journal Article), pp. 321–333. doi: 10.1016/j.jth.2017.11.143.

Schramm, A.J., Rakotonirainy, A. and Haworth, N. (2008) 'How much does disregard of road rules of road rules contribute to bicycle-vehicle collisions?' in How much does disregard of road rules of road rules contribute to bicycle-vehicle collisions? *High Risk Road Users - Motivating Behaviour Change: What Works and what Doesn't Work?* Brisbane: National Conference of Australasian College of Road Safety and the Travelsafe Commitee of the Queensland Parliament, pp. 149-162.

Seale, C. (1999) The Quality of Qualitative Research. 1st ed. London: Thousand Oaks.

Seale, C. (2004) 'Chapter 24: Quality in Qualitative Research' in Seale, C., Gobo, G., Gubrium, J., and Silverman, D. (eds.) *Qualitative Research Practice*. City Road, London: SAGE Publications Ltd, pp. 379 – 389.

Sennett, R. (2002) The fall of public man. London: Penguin.

Sheller, M. and Urry, J. (2000) 'The City and the Car', *International Journal of Urban and Regional Research*, 24 (Journal Article), pp. 737-757.

Sheller, M. (2008) '2. Mobility, freedom and public space' in Bergmann, S. and Sager, T. (eds.) *The ethics of mobilities: rethinking place, exclusion, freedom and environment*. Aldershot, England; Burlington, VT: Ashgate, pp. 25-38.

Short, J. and Caulfield, B. (2014) 'The safety challenge of increased cycling', *Transport Policy*, 33(Journal Article), pp. 154–165. doi: 10.1016/j.tranpol.2014.03.003.

Smarter Travel (2009) *National Cycle Policy Framework*. Available at: http://www.smartertravel.ie/sites/default/files/uploads/2013_01_03_0902%2002%20E nglishNS1274%20Dept.%20of%20Transport_National_Cycle_Policy_v4%5B1%5D%5B1%5D.pdf (Accessed: November 2018).

Spinks, A. *et al.* (2005) 'Community-based programmes to promote use of bicycle helmets in children aged 0-14 years: a systematic review', *International Journal of Injury Control and Safety Promotion*, 12(3), pp. 131–142. doi: 10.1080/1566097042000265764.

Spinney, J., Aldred, R. and Brown, K. (2015) 'Geographies of citizenship and everyday (im)mobility', *Geoforum*, 64(Journal Article), pp. 325–332. doi: 10.1016/j.geoforum.2015.04.013.

Standing, G. (2011) The Precariat: The New Dangerous Class. London: Bloomsbury.

Stanojević, P. *et al.* (2018) 'The impact of police presence on angry and aggressive driving', *Accident Analysis and Prevention*, 110(Journal Article), pp. 93–100. doi: 10.1016/j.aap.2017.11.003.

Statistics Netherlands (2016) *Transport and mobility 2016.* The Hague: Statistics Netherlands.

Strauss A. (1987) *Qualitative analysis for social scientists*. 1st ed. Cambridge: Cambridge University Press.

Strauss, A. and Corbin, J. (1990) *Basics of qualitative research: grounded theory procedures and techniques*. 1st ed. Newbury Park, Calif: Sage Publications.

Tainio, M. et al. (2016) 'Can air pollution negate the health benefits of cycling and walking?', *Preventive Medicine*, 87(Journal Article), pp. 233–236. doi: 10.1016/j.ypmed.2016.02.002.

Taylor, C. (1994) 'The Politics of Recognition' in Gutmann, A. (ed.) *Multiculturalism*. Princeton, N.J.: Princeton University Press, pp. 25-73.

Thompson, J. *et al.* (2017) 'Estimating the safety benefit of separated cycling infrastructure adjusted for behavioral adaptation among drivers; an application of agent-based modelling', *Transportation Research Part F: Psychology and Behaviour*, 49(Journal Article), pp. 18–28. doi: 10.1016/j.trf.2017.05.006.

Thompson, D.C., Rivara, F.P. and Thompson, R. (2010) 'Helmets for preventing head and facial injuries in bicyclists', *The Cochrane Database of Systematic Reviews*, (2), p. CD001855.

Thornberg, R. and Charmaz, K. (2014) 'Chapter 11: Grounded Theory and Theoretical Coding' in Flick, U. (ed.) *The SAGE Handbook of Qualitative Data Analysis*. City Road, London: SAGE Publications Ltd, pp. 153 – 169.

Tommy Broughan TD (2018) *Over 2,600 cyclists attended hospital due to road accidents in 2015 & 2016 – Broughan* Available at: http://www.tommybroughan.com/over-2600-cyclists-attended-hospital-due-to-road-accidents-in-2015-2016-broughan/ (Accessed: March 2019).

Twisk, D. *et al.* (2018) 'Higher-order cycling skills among 11- to 13-year-old cyclists and relationships with cycling experience, risky behavior, crashes and self-assessed skill', *Journal of Safety Research*, 67(Journal Article), pp. 137–143. doi: 10.1016/j.jsr.2018.10.003.

Urry, J. (2000) *Sociology beyond societies: mobilities for the twenty-first century*. London, New York: Routledge.

Urry, J. (2004) 'The 'System' of Automobility', *Theory, Culture and Society*, 21(4/5), pp. 25—39.

Wengraf, T. (2001) *Qualitative research interviewing: biographic narrative and semi-structured methods.* Thousand Oaks, California: Sage Publications

Yavuz, N. and Welch, E. W. (2010) 'Addressing Fear of Crime in Public Space: Gender Differences in Reaction to Safety Measures in Train Transit', *Urban Studies*, 47(12), pp. 2491–2515. doi: 10.1177/0042098009359033.

Zhao, P. *et al.* (2018) 'How does air pollution influence cycling behaviour? Evidence from Beijing', *Transportation Research Part D*, 63(Journal Article), pp. 826–838. doi: 10.1016/j.trd.2018.07.015.