

# Suggesting a theoretical framework to curb '*the planning fallacy*' element in transport policies of New Zealand and Pakistan

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## ABSTRACT

Studies reveal that investments in urban roads have been justified on the basis of factors such as economic development, congestion relief, time saving, increased safety and better social and environmental outcomes. The critics, however, think that increased investments in urban roads and state highways result in additional congestion and parking problems. These factors then impede economic development and sometimes leave reverse development impacts.

An analysis of urban transport policies of New Zealand and Pakistan reveals that both the countries are making huge investments in building roads. The two countries consider roads investments as vital for economic growth, development and productivity. New Zealand does have a better transport policy institutional structure than Pakistan resulting in better transport policymaking and implementation mechanisms both at national and local levels. Pakistan lacks institutional capacity to formulate a coherent transport policy document both at federal and provincial levels. New Zealand and Pakistan, being developed and developing countries respectively, have different institutional structures but their transport policies lay greater emphasis on building roads. A critical transport policy review the two countries suggest the presence of 'planning fallacy'. Therefore, the question 'why New Zealand and Pakistan experience *the planning fallacy* despite different transport policy institutional structures?' needs to be investigated. This paper aims to evaluate and look through various theoretical lenses to address this question.

## 1. Introduction

The notion of *planning fallacy*, as defined by Flyvbjerg (2008), is a systematic fallacy in decision-making and planning in which the policymakers underestimate the costs, risks of planned actions and completion times. They also overestimate the benefits of these actions. The term *planning fallacy* was first uncovered by the noble laureate Daniel Kahneman and Amos Tversky (see, for example, Kahneman and Tversky (1979a),(1979b); Kahneman (1994)). Shaw and Eichbaum (2011) argue that policymaking is characterised by commitment of investment through public resources. They note that public policy is *normative* in nature which means it has the vision of the way things 'should be'. They further note that this element of 'should be' is largely influenced by those who engage in the policy process such as politicians, interest groups and individuals having strong views about what should be done. The implications of this 'should be' element for economic development become more complex when coupled with, what Flyvbjerg (2008) calls, *optimism bias* and *strategic misrepresentation*.

New Zealand and Pakistan are diversely different from each other both geographically and demographically. Any policy analysis of the two countries requires a different theoretical lens that could forgo the constraints such as comparatively disproportionate population size,

different institutional and political structures and poles-apart cultures. Chohan et al.(2011) note that the transport policy environments of New Zealand and Pakistan, with populations of 180 and 4.5 million respectively, are very different from each other. They argue that Flyvbjerg's phronetic planning research methodology makes such a comparison possible and brings the discussion into power studies irrespective of disproportionate populations' size cultural values and institutional structures. Flyvbjerg (2004) argues that the main difference between *phronetic planning research* and other approaches lies in the understanding of power. He outlines the methodological guidelines of *phronetic planning research* as well. Based on critical transport policy review of New Zealand and Pakistan and Chohan et al.(2011) suggest that both countries experience *the planning fallacy* despite different institutional structures.

The question 'why New Zealand and Pakistan both experience *the planning fallacy* despite different transport policy institutional structures?' remains unanswered. This paper aims to identify a suitable theoretical framework that could provide a formal research lens to look at this planning issue.

## **2. Theoretical challenges**

Analyzing transport policies of two different countries with different demographic, economic, institutional and policy parameters faces many challenges. The first such challenge is to follow an appropriate theoretical framework that could best address the issue. Looking for such a framework requires another theoretical framework that could be followed for the purposes of present paper. This is indeed second challenge. The third challenge is whether to individually follow a core theory, model or conceptual framework; given that each category has got varied gravities of pros and cons. Another possibility is to use a combination or quasi-combination of some theory and/or model and/or conceptual framework. This paper attempts to meet all three challenges and suggests an appropriate theoretical framework that could best suit the primary research question, i.e. 'Why New Zealand and Pakistan both experience *the planning fallacy* despite different transport policy institutional structures?' In line with the findings of Chohan et al.(2011), this research question depends on two secondary questions: (i) Do the transport policymakers in New Zealand and Pakistan underestimate the costs, risks and completion times of road projects? And (ii) Do the transport policymakers overestimate the benefits of building roads under institutional and systematic frameworks in New Zealand and Pakistan?

Theoretically, this paper follows Allmendinger's (2009) approach of categorising and analyzing theories, models and conceptual frameworks. The paper evaluates various relevant theoretical perspectives for the research question under discussion. The paper analyses and discusses the key concepts, applications, category wise strength of various theoretical perspectives and their relevance to the research question. The paper also justifies why Flyvbjerg's *phronetic planning research* framework is best suited to explore *the planning fallacy* issues in New Zealand and Pakistan.

Starting from Chalmer's *problem of perception*, Allmendinger (2009) argues that a theory is just like a staircase, as shown in Figure 1, and it depends on the viewer to see the staircase either from above or beneath. From this example, he infers that a theory may not be wrong rather the observation by which it is viewed may itself be wrong. He, therefore, negates the

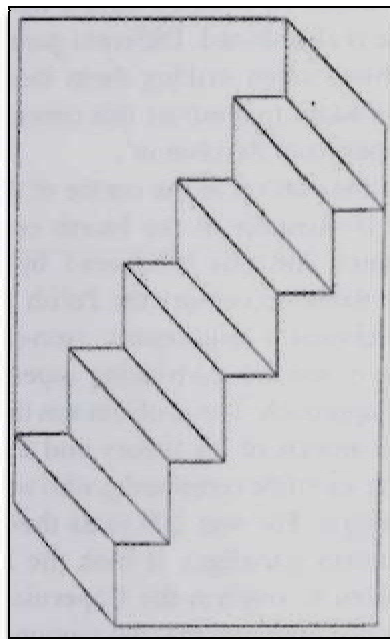
concepts of *falsification* and *refutation* of theories. According to Couvalis (1997, cited in Allmendinger (2009, p. 23)),

Theories cannot be conclusively falsified because the observation statements that form the basis for falsification may themselves prove to be false.

According to Allmendinger (2009, p. 24)),

A theory should not be refuted simply because it is counterintuitive or falsified. Many theories are a product of their time.

**Figure 1: The problem of perception**



Source: Based on Chalmers (1994, p.24 cited in Allmendinger (2009, p.23)

The next question is, are all the theories same? After drawing a basic distinction between natural and social sciences theories, Allmendinger (2009) presents six categories of theories as presented in Table 1. These include: (i) normative theory, (ii) prescriptive theories, (iii) empirical theory, (iv) models and (v) conceptual frameworks. According to the author, *normative theory* looks into how the world 'should be' and presents the concepts and ideas how to achieve this element. Traditionally this set of theories is referred to as theories of planning including Marxist, liberal and communicative or collaborative planning approaches. *Prescriptive theories* deal with and reflect how to go about things. This set of theories is, traditionally, known as theories in planning, for instance, cost-benefit analysis. *Empirical theory* relates and interprets reality with a focus on causal relationship usually involving dependent and independent relationships between variables. *Models* are simple representations of reality but do not necessarily involve hypotheses but can be tested. *Conceptual frameworks or perspective* denote linguistic analysis of situations and ideas resulting in perspectives and critiques that might have not been achievable otherwise.

The relation between theory, structure and agency also remains equally important in selecting appropriate framework for the research question. According to Hay (1995, cited in Allmendinger (2009, p.35),

In planning theory, the relationship between structure and agency is equally important for a number of reasons. First, the use of theory by planners may be limited by the role of structure. Second, some theories ignore this relationship particularly theories of planning (i.e. how to go about it) and thereby limit their usefulness. An understanding of the two is essential for an appreciation of the use and limits of theory.

**Table 1: Categories of theory**

<i>Type of theory</i>	Characteristics
Normative Prescriptive	Concerns how the world ought to be Concerned with best means of achieving a desired condition
Empirical Models	Concerned with explaining reality Representations or stylized and simplified pictures of reality
Conceptual frameworks or perspectives Theorizing	Ways of looking at or conceiving an object of study Thinking about some aspect of a phenomenon

*Source: Based on Judge, Stocker and Wolman (1995, cited in Allmendinger (2009, p.28))*

Flyvbjerg's (2004) *phronetic planning research*, however, lays emphasis on moving beyond the confines of agency and structure. Within these broader principles of theory, the paper aims to investigate the phenomenon of *planning fallacy* in transport policies of New Zealand and Pakistan. The paper presents an appraisal of a number of theoretical frameworks and justifies the selection of Flyvbjerg's *phronetic planning research* for addressing the primary and secondary research questions.

### **3. A brief appraisal of relevant theoretical frameworks**

Chohan et al.(2011) suggest that political assertions in transport policymaking derive their strength from the prevailing power mechanism in New Zealand and Pakistan. The authors recommend an investigation into the power dynamics of the two countries with the aim of understanding the rationales behind the so called *planning fallacy*. This recommendation leads to placing power at the core of analysis to address the primary research question. According to the authors, New Zealand land transport legislation and policy framework provides better set of institutional arrangements than Pakistan. Pakistan lacks institutional capacity resulting in her increased dependence on the world development agencies for transport policymaking. Despite different transport policy institutional structures, both countries experience *the planning fallacy*, suggesting the presence of a missing planning link. It leaves enough research room to identify and investigate the constraints beyond the present transport policy paradigms of the two countries. Following Allmendinger's approach, the primary research question needs both *normative* and *conceptual framework* flavours in the theoretical framework. The reason is we are obviously concerned 'how the world should be' and 'ways of looking at an object of study' elements for the research questions.

Therefore *normative* and *conceptual framework* elements in a theory will sharply define and align the research direction and will be helpful in finalising an appropriate framework.

This paper identifies six potential theories that are closely relevant to the research questions: (i) the Resource Dependency Theory, (ii) the Theory of Power Dependence, (iii) Advocacy Coalition Framework, (iv) The Path Dependency Theory, (v) The Network Theory and (vi) Phronetic Planning Research Theory. These theories have been discussed below in detail. There are some other theories which are, although, relevant but do not adequately address the concerns raised in the primary and secondary research questions. These include: (i) The Theory of Isomorphism, (ii) Discourse Coalition Framework, (iii) The Institutional Theory, (iv) The Gravity Model, (v) Post Fordist production patterns framework, (vi) The Policy Transfer Theory and (vii) The Theory of Structuration. These theories have not been discussed here.

In line with the findings of Chohan et al.(2011), power is to be placed at the core of analysis (see also Flyvbjerg (2004)). Resources remain the pivotal point in determining the gravity of power as external resources of various organisations have implications for the organisational behaviour. This argument was formulised in the form of *Resource Dependence Theory* with the publication of Pfeffer and Salancik (1978). Boyd (1990) tested the theory empirically and provided an extension of the research on group size and decision-making. Salancik (1979) presents an examination of the effect of inter-organisational dependencies on compliance with government affirmative action demands. In simple words, *the resource dependence theory* is based on a simple argument that the power of organisation A over the power of organisation B is dependent on the organisation B's dependence on organisation A's resources. *The theory of resource dependence* considers power to be mutual, relational and situational. The theory further argues that organisations are dependent on resources and resources are the basis of power. The *theory* suggests a direct link between power and resources.

*The theory of resource dependence* as a theoretical framework for the research questions, however, leaves few lacunas that need to be addressed. First it concentrates more on the implication of power on organisational behaviour. Second, it does not place power at the core of analysis rather places organisational behaviour at the centre which is in turn surrounded and determined by power. Third, it places emphasis on various parameters such as resources, mutual dependence, mutual relational capacity and organisational behaviour. Such deeper parameters are not suitable for an analysis between the transport policies of two different countries such as New Zealand and Pakistan. Finally, the theory is primarily meant for organisations and does not adequately provide a platform to look at the core power mechanisms in two different political environments of New Zealand and Pakistan.

*The power dependence theory* is basically a replica of *social exchange theory* developed by Richard Emerson (see, for example, Emerson (1962, 1972a, 1972b)). The theory revolves around power and examines power use and power operations. Emerson (1962) attempts to address some difficulties in power relations and brings *power, legitimacy, authority* and *power structures* in a coherent scheme. He considers absence of systematic treatment of social power as a flaw that hinders meaningful research. He then coins the notion of *ties of mutual dependence* between the parties which means, for example, A will depend on B if he wishes some goals which could be facilitated by B. It means that *mutual dependency* will enable each party to exercise some power over the other. Emerson (1962) observes that *power resides implicitly in the other's dependency*. On the basis of this observation, he

explains following two variables: (i) *dependence* and (ii) power. According to Emerson (1962, p.32),

*Dependence (Dab)*: The dependence of actor A upon actor B is (1) directly proportional to A's *motivational investment* in goals mediated by B, and (2) inversely proportional to the *availability* of those goals to A outside of the A-B relation.

*Power (Pab)*: The power of actor A over actor B is the amount of resistance on the part of B which can be potentially overcome by A.

In terms of above variables, he then presents following basic set of equations showing that the power of A over B is equal to, and based upon, B's dependence on A:

$$P_{ab} = D_{ba}$$

$$P_{ba} = D_{ab}$$

Heckathorn (1983) critically examines Emerson (1962) and identifies several deficiencies in the *power dependence theory* such as a 'reliance on invalid interpersonal utility comparisons'. He uses a model of negotiation based on *mathematical bargaining theory*<sup>1</sup> to overcome these deficiencies by reformulating the *power dependence theory*.

Although *the power dependence theory* provides a powerful basis to analyse power in the transport policy making context but it also portrays some shortcomings. As identified by Heckathorn (1983), the *power dependence theory* places reliance on invalid interpersonal utility comparisons. This reliance leaves research vacuum to address various relevant issues such as the power implications of one's love and affection for the other. The theory may be very successful in other disciplines such as sociology but our research questions with purely planning context are not suitable to be investigated through this theory. The theory has the tendency to drag the research into mathematical modelling involving variables such as *power* and *dependence*. This aspect leaves no room to go beyond structure and agency which is the basic requirement of analysis between two dissimilar countries such as New Zealand and Pakistan.

The research question may also be investigated with the policy goggles on. *Advocacy Coalition Framework (ACF)* provides a policy framework based on the formation, dynamics and analysis of groups and coalitions in policymaking. ACF is basically a result of Paul Sabatier's criticism of traditional *stages heuristic* which refers to a theory of policy process in various stages. These stages include: (i) problem formation, (ii) policy selection, (iii) policy implementation and (iv) policy evaluation. Jenkins-Smith and Sabatier (1994) argue traditional *stages heuristic* have many shortcomings and ACF provides a causal theory which is an alternative of *stages heuristic*. The originally evolved ACF proposed changes in policy process by responding to many perceived 'needs'. These needs include: (i) a need to focus on a long run perspective of a policy to understand the policy change, (ii) a need for an understanding of more complex subsystems so that researchers and inter-governmental relation could be included, (iii) a need for greater emphasis on the role of science in policy making and (iv) a need for the individual who is associated more with psychology than microeconomics. Jenkins-Smith (1990), Sabatier (1988) and Sabatier & Jenkins-Smith (1993) form the foundations of ACF as a guiding theoretical enquiry about some crucial

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<sup>1</sup> The theory derives its basis from the famous Game Theory.

questions that make the core of policy process. These questions include: (i) how do people act, maintain and move in advocacy coalitions? (ii) What is the role of science and technology in policy process? (iii) which factors are responsible for major and minor policy change and (iv) to what extent people learn from supporters or opponents? Weible et al. (2009) note that these questions have been addressed and explored from various directions by researchers during the last two decades.

The ACF does provide a formal theoretical lens to look at the implications and influences of various coalitions in transport policymaking. It also provides an investigative space to look into the role of various interest groups, stakeholders and other coalitions influencing the transport policymaking and the phenomenon of *planning fallacy*. However, the ACF may not be suitable for a policy analysis in two distinctly different countries such as New Zealand and Pakistan due to the following reasons: (i) First, the ACF mainly places focus on *coalitions made by shared beliefs* and, therefore, forgoes other patterns of coalition formations such as various government ministries during the transport policymaking process. Such a conceptual approach may not enable the present study to place power at the centre to investigate *the planning fallacy* issue in New Zealand and Pakistan. This view point has also been endorsed by Schlager (1995) who, in addition to coalitions by shared beliefs, identifies *coalitions by shared patterns of coordination* as well. (ii) Second, the ACF has mainly been applied in the US only and researchers have been questioning its applicability for the subsystems outside the US. Paul Sabatier has himself questioned the applicability of the ACF for the subsystems outside the US (see Sabatier (1998)). Weible et al. (2011) argue that efforts are being made to remove the shortcomings of the ACF and strategies are being developed to apply the ACF as a foundation for comparative public policy research. (iii) Third, our primary research question mainly aims at investigating *the planning fallacy* phenomenon in New Zealand and Pakistan which is purely a planning issue and, therefore, preferably needs an appropriate planning theory. The ACF may, however, be applied partially in conjunction with the main theoretical framework when and where needed.

*Path Dependence Theory* compares and analyses the implications of decisions taken under certain circumstances with the decisions taken in the past. The past circumstance may or may not be the same in the present day context. The concept of *path dependence* was originally developed by economists to illustrate the phenomenon of *adoption process* and *industry revolution* (see, for example, Nelson and Winter (1982)). Later David (1985) introduced the notion of QWERTY-nomics to explain that a first-to-market *standard* may become entrenched just like the layout of alphabets QWERTY, used initially in traditional typewriters, continued to be used in a computer keyboard. He then explains why present circumstances become *dependent* on certain incidences and practices of the history. He further explains the significance of *path dependence* in determining how *standards* are formed (see also, David (2001)). With particular reference to Economic Planning, the notion of *path dependence* refers to the outcomes either on one point in time or as a result of long term process. Basically *the path dependence theory* relies mainly on following two broad concepts: (i) appraising history of actions, and (ii) suggesting that smaller proportions of present day regime may result in disproportionate cause of later (or future) circumstances. Smith (1961) and Krugman (1991) also noted that similar firms tend to agglomerate geographically resulting in attracting workers and skills in that particular business. The practice of firm's geographical agglomeration is indeed *path dependence*. Vergne and Durand (2010) explain the conditions under which *the path dependence theory* can be

tested empirically and methodologically. Pierson (1996) and Schwartz (2000) attempt to formalise *the theory of path dependence* in political and social sciences.

*The path dependency theory* can be applied to address the '*the planning fallacy*' issue in New Zealand and Pakistan on the basis of following two reasons; (i) the theory will enable the research to look at the historical policy incidents of minor and major nature to explain the present formal transport policy paradigm in both countries (ii) it may help to explain why political assertions are taking place in transport policies of both New Zealand and Pakistan despite different institutional structures. However, *the path dependency theory* may not adequately explain the presence of basic ingredients (for example, *optimism bias* and *misrepresentation*) of *the planning fallacy* from historical appraisals. The empirical and methodological guidelines for the theory have been in question for quite time. Only very recently, Vergne and Durand (2010) specify some methodological reflections on *the theory of path dependency* which obviously need some time to get matured and formalised. *Path dependence* may, therefore, provide appropriate framework for an institutional analysis on the basis of past practices. However, applying this theory to address *the planning fallacy* issue in two different countries does not find reasonable justifications.

As structures of relationships between social *entities* remain paramount for transport policymaking, *the network theory* may provide another way to address *the planning fallacy issue* in New Zealand and Pakistan (see, for example, Wasserman (1994)). These *entities* include a wide range of groups including organisations, nations, interest groups, websites, scholarly articles, various coalitions etc. Burt (1997) and Bourdieu (1985) argue that *networks* create social capital for individuals and communities (see also, Putnam (2001) and Portes & Sensenbrenner (1993)). Podolny (1993) and Zuckerman (1999) argue that *networks* create status and difference in markets. Newman (2010) notes that the empirical study of *networks* has played a pivotal role in social sciences, by using various mathematical and statistical tools, since 1970. *The network theory* has, therefore, been applied diversely in the fields of network science, graph theory and social sciences. Basically *the network theory* is associated with a study of graphs representing either symmetric or asymmetric relations between discrete objects. The *theory* has been applied in wide ranging fields including, biological networks, social networks, logistical networks, and internet. The *network theory* revolves around *networks* which define a pattern of relationship among *entities* in a social space. These *networks* could be: (i) individual (for example, friends), (ii) formal (for example, contractual relations between organisations), (iii) informal (for example, inter-organisational relationship flow through people) and (iv) affiliations (for example, trade associations). The three key functions of *networks* are to act as: (i) resource and information channels, called *network pipes*, (ii) status signalling and certification, called *network prisms* and (iii) social influence, called *network peeps*.

*The network theory* may approach *the planning fallacy* issue purely from sociological point of view. Following Allmendinger's approach, such an approach is likely to be more *normative* in nature. The theoretical basis of the *theory* is quite similar to the earlier mentioned ACF; however, the *network theory* clearly defines the functions and characters of *networks* as opposed to the *coalitions* focused by ACF. The main reasons for not choosing this *theory* remain almost the same as for the ACF. The theory also does not draw any distinction between network formations in two distinct countries such as New Zealand and Pakistan. *The network theory's* scope to deal with secondary research questions remains very limited because of its greater *normative* approach.

*Phronetic Planning Research Approach* has been developed by Bent Flyvbjerg to explain certain planning issues in recent years. According to Flyvberg (2004), the theoretical foundations of the *approach* are based on four simple questions: (i) where are we going with planning, (ii) who gains and who loses, by which mechanisms of power?, (iii) is this development desirable? And (iv) what should we do about it? The primary strength of *phronetic planning research* lies in providing solid examples and narratives in a way that explains how *power* and *values* work in planning. It also explains how the power dynamics can be changed to work with other planning consequences. *Phronetic planning research* also explains *who is doing what to whom* and places greater emphasis on *understanding of power*. Jones and Euske (1991) view *strategic misrepresentation* to be a planned, systematic misstatement of facts in response to incentives in the budget process. Flyvbjerg et al. (2002) argue that *strategic misrepresentation* explains the cost overrun<sup>2</sup> in public works projects. Flyvbjerg (2008) explains how *strategic misrepresentation* can be curtailed by using different methods and techniques. The notion of *optimism bias* refers to a tendency for people to be overly optimistic about the planned outcome of actions (see, for example, Armor and Taylor (2002)). Dunning et al. (2004) note that *optimism bias* may result in a tendency for the people to under-invest in primary and preventive care and other risk reducing behaviours. *Optimism bias* also results in cost overruns, benefit shortfalls and delays as compared with anticipated outcomes. Kahneman and Lovallo (2003) agree that *optimism bias* is a main planning problem. The presence of *optimism bias* and *strategic misrepresentation* in planning projects has been endorsed by Bent Flyvberg (see, for example, Flyvbjerg (2003) and Kahneman and Lovallo (2003)).

Bent Flyvberg's *phronetic planning research approach* provides a good research lens to look at the issue of *planning fallacy* in transport policies of New Zealand and Pakistan. The approach also provides broad guidelines to understand and further investigate the elements of *optimism bias* and *strategic misrepresentation* in the transport policies and projects of the two countries. A detailed appraisal of *phronetic planning research* along with the justifications and reasons to choose it has been covered in the next section.

#### **4. Choosing *phronetic planning research* framework**

Chohan et al.(2011) note that New Zealand land transport framework and legislation provides a better set of policy institutions for governing transport. However, political assertions influence transport policymaking in New Zealand. The authors suggest that transport policymaking in Pakistan is constrained by two issues, (i) lack of institutional capacity and (ii) political assertions (mainly motivated by *optimism bias* and *strategic misrepresentation*). Despite different transport policy institutional structures, the element of political assertion in transport policymaking is common in the two countries. The main reason for these political assertions is that policymakers underestimate the costs, risks and completion time of road projects. They also overestimate the benefits of building roads within the institutional and systematic frameworks in New Zealand and Pakistan. Theoretically this scenario brings both these countries under the influence of the phenomenon of *planning fallacy* (see also Kahneman and Tversky 1979a; 1979b).

With this background, understanding a theoretical relation between the notions of *planning fallacy* and *phronetic planning research* becomes relevant. As mentioned earlier, the term

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<sup>2</sup> Cost overrun refers to an unexpected cost incurred in excess to the actual amount due to underestimation.

*planning fallacy* was first coined in 1979 by Daniel Kahneman and Amos Tversky (see, for example, Pezzo et al. (2006) and Kahneman & Tversky (1979a)). Flyvbjerg and COWI (2004) present procedures to handle *the optimism bias* and *strategic misrepresentation* issues in transport planning. Flyvbjerg (2008) develops *reference class forecasting* as a methodology to curb and reduce the effects of *the planning fallacy* in decision making. It may be convincing to say that *the planning fallacy* issue basically depends on two elements: (i) *optimism bias* and (ii) *strategic misrepresentation*. The role of *reference class forecasting* in transport planning has immensely increased in recent years. The present paper recommends investigating *the planning fallacy* within the broader principles of *phronetic planning research* by placing power at the centre. The basic strength behind this investigation remains an understanding of the issues of *optimism bias* and *strategic misrepresentation*. As outlined earlier, the *phronetic planning research approach* is based on four simple but philosophically deep questions. Such a theoretical, procedural and transport related planning research framework is unique in its approach for analyzing the transport policies of two distinctly different countries. Following Allmendinger's approach, *phronetic planning research* also presents a combination of a *theoretical framework* and a *normative theory* as per the requirements of the research questions.

Flyvbjerg (2004) presents theoretical and methodological details of *the phronetic planning research*. He argues that the whole concept is based on the Greek concept of *phronesis* which means wisdom, practical judgement, common sense or prudence. Forester (1993) and Throgmorton (1996) (both cited in Flyvbjerg (2004)) argue that other planning research has focused mainly on practical judgement and could contain the element of *phronesis* in this particular sense. However, Flyvbjerg (2004) argues that the main difference between such research and the *phronetic planning research* is the concept and understanding of power. Considering the previous research in planning as *communicative* in line with Habermasian tradition<sup>3</sup>, he argues that this tradition may not be most effective in thinking about power in planning (see also Douglass and Friedmann (1998)). Flyvbjerg (2002) presents the concept of bringing power to planning research in a simple saga narrated by a researcher. Flyvbjerg (2004) draws a departure line between the previous research and *phronetic planning research* on the basis of understanding of power. According to Flyvbjerg (2004, p.284),

In order to understand power it would be better to take a point of departure in thinkers who focus on power instead of in thinkers who focus on communicative rationality. Therefore, the point of departure in the current study is in the work of Machiavelli, Nietzsche and Foucault who have written canonical texts on power.

Flyvbjerg (2004) terms Aristotle as the philosopher of *phronesis* who defines *phronesis* as an *intellectual virtue*. Aristotle defines *intellectual virtue* as 'reasoned and capable of action with regard to things that are good or bad for man'. Within these philosophically deep principles outlined by Aristotle, Flyvbjerg (2004) defines *phronesis* as a process that concerns *values* and goes beyond the confines of scientific knowledge (*episteme*), technology (*techne*) and *the art of judgement* (see also Vickers (1995)). On the basis of this definition of *phronesis*, Flyvbjerg (2004) argues that any planning practice that attempts to reduce the planning research to only *episteme* or *techne* may be misleading. He, therefore, classifies three *intellectual virtues* in Aristotle's *phronesis* as: *episteme*, *techne* and *phronesis*. He further argues that out of three *intellectual virtues*, *phronesis* is the most important as it creates a

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<sup>3</sup> Based on the traditions set by Jürgen Habermas in sociology (particularly the *critical theory* and *pragmatism*)

balance between *instrumental rationality* and *value rationality*. *Instrumental rationality* and *value rationality* have also been referred to as *means-rationality* and *substantive rationality* respectively by Flyvbjerg (2004). The difference between *instrumental rationality* and *value rationality* has been outlined by Weber (1978).

From here on, Aristotle and Weber (cited in Flyvberg (2004)) argue that a balance between *instrumental rationality* and *value rationality* is of paramount importance for the viability of any social organisation ranging from the family to the state. He points out that in modern times the words *episteme* and *techne* have been replaced by *epistemology* and *technology* respectively but the word *phronesis* remains un-replaced. Therefore the lack of an alternative word for *phronesis* motivated Flyvbjerg to use the notion of *phronetic planning research*. He further argues that classical interpretation of *phronesis* is strong on *values* but weaker on *power* issues. Therefore *phronetic planning research* is an attempt to balance *power* and *values*. Flyvbjerg (2004) also coins the notion of *integrated judgement* which not only involves appreciative judgement in terms of values but also practical real political situations involving power. This framework, therefore, concentrates both on *value rationality* and power, covering both political and institutional-cum-administrative aspects of transport policies in New Zealand and Pakistan. The *phronetic planning research* drags the research beyond the structure and agency in line with the methodological guidelines of Flyvbjerg (2004). Moving beyond structure and agency liberates the research from narrow demographic, geographic and cultural confines of two diversely different countries, providing better theoretical space to look at the transport policies of New Zealand and Pakistan. Flyvbjerg (2004) covers both theoretical and methodological guidelines of *the phronetic planning research* but this paper places focus on theoretical reflections only. The methodological guidelines and research methods to be used for this study have, therefore, been kept beyond the scope of present paper.

## 5. Conclusion

Bent Flyvbjerg's *phronetic planning research approach* presents elements of both *normative theory* and a *theoretical framework*. It also places power at the core of analysis and suggests moving beyond agency and structure. *Phronetic planning research approach* is most modern and highly respected research tool in transport planning. These factors make the *phronetic planning research* as a good option for addressing the primary and secondary research questions. Within the broader principles set by *phronetic planning research approach*, the issue of *planning fallacy* can be investigated from the research goggles of *optimism bias* and *strategic misrepresentation*. This approach will basically address two transport policy issues confronted by New Zealand and Pakistan: (i) it will enable the research to look into the philosophical underpinnings revolving around power and institutional structures in New Zealand and Pakistan and (ii) it will also enable the research to investigate and focus on the practical transport planning issues such as *optimism bias* and *strategic representation*. Generally speaking *phronetic planning research approach* will be helpful in understanding both theoretical and practical transport policy issues on a broader but at the same time narrower canvass. The approach also suggests moving beyond agency and structure. This factor does away with the shackling factors of geography, demography, culture and the like for two distinctly different countries such as New Zealand and Pakistan. Flyvbjerg (2008) shows the importance of *reference class forecasting* on the basis of lessons learnt from similar projects in the past. For all methodological purposes, this aspect makes *reference*

*class forecasting* as a modern times replica of the *path dependence theory* which places greater emphasis on similar actions in the history. An investigation into the elements of *optimism bias* and *misrepresentation* in transport policies may also result in better awareness of these issues both in New Zealand and Pakistan. Chohan et al.(2011) note that the fourth question, '*what should be done*' remains unanswered. This question may also be addressed by using this approach.

Suggesting any research methodology within the *phronetic planning research approach* has been kept beyond the purview of this paper. However, *reference class forecasting* remains a potential research methodology aimed at curbing *the planning fallacy* in transport policies of New Zealand and Pakistan. Within the broader methodological guidelines provided by Flyvbjerg (2004), a wide range of qualitative and/or quantitative methods can be employed to further explore the *planning fallacy* in transport policies of New Zealand and Pakistan.

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