THE DESIGN OF INQUIRY FOR BUSINESS GROWTH

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ABSTRACT

This paper is concerned with the design of 'business growth programmes', i.e. specifically designed learning programmes with explicitly stated goals of promoting and impacting on business growth. This paper is based on research into the design considerations of growth programmes in 3 European countries. It is the result of a two year European research study funded from the European Commission. With this as context, using Systems Thinking we re-theorise the role of design itself as it applies to business growth programmes. This is achieved by re-tracing some of the most fundamental systems ideas back to Kant's critique of practical reason. The paper draws out several implications, (i) to demonstrate the application of a new set of principles which are designed to simultaneously help to develop and evaluate future business growth programmes; (ii) these principles also can help explain the tendency towards sub-optimal growth programmes in current practice; and (iii) to re-consider the policy priorities and assumptions for supporting business growth programmes in future.

Keywords Systems Thinking, Methodology, Business Growth, Learning Programmes, Inquiry, Design Research, Practical Reasoning.

INTRODUCTION

The contemporary economic context has renewed interest and re-invigorated urgency to construct policy which can foster business growth (see McFarland & McConnell 2012). The rationale for this is that business growth initiatives have indirect effects on regional economic development (see Fritsch 2011). High-growth businesses are seen to play a key role in structural change and wider regional development (see Bos and Stam 2011, Acs & Armington 2006). In the implementation, there have been calls to ensure policy-making is sensitive to the specific contexts of businesses, their specific needs, in specific sectors, at specific stages of growth. This is based on the commonly held assumption that businesses tend to move through common stages of development and as such there is a degree of generalisability in achieving growth across businesses, e.g. around the issues of management, technical, financial needs, (e.g. Churchill & Lewis, 1983; Lichtenstein &

Lyons, 2006). Further, it is possible to provide generalizable methods, advice, help, learning processes etc. which can positively impact on business growth. These generalisations can provide the rationale for the designs and operationalization of a given growth programme for a given business in a given context.

The link between designed business growth programmes and specifically targeted learning activities, and business growth itself, remains under researched. For instance, Mueller *et al*. (2012), contrary to expectations, found that was in fact a negative relationship between 'strategic learning' and business growth, in the sense that it challenged the learners' 'pioneering orientation'. In their (broadly quantitative) study, there was little insight into the design of the specific strategic learning processes, and the design assumptions and constraints. It becomes clear that there is often a taken for granted assumption that learning will have a positive impact. Indeed, conclusions drawn in this paper suggest that there appears to be a kind of leap of faith between, on the one hand, (i) the characteristics of the constitution or process of 'growth', the characteristics of the conditions which enable 'growth', the measurement of 'growth', and associated action planning, etc. to drive growth; and, on the other, (ii) the design of a learning process to promote growth, (and design principles to underpin the designs), for a given business, in its own specific context, with specific aspirations of its owners, with suitable pedagogy and process.

This paper reports on a research project which has undertaken a radical exploration of business growth programmes. The project involved the critical appraisal of existing business growth programmes, including those oriented towards new ventures, as well as programmes for business leaders of existing businesses. The project also piloted a new design, based on a form of design informed by a 'Singerian inquiring system', see Singer 1959, Churchman 1971, Ulrich 1983, 2012a, 2012b. This provides a significant set of principles drawing from the Systems literature, to inform the designs. The resultant programme, called 'The European Business Growth Catalyst' (EBGC) was developed using these principles, and subsequently piloted in three European countries (Greece, Spain and UK), with 62 different businesses. Section 1 of the paper outlines that basis of the design, and the rationale for using a Systems Approach for the design. The second section provides a discussion of some of the most important aspects of the design, taken in the project. The third section theorises the intellectual position presented, locating it in the wider challenge of contemporary research. As will be seen, the research provides a radical challenge to the assumptions that are in-built into current designs of business growth programmes, not least because it is embedded into a philosophical and methodological genre, which is, in this paper, termed 'practical reasoning'.

PRACTICAL REASONING

One of the most fundamental starting points in identifying the design principles of the EBGC was the observation that learners are ultimately expected to apply some form of 'practical reasoning'. In a sense, this states the obvious, e.g. '…that learners must learn to apply their reasoning in order to achieve practical results…', i.e. business growth in their respective businesses. However, the challenge is not so much in such a rather obvious statement, but it is in how a given 'practical reason' is justified or judged to be appropriate or 'correct' in context. To achieve this, it requires consideration of the nature

of reasoning itself. For example, for Immanuel Kant, reason is 'pure' or 'theoretical' when it is applied to produce knowledge or understanding of phenomena, i.e. what is, or what happens. Thus 'pure' reasoning aims at providing causal laws, often premised on an inquiry which is informed by its application to natural systems. An alternative reasoning, which he terms 'practical reasoning', is one that helps to determine *what ought to be*, *what ought to be done*, and/or *how to do it*. Thus, it could be argued that at the heart of a design of a learning system for business growth, there must be a Kantian 'practical reasoning' because fundamentally it is concerned with a vision of a '*future state*' (i.e. a business that has grown).

Kant's ideas go on to say, that only practical reason can determine how to use human freedoms, choice options and choice-making, to realize better human social systems. Thus *choice making* needs a critique of the decision makers perceptions of their *choice options* and this in turn requires an *inquiry* of some sort into a given learners' perceptions of their personal or business contexts, conditions and the ethics of the current and future state. 'Practical' implies a "*…capacity of determining man's will by the law of an intelligible world, i.e. the law of freedom itself…*", (Kant 1788, p. 139). Thus, the inquiry must have the capacity to challenge the perceived choice options which themselves can constrain the freedoms.

Given that a practical reason, which helps to justify decisions and actions (e.g. to grow a given business), must stand up to scrutiny, then there must a basis for judging one to be good, another to be bad etc. This was the research element of the EBGC project, whereas the practical implementation involved a learning programme and a set of resultant growth actions and decisions of the learners themselves. The basis for judging a practical reasoning is complicated by the fact that a 'future state' cannot be proved empirically. This is because it is in the future. A search for a solely empirical basis for the decisions made to achieve a future state (e.g. growth in a business), are limited (or perhaps futile)[1]. This is why Kant challenges the basis of the perceptions of a given future state in the abstract construction of it as a concept, i.e. he attempts to unpick the truth value (and 'deceptions') of a practical reason, and the process of its construction, in providing a concept of the future state. One of the ways he provides is by de-constructing it's *a priori* (or noumenal) concepts and *a posteriori* components, each playing a role in a given construction. It may contain assumptions and preconceptions of its constitution, and this can be subjected to analysis by taking apart the reasoning – which will have both *a priori* and *a posteriori* content. In the case of the EBGC, it was purposefully designed to increase precision of the use of concepts, and for learners to explore their own experience (or lack of it), as an element of critique. For example, abstractions such as 'markets' or 'innovation' or 'business models' were not only explored as constructs, but learners' experience of them. This was based on the very Kantian idea that a purposely designed learning and an inquiring activity is in part to facilitate a critique of a given practical reason (its own content) and to analyse its own limitations.

[1] It is of course possible to empirically explore the growth of a business once the practical reasoning has been applied. But not beforehand.

Kant talked of practical reasoning to be underpinned by an inquiry that was 'holistic' in the sense that there was a goal of understanding 'totality of conditions' on which a future state might be considered achievable. This is a goal of both reasoning and its critique, albeit an unachievable goal. It implies that there is a need to strive towards some sort of exploration of the totality of conditions upon which a given reasoning is based, and thereby improving awareness of its limitations as a basis for it 'improvement'. This 'exploration' should not to be taken to mean that 'truth' is in some way derived in an absolute sense, or that a 'totality of conditions' is ever possible. Rather, it is taken to mean that it is possible to *critique the reasoning* which can help assist in understanding the limits of one's own truth. Thus a Kantian practical reason aims to help to realise the weakness in the totality of the understanding in a given context, which is subject and context specific. In this sense, 'holistic' might be taken to mean 'to explore the limits of one's own truth' as it applies to the practical concerns of what *ought to be*, *what ought to be done*, and/or *how to do it*. In that sense, a 'practical reason' can only be understood as a 'critical' process, or as Kant puts it, a 'rule' which challenges the 'conditions' upon which it is based. Critique in this sense, is a form of 'regulative' process, and the reasoning is not to derive 'laws' (or 'theories'), but a process of uncovering assumptions or 'deceptions' about the possibilities of achieving a future state. A learning process is a form of this regulative process, and in effect helping people to improve their specific 'practical reasoning' and its limitations, their assumptions etc. in order to improve the basis upon which action is undertaken. Thus, the design of a growth programme based on a Kantian view, would be to help learners to apply a 'practical reason' as they project to a 'future state', and as they determine what *ought to be*, *what to do* or *how to do it* within the freedoms that they have to act in their given context.

There are some very important lessons and observations to be learned for the design of an inquiring process, based on a Kantian 'practical reasoning'. Firstly, that research in the field of Business Growth is not based on Kantian practical reasoning. Research in the field might be (somewhat) better described as rather more akin to a 'pure reason', i.e. one that is to uncover laws, to generate knowledge, to explore rules and generalisible constructs, ideas and notions. For instance:

- The characteristics of faster growing businesses, (e.g. Acs & Mueller 2008, Acs *et al* 2008, Parker *et al* 2005, Garnsy *et al* 2006);
- 'Stages of growth' frameworks, (e.g. Penrose 1968, Hisrich & Peters 2002, Kuratko & Hodgetts 2004, Schaper & Volery 2007, Bygrave & Zacharakis 2008, Timmons & Spinelli 2004);
- Growth patterns in different businesses, e.g. differences in the in large and small organisations (e.g. as in the well known Gibrat's Law (Gibrat 1931), Sutton 2007), and how policy shifts from obtaining viability in small organisations to maintaining viability in established businesses;
- Analysis of key 'factors' which combine to facilitate growth, e.g. leadership characteristics, industry structure, strategy, processes and systems (e.g. Sandberg 1986, Chrisman *et al* 1998, Thakur 1999, Box *et al* 1993);

Whilst much research may not be informed by practical reasoning, it does not mean that such research is not relevant to the design of a learning process based on practical reasoning. This is because conclusions of such research might be integrated such a

process, i.e. it may become part of a process of challenging the assumptions of a perceived the future state, *what ought to be*, *what ought to be done*, and/or *how to do it*. We will call this 'sweeping in' (for want of a better phase, and after Churchman 1979). Or, in other words, in the design of a growth programme, knowledge and ideas derived from other forms of reasoning might be considered to be valuable within a *process of practical reasoning*, and thereby 'swept in'. The challenge of design is to: (i) determine what (if anything) needs to be 'swept in', what is its potential value (and limitations) in helping to determine *what ought to be*, *what to do* or *how to do it* (within the freedoms that a given learner has to act in their given context); and, (ii) where ideas, concepts, frameworks, techniques, tools, or the results of past research are used (or 'swept in') by a learner, then the learners' own use of such things should be the subject of critique. A key design issue to consider is that practical reasoning provides the structure and basis, whereas other forms of knowledge *may* prove useful to integrate into a *given* inquiry.

A second important point that emerges from this is that research that produces knowledge can only be seen to be relevant when it contributes to a practical reason. Relevance can only ever be judged by helping to inform or scope a practical reason. Indeed, if a given concept, construct, idea, principle etc, is 'swept in' in such a fashion, there is opportunity to enhance it in such a way to use it and improve it in some way (a process of refutation, re-interpretation, to enhance its relevance). Thus a design of a growth programme not only involves the use of a given construct, idea or principle, but to refine the understanding of its relevance, how it could be or should be used as it is 'swept in', and potentially how it could be enhanced in order to give it greater insight, relevance or clarity, as it steers the process of reasoning. A key design issue in the EBGC project was therefore, that there were research goals, integrated into the design of the learning and inquiring process. The research goals were concerned with the designs and judgement of them.

Of course, Kant was writing over 200 years ago, and a lot has been developed since that time, which relate to practical reasoning. For example, following Singer(1948), Churchman(1971) outlines the principles of an 'inquiring system', to provide a basis to know the limits of a given practical reason. Churchman's 1971 Design of Inquiring Systems provides a rich discourse in methods for the design of inquiring systems, which can help to inform designs of inquiry in many contexts (including the inquiry as a basis for a business growth programme). A key tenet of his argument is the inclusion of three hypothetical elements, described and conceptualized as roles, in a given social change, namely 'client', 'decision-maker' and 'planner'. The integration of these were considered to have certain implications for a design of a growth programme. For example, (i) it provides an abstract form of 'inter-subjectivity' of those in a given context; (ii) it recognises the need for a critical dialogue when exploring 'the affected' over and above 'those more directly involved' (in a given growth project, in a given business); and, (iii) it might be considered a search for a consensus as a basis of 'action' (for growth). These three categories are extended in Churchman 1979, to include 'the systems philosophers'. This provided an additional subjective account which can be integrated into the inter-subjective accounts of those directly involved in the social systems. This is done because there is a need to explore '*… the significance of the whole effort…*' (Churchman 1979, p.80). In part, the implication of this is to include, as an element of the inquiry, the

'impact' made. This is not narrowly focused solely on the impact of an *intended* change (or future state), e.g. the actual growth of a given business. It is also concerned with the impact that is unintentional, or 'that which emerges'. For example, there may be impacts on internal or external systems that are unintended. For example, by growing a business, another might go out of business; or, by growing a business there might be ecological impacts… etc. An implication of this for the design of an inquiry for business growth is that: (i) prior to action (any actions to achieve growth), it is possible to inquire into the likely consequences on wider systems; (ii) during and after action, it is possible to include inquiry into possible unintended impacts, which may also have impact on subsequent inquiring activities and actions; and (iii) the continued iterations of inquiry and action and the inclusion of the unintended consequences, in effect widens the inquiry, i.e. makes it 'more holistic'; (iv) the 'implications on humans' is a central element of the inquiry, and thus it involves consideration of the ethics of the given change. In effect the inclusion of 'the significance of the whole effort' into an inquiry, widens its scope, in a way that is commensurate with the Kantian notion of a 'totality of conditions'.

By his inclusion of the various inter-subjective accounts, Churchman sets the scene for integrating a form of dialectic into his Systems Approach, with which to analyse the weaknesses in an holistic understanding of a 'future state' embodied into, for example, a given business growth planning process. In integrating this, he avoids some key difficulties associated with a fundamental or inherent recourse to rationalism. That is, Churchman talks of a challenge to planners' claims for rationality by those who live with the practical consequences of the planning. The basis of this challenge is not achieved via an intellectual discourse or communication *per se*, (e.g. about the planning, policy or impact in planners terms and language), but by incorporating an interpretation of the 'lived in experience' of those who are connected in some way with the planned change. Thus the communications are not to contest the rationality of the plan in 'rational' terms, because those affected by the planning commonly have no means (or skills) to undertake it. For example, to explore the degree of 'rationality' of a given business planning exercise, implies that those undertaking the testing have the required skills in 'transcending' their given social situations, in order to genuinely provide insight to a given discourse. In practical terms, the inability of humans to do this effectively is a key problem, because at one level it assumes a form of objectivity or 'superior knowledge' which then opens up questions about what this could be and how to attain it. The implication for the design of business growth programmes in the EBGC project, was that it was recognized that a form of dialectic would necessarily be integrated into the process, which was to be designed in such a way that any planning would consider the 'lived experience' of the consequences[2].

Ulrich 1983 explores the practical consequences of Churchman's inquiring systems, and formulates from them a set of heuristics. These are to discover 'problem-relevant' questions, in the formulation of problem-solving, social planning and change. By heuristics he understands it as "*not a collection of prototypical problem solutions or*

[2] In the EBGC project, this was trialled using a formal dialogue, called a 'ThinkTank', alongside different forms of 'stakeholders' perspectives analysis'.

problem-solving techniques", but rather "…the art of making "the problem" the problem…" (Ulrich 1983, p.22). He clearly positions CSH away from narrowly defined or functional research, but as a problem of learning, which challenges stakeholders in their perceptions of their often 'as-given' problems and solutions. Ulrich also differentiates CSH from a rationalist or empiricist inquiry, but proposes a critical process approach. His work is clearly informed by the Kantian exploration of the weaknesses (or 'deceptions') in a given 'holistic understanding' when developing judgement. Ulrich's CSH develops Churchman 1979, by developing several key strands.

(i) Firstly, he integrates a re-interpreted form of dialectical reasoning, (after Hegel 1807), to integrate a self-reflective element, and this forms a key element of the heuristics.
(ii) Secondly, he adapts Churchman's 4 categories to demonstrate their use in challenging the (often self-imposed) 'boundaries', which limit holism in a practical reason. This is central to his argument about his 'critical turn' of the Systems Approach (see Ulrich 2007 for instance).
(iii) Thirdly, he provides a critique and explanation of some failing alternatives, which result from a lack of holism in their practical reasoning (e.g. 'functionalist', 'incremental' research practices).

These were taken in turn into the design of the EBGC process, to encourage inquiry which was self-reflexive in character, to challenge the (often self-imposed) boundary construction. For example, assumptions about the span and scope of a given business were subjected to self-reflexive critique. This gave significant insight into why certain businesses appeared to limit their own growth potential. It was the link between boundary construction, and its consequences for the way inquiry was subsequently formulated, which enabled a fundamentally rich design feature, throughout the EBGC process. Indeed, the inquiry itself, was necessarily conceptualized as a process – with a boundary - each stage opening up new possibilities, and closing others, to refine priorities, actions and planned activities for achieving business growth. If the design of business growth programmes were to be informed by this approach to inquiry and learning, then there are some important process characteristics. For example,

(i) The abstractions used in practical reasoning are used to validate a particular position and these can be subjected to challenge to uncover the flaws ('deceptions') within it. To achieve this, it is possible to include purposely designed interventions in pedagogic terms, e.g. (a) exploration of the *a priori* or *a posteriori* content of a given abstraction; (b) using forms of dialectics to uncover the likely outcomes or implications of a given growth plan; (c) and/or, a critical analysis of (self-reflexive) boundary construction, which may limit a given inquiry, or direct its subsequent path. It may be that this process is of primary importance in the formulation of research into the purposeful design of business growth programmes.
(ii) The purpose of 'practical reasoning' is an attempt to improve the effectiveness of action in practice as a primary goal, (not the generation of knowledge or theory). However, the experience and the empirical (*a posteriori*) in the process of formulating a reasoned position about the growth of a given business, may confirm or refute existing concepts, constructs, frameworks, methods, techniques, tools, abstractions and theories… (i.e. they are 'swept in' or 'swept out'). As such, this

process may contribute to knowledge generation… as an emergent characteristic. That is to say, there may be implications for knowledge and theory from a practical reason, despite that it is not a primary goal.

(iii) That a business growth programme based on these ideas of practical reasoning, will be a critical process – a process which attempts to guard against error – to make transparent the 'deceptions' or 'illusions' within the practical judgements inherent in a given practical reason[3]. Further, that a process of practical reason is (in part) an exploration of the perceived 'freedoms', that determine its construction, i.e. that such perceptions are a potential source of 'deception', which includes boundary construction.

(iv) There must be a relationship between a practical reason and the human action that is informed by it. However, the relationship between practical reason and human action is not to be confused by a form of 'cause and effect' in a deterministic sense. Rather, the specific context and perceptions of the context, are dynamic and complex, as are the varied purposeful actions that might arise from a given practical reason. The relationship between action (or non-action) and the reasoning, is a key area of exploration in the process, because it gives insight into the 'constraints on the freedom to act'.

(v) There must be a relationship between a practical reason and the process by which it is refined and improved. These process characteristics can be termed a 'learning process' of sorts. The design of the learning process is itself an abstraction arising from the notions of practical reasoning, and will be required to consider the logical structure, the role of the empirical, awareness of the teleological dimensions, the ethical implications etc.

(vi) Although a Kantian 'practical reason' has a theoretical basis, a given 'practical reason' (in practice) is not to construct theory as a primary goal[4]. Thus, in developing a practical reason, theory generation might be considered an emergent property during a process of exploring the practical reasoning of a given social change. A design of a growth programme based on a practical reason, must have capacity for this type of emergence.

(vii) Kant talks of a 'doctrine of elements' of practical reason, and a 'methodology' of practical reason. This implies that a process of 'practical reason' has generalizable characteristics, (i.e. applicable into many contexts), and that there is a knowledge base, an intellectual basis, and methodology, for practical reasoning. It might be that it is this, and the improvement of it, is of primary concern to researchers in the

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[3] This moves away from Kant's original work, which perhaps was more focused on critique to search for a higher order or law (e.g. one that is 'God given') rather than in a reflexive, self-analytical sense as we might understand it in the contemporary period.

[4] In a Kantian 'practical reason' theory generation is largely focused on the theory of constructing a practical reason and its validity. It is not focused on subject related theory generation.

field. This has some potential over time to significantly alter the contemporary disciplinary knowledge production process, as we understand it today[5].

PRINCIPLES OF A PROCESS DESIGN FOR THE EBGC

One of the important contributions of the EBGC has been to locate the design of learning in Kantian practical reasoning. As discussed, this involved the notion of 'sweeping in' knowledge, concepts and research outputs, which had their history underpinned from a variety of disciplinary areas, and a variety of 'schools' of research design (see Radnitzky 1970). The challenge at design time was not only concerned with what was to be 'swept in'[6], but also what was the essential designs of the process 'into which it was to be swept'. Whilst the Kantian notion of practical reasoning was considered to be a starting point, the specific process characteristics needed to be created as a conceptual artifact. These are explored and explained in this section.

It stands to reason that any given inquiry into the best forms of action for business growth must be purposeful. Thus, the design intentions, and the resultant learning process, are both teleological in nature. An exploration of the term 'teleology' quickly tells us that its concern is not solely focused on explicitly stated goals, but on the hidden goals, and how behaviour is explained by 'goal seeking' in the context of transient human systems. Given that 'making an inquiry' is a human activity, then it stands to reason a given inquiry is teleological, and that the way that it is conceived, structured and undertaken, will be explained by the goal seeking behaviour of the human(s) undertaking it. That is to say, the goals (hidden or otherwise), affect the boundaries of the inquiry, i.e. 'what it is that is being inquired into, and how'. This might be considered neatly summed up by the notion of 'boundary construction', e.g. see Spencer Brown 1972. It stands to reason then that the 'boundary' of inquiry will reveal much about the 'goal seeking' of the inquirer.

Following this idea, the purpose will affect the boundary of inquiry, and the boundary of inquiry will reveal insights into purpose. If this fundamental principle is applied then it also stands to reason that:

(i) A learner who wishes to inquire into the potential of their business to grow, will structure their inquiry and construct a boundary around that inquiry;
(ii) A concern for evaluating the practical reasoning of a given growth plan would include consideration of the assumptions (or 'deceptions') inherent in a given learners' boundary construction; and

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[5] This of course assumes that a given research piece is purposely designed around the justification of a change in social systems in some way, as opposed to a 'pure' research piece which may be formulated around some observed phenomena or challenge to existing theory.

[6] 'Sweeping in' can be considered to be something that the designers of the EBGC undertook as part of their formal design, i.e. they inserted specific constructs, ideas, techniques etc. (e.g. industry sector analysis, analysis of KPI's, market analysis etc). However, more importantly, it also was considered to be something that the learners undertook, as part of their inquiring activity, during the process, i.e. to 'sweep in' the use of constructs to 'improve' their specific inquiry.

(iii) There may be capacity for challenging the boundary construction, and therefore the assumed purpose, and therefore the boundaries of inquiry itself.

In order to accommodate this, an element of the design of the EBGC was to encourage a learner to explore their own boundary construction, and to explore the implications of it on both the business as an entity, and on their inquiry into it. In the design of the EBGC, learners would need to be given tools to: (i) think about their own boundary construction; (ii) how to alter it; (iii) and to explore its implications. This is depicted as a set of arrows in figure 1.

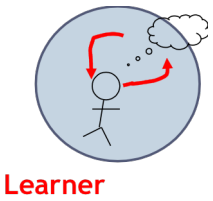

Figure 1 : A learner making inquiry into their own conceptual boundaries, depicted with the double arrow and the 'mental bubble'

At the heart of the design of the EBGC, there was the assumption that it is possible that a learner could become more aware of their own conceptual boundary constructions, and the consequences of them. It also assumed that it was useful to challenge them, in order that a learner might re-consider or change existing boundaries. In the design of the EBGC, the idea was to include this element as an on-going activity, because it was assumed that this was an important consideration during the whole process. For example, as a learner was considering '*what ought to be*, *what to do* or *how to do it'*, they would naturally be considering the boundary of their perception of their business in a future state, the feasibility of achieving it, what they would need in a transition period (resources, time etc), and what the perceived future state would need to be comprised of (e.g. structure, resources, process needs etc). A specific set of inquiring activities were designed for this purpose[7].

In the design of the inquiry, it was recognized that a learner's conception of a future state needs to consider carefully its own assumptions about its feasibility, i.e. feasibility of a changed state, in a given context. It will also be based on assumptions about the feasibility of *changing* from the current state to a given future state. As such, the inquiring activity needed to consider both of these sets of assumptions. The principle which guided the design was the (rather Kantian) observations that: (i) the 'current state' (e.g. of a business - its current internal systems and structures, its products and markets

[7] In the EBGC, there were specific methods to do this, including: (i) A set of activities specifically designed to explicitly state and challenge the boundary perceptions of a current business; (ii) a purposefully constructed dialectic (called a 'ThinkTank') to provide a method of challenging it, and (iii) a graphical representation of boundary construction in different time periods, (called a 'strategic spider').

within the given context etc) could be explored both empirically and with reasoning; however, (ii) the equivalent 'future state' could not be proved empirically, and could only be explored using reasoning and predictions. Reasoning can be highly abstract, and can follow many paths, and the empirical can tend to ground the reasoning in some way. This presented the learning design with both positive opportunity and also a set of challenges.

(i) The opportunity came with a form of simplification in guiding a given learner's inquiry because it allowed a rather simple test to be undertaken. For instance, when a learner was making assertions or assumptions about their business in its current state, it was possible to explore the empirical evidence. In situations where this was not forthcoming from the learner, and if it was considered sufficiently important, then a given learner would be charged to explore an empirical basis for a given assumption as an action point.

(ii) The challenge came with the inquiry into a future state, which could not be explored empirically (because it is in the future). That is to say, a given future state can only be based on reasoning and predictions from a current state. In the design of the EBGC, it was recognized that there could be a tendency that a given 'future state' would become aspirational, and have little truth value in practice. Thus, a set of activities were required to refine the inquiry in practice, to test the basis of prediction, and to specifically challenge the resources and conditions required to achieve that future state.

The Kantian notion of 'uncovering the deceptions' by using a form of dialectic that was directed specifically at challenging these assumptions, was built into the EBGC. For example, it was assumed that a learner could develop an improved perspective by exploring the basis of their own assumptions, e.g. by (a) exploration of the *a priori* or *a posteriori* content of their given assertions or abstractions; or, (b) by using forms of dialectics to uncover the limitations of the assumptions; and, (c) to provide basis for a critical analysis of (self-reflexive) boundary construction, which may limit a given inquiry, or direct its subsequent path. These were ambitious designs but were considered to be an essential element in helping to identify the weaknesses in a given learners' assertions and inquiry. This continuous iterative inquiry was, in essence, to help learners to identify 'what they did not know' (e.g. about their product, market, sector, resources etc), in order to 'know what they needed to find out', in both the current state and in their predictions of a given 'future state'. This resulted in a structure implemented into the EBGC whereby:

(i) there were relatively short inquiring workshops designed to identify weaknesses in perceptions of the 'current state' and in the possibilities for 'a future state'; and then

(ii) longer periods of inquiry to help to understand the consequences and to explore some of the consequent gaps in knowledge, information, the empirical evidence of a given assertion, or the basis of a given projection.

This iterative process was considered a necessary design feature, so that the inquiry could be refined in an holistic manner. The time period for the iterations were to be over a 6 month period in which time the learner would be grappling with (potentially) a great many contextual issues in practice and formulating a significant 'growth project' (termed 'project catalyst'). It was envisaged that a whole set of actions for growth would emerge

from the iterative inquiring activities, but the real value would be in the actions resulting from the formulation of the 'project catalyst' in each case.

The process assumed that inquiry and action were in some way connected. In the design of the EBGC, learners would identify 'required actions'. However, it was assumed that the action element may be quite problematic. This was because of the varied (and complex) relationship that a given learner has to their own business and business context. In essence, that is to say that each learner will have a different context in which they were to implement actions, and thus, there was a different relationship between the learner and a social context. That relationship was conceived to be the key to the learners' formulation of 'what is possible through freedom'. That is to say, in the case of the EBGC, the learner would commence the inquiry with a specific relationship to their own business and its context, which can affect the inquiry by affecting how interaction (and action) occurs, and what observations are made that result. This relationship is depicted in figure 2.

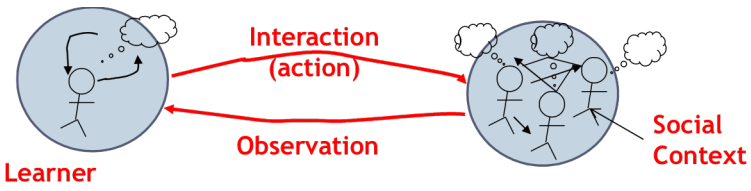

Figure 2 : A learners relationship with context

It was recognized that this relationship would affect the inquiry itself, see for example see for example Ylijoki 2003a, 2003b. For instance, a given learner will be seeking to make inquiry about their business, but will do it with an existing role in that business. The role will carry with it behavioural norms, responsibilities, power relationships and the like. That role can affect the way the inquiry is undertaken (it affects the boundaries of the inquiry). Similarly, the learner will have relationships with others in the context, and they may have specific expectations of behaviours etc. Thus, the context and a learner's relationship to it, was considered to act as 'lens', which in turn would affect the subsequent inquiry. As the relationship developed and changed, so would the lens. This in effect was seen by the design team of the EBGC as a potential limitation in the quest for holistic inquiry (and subsequent action). Thus, the relationship was included in the inquiry, i.e. the relationship and the lens was the subject of critique during the inquiring process. Thus, a learner was to develop awareness of 'what is or is not possible', given their specific and contextual social relationships. For example, not wanting to undermine a social relationship (e.g. with power brokers in the learner's specific context)… or, being unwilling or lacking in the confidence to challenge a social norm, a set of belief systems about the current business …etc. This was also developed in the EBGC design, whereby the learners were encouraged to explain their specific actions or inactions, by reference to their contexts. This was achieved via the iterative cycles which characterized the design,

and this provided specific reflective practice that was in-built into the EBGC (see also Schön 1983).

At design time, it was envisaged that there would be two major skills areas that would become challenging to learners, given the process designs envisaged. These were:

(i) In situations where a learner clearly defined 'gaps' in their knowledge when considering a 'future state' of their business. It was recognized that in these situations there would be a need for specific skills in research, i.e. it may involve gathering primary data, e.g. about customers, markets or products etc. and/or evaluating the validity or secondary data or research reports.

(ii) The process involved 'sweeping in' constructs, methods, ideas, frameworks etc. and these needed to be justified and clarified, as part of the process of making holistic inquiry. This demanded skills in the selection and application of what was, and what was not, appropriate when enhancing the inquiry.

Both of these skills were considered hugely important, but providing them was considered to be beyond the scope of the EBGC. In Churchman 1979, he introduces the notion of the 'systems philosophers' into the systems approach. In the design of the EBGC, this idea was taken to specifically focus on bringing into the inquiry, a set of perspectives and skills which were to be integrated into the process. Specifically, these centred around: (i) the research skills to help learners to explore the 'deceptions' of primary or secondary research that they might incorporate into their inquiry; (ii) to help improve the learners' careful and considered incorporation (and critique) of specific constructs, ideas or frameworks, with the objective of using them to help develop an holistic inquiry; (iii) to help to incorporate an analysis of implications for systems and stakeholders (a form of 'impact analysis'), from the conceptualization and implementation of any chosen growth actions that emerged from the inquiry.

SOME DISCIPLINARY AND RESEARCH IMPLICATIONS

During the design and operationalisation of the EBGC, the focus was to develop a process which was based on the Kantian notion of practical reasoning. Whilst the process designs had the specific goal of producing growth in learners' respective businesses, there was also a research objective. This was specifically to explore the possibility of developing a process, informed fundamentally by *A Critique of Practical Reason*. There was a distinct integration between research goals and practical outcomes. In short, the EBGC project was designed with a research goal (exploring practical reasoning for business growth objectives), and to create and explore a form of inquiry with distinctive practical outcomes (business growth).

This specific form of research design had significance in part because of the contemporary challenges of 'bridging the relevance gap' (Starkey and Madan, 2001). In general, business and management research has been struggling with anxieties about the lack of relevancy in much academic research activity, see for example Hambrick 1994, Gopinath & Hoffman 1995, Davenport & Markus 1999, Watson *et al* 1999, Lyytinen 1999, Benbasat & Zmud 1999, Reed 2000, March 2000, Abrahamson & Eisenman 2001, Hodgkinson 2001, Hodgkinson *et al* 2001, Huff & Huff 2001, Mclean & MacIntosh 2002, Bolton & Stolcis 2003, Baldridge *et al* 2004, Goshal 2005, Spender 2005, Keiser &

Leiner 2009. During the EBGC project, it was perceived that the challenge of relevancy of research practices in the field might be explained by a contemporary ambiguity about the nature of and distinction between practical and pure reasoning. However, more significantly, having completed a 2 year design, development and pilot process, it appears that the EBGC project has been able to commence exploration into forms of research in Management and Business in a specific way, which has some potential for 'bridging the relevance gap'. This is a specific form of 'design research' because it is a 'design of inquiry'. The EBGC project was always concerned for the 'design of inquiry', for business growth. However it might be distinguished from design research in a more traditional sense, because it was not concerned for designing an artifact. Rather, it is concerned with the designing an inquiry more akin to Singerian inquiring system (see Singer 1948, Churchman 1971).

The Kantian notion of practical reasoning has already had significant traction in many areas of contemporary thought. For example, Habermas (1971) takes the notion of practical reason as a basis to critique 'rational choice' and 'communicative action'. He argues the dangers of a 'positivistic' misinterpretation which may result in subverting a required dialectic about the possibilities of a given practical reason, and the societal structures which place constraints on freedom. His argument suggests that there are certain social beliefs that masquerade as practical and rational, which have inherent epistemic assumptions that may be imposed on social situations, which deny the freedoms of choice, and thus denying behaviour based on 'consensual norms' (ibid, p. 91-2). In epistemological terms, he rejects a socially neutral observational language and thus challenges a positivist position. It also acknowledges a goal of 'consensus' as the basis of reasoning in social situations. The work of Habermas acknowledges the influence of the Kantian explorations on practical reason, and as a result has provided significant contributions in the development of contemporary social theory, commonly referred to as a Critical Social Theory ('CST'). A central theme in CST has been to question the freedoms and choice-making of humans within given social structures and societal forms, and thereby on the limitations of human re-generation and change. The foundations of CST build upon key notions of freedom, expressed many years earlier in Kant's *discourses*. Despite the recognition of some fundamental concerns with Kant's original work, Habermas's work and that of the Frankfurt School has gained notoriety for its contributions to a critical theory of society, pioneering its ideas by building upon some of Kant's underpinning messages. The influence of the Frankfurt School is extensive, and there is significant research being undertaken in refining and developing its theoretical base as it applies to business and management research, see for example, Wikert & Schaefer 2015, Alversson & Wilmott 1992, Alversson *et al* 2009.

Selected strands of modern day 'Systems Thinking' also acknowledges the influence of Kant, and like Habermas, also reject a neutral observational language. Systems Thinking has been considered to have its lineage in action research (see Baskerville & Wood-Harper 1998), but it is probably more clearly linked to pragmatism. For example, Ulrich's (1983) Critical Systems Heuristics was significantly influenced by Ulrich's teacher, C.West Churchman (1913-2004), who himself was hugely influenced by his own teacher, Edgar Arthur Singer (1873-1954) who was himself a student of the pragmatist William James (1842-1910). This lineage can also be clearly seen in Churchman's 1948 critique

of quantitative methods and empiricism, in which he develops his theory of experimental inference, where the term 'experimental' was used in a rather similar way to a number of pragmatist thinkers. However, it is perhaps in Churchman's later work where there are some significant insights for modern day concerns in organisation, management and business research (see particularly Churchman 1968, 1971, 1979). He talks of 'Kant for planners' derived and developed from the same basic root in the philosophy of science as that taken by Habermas. Churchman 1979 for instance, takes the Kantian notion that a practical reason is in part a search for knowledge of a '*totality of conditions'* which, if known, would provide insight and predictive capacity for the impact of a given action derived from a given practical reason. Churchman talks of the 'systems approach', to provide a linkage between 'systemic' (or 'holistic') reasoning to deal with human and organisational problems *in practice*. As such, Churchman's approach does not see related research to be primarily focused on theory (or knowledge) production. Rather, his *Systems Approach* is an exploration of the (impossible) search for the 'totality of conditions' during the solving of practical problems, and the reasoning processes that underpins it. As a result, its focus is on methods, and the applied application of methods, for the purpose of solving problems (organisational, societal, human). That is to say, Churchman's work is concerned to develop knowledge of methods as primary goal, not on theory production, except in terms of where it develops or contributes to the *design of inquiry*.

Whilst both Habermas and Churchman are both concerned to re-interpret the Kantian practical reason, their approach is fundamentally different. Habermas develops a critical social theory which explains the social-structural barriers to achieving it, and the dangers of its subversion. Churchman is concerned with the design of an inquiring system to create an interpreted inquiring and learning process, which capture the lived in experiences in practice, to identify the *possibilities* of action within the context of social freedom to act. There are potentially significant contributions that CST might be able to make in the critique and improvement of an inquiring system. However, CST does not provide an equivalent method of achieving or evaluating social change, to that of the *Systems Approach*. It might be much more logical to use the methodological principles of the *Systems Approach*, and integrate insights of others, (e.g. CST) as they provide additional understanding and dimensions of weaknesses in holistic thinking for practical impacts in social situations. When Churchman (1979) talks of the 'enemies' of the systems approach, he is acknowledging that the search for holism in a practical reason, can learn from other philosophies and positions, (he specifically talks of morality, politics, aesthetics and religion). He also argues fundamentally that the systems approach can 'sweep in' the enemies if it is able to critically evaluate their contribution in the search for a search for the most suitable inquiring system. For example, Habermas's 'ideal speech' can provide insights into the limitations of human capabilities in developing a discourse, and/or the concerns about rationality subverting consensus (Habermas 1971)[8]. It can also be that Churchman's 'Systems Approach' can learn a lot from the contributions of the Frankfurt School in the process of interpreting, inquiring and learning about the social freedom to act, and the implausibility of finding cosy

[8] This is shared in Churchman 1968, see ch 7, 'Rational Decision-Making'.

consensus in social planning contexts. Nonetheless, it might be that *Systems Approach* as conceived in Churchman 1979 provides a framework for designing and evaluating changes in human social systems, into which other ideas can be integrated (or 'swept in').

The literature on business growth tends to be dominated by the application of research methods which are in essence akin to what Kant describes as reason is 'pure' or 'theoretical', i.e. methods are applied to produce knowledge or understanding of phenomena, i.e. what is, or what happens. Unfortunately perhaps, the notions of practical reasoning and holistic remains quite alien to many contemporary researchers in the business and management domain and there are significant challenges in the integration of research types which have roots in very different traditions. For example, an operations research piece may identify variables which are to be tested in a form of model or experiment, to draw conclusions about what may be desirable to change within a given context, i.e. to provide insights into a 'future state'. The business and management academic literature is replete with examples of forms of research, commonly empirically orientated, which provide insights into phenomena or human experience of it, and which provide *potentially* useful insights into a 'future state'. However, very few are themselves a practical reason in the manner applied in the EBGC project. That is to say that they commonly use a form of inquiry to use empirical and/or experience to develop new or alternative perspectives on a given phenomenon (e.g. aspects and dimensions of 'business growth') but not on the practical reasoning involved in achieving it. Whilst the most common forms of research may claim or have implications for a potential 'future state', they are not explicitly designed to apply, examine, test or include a systemic practical reason. It is only certain strands of the Systems literature which tends towards any notion of the 'inquiry into the limits of holism', or to provide a form of learning and inquiry to guide and provide underpinnings for action. The experience of the EBGC project has given insights into the potential of shifting the focus in both research and in design research. On the one hand from 'pure' to 'practical' reasoning, and from 'design of artifact', to 'design of inquiry'.

CONCLUSION

Many growth programmes are justified by policy makers and fund-holders by reference to the specific elements and conditions that are required to achieve business growth. There is a genre of literature which provides predictors for growth, to help in policy and prioritisation, and to help in the process in some way. Unfortunately, in practice, growth commonly remains frustratingly elusive, and successive (often government-led) initiatives fall far short of their planned impact. The EBGC project has taken a very different approach with several important implications. Firstly, it has been assumed that business growth can only come from 'action on the ground', i.e. from the businesses themselves. However, there needs to be some way of developing the thinking in order to improve, justify or validate any 'action on the ground', and this may come from a greater awareness of the implementation issues in the 'design of inquiry'. Secondly, that researching business growth may continue to benefit from traditional application of research methods, e.g. those based on 'pure reasoning' as opposed to 'practical reasoning'. However given that contemporary university research has undertaken significant investments in 'pure' research, then perhaps the EBGC project may have provided insights into a rather more exciting new tranche of research which aims to

develop and improve alternative approaches, e.g. based on the 'design of inquiry'. Thirdly, that policy making may benefit from considering new approaches to creating conditions for business growth. Perhaps nobody can claim full insight into what those conditions need to be. However, it stands to reason that the notion of inquiry into 'what is possible through freedom', i.e. to establish an understanding of what the key roadblocks to growth are, in a given business, at a given moment in time, is a pre-requisite for effective policy making. There are some implications of the design of inquiry for business growth, (i) for consideration by decision makers in businesses aspiring growth; (ii) for researchers of business growth and related fields; and for (iii) for policy makers who aspire to create conditions for business growth.

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