Dualism VS Duality: Morphogenetic Approach - A Realist Alternative for Management Accounting Research

M Junaid Ashraf
Lahore University of Management Sciences,
Lahore, Pakistan

And

Shahzad Uddin
Essex Business School
University of Essex
Abstract

This paper introduces Archer’s (1995) morphogenetic approach as an alternative methodological and explanatory framework for management accounting research. The explanatory power of this framework comes from its conceptualisation of management accounting both as a set of ideas and an organization practice influenced by ideal and material structures. The paper begins with a realist critique of Giddens’ structuration theory and the notion of ‘duality’ of structure and agency. It also highlights the weaknesses of structuration theory both in conceptualising management accounting and explaining changes in management accounting practices. The paper then illustrates the use of dualism and the morphogenetic approach of management accounting research with a longitudinal case study of a public sector organization. We believe that Archer’s approach incorporates the structural (ideal and material) and agential aspects of social life without embracing the limitations of ‘duality’ and thus can be utilised very fruitfully in future research for theorising stability and change in management accounting practices.
Introduction

Since the introduction of Giddens’ structuration theory (1976, 1979, 1981, 1984) in accounting (Roberts and Scapens, 1985; Macintosh and Scapens 1990), it has become one of the dominant alternative approaches to explore accounting practices, especially management accounting practices (Busco, 2009, Coad and Herbert, 2009 and Englund and Gerdin, 2008; Baxter and Chua, 2003; Englund et al., 2011). In his theory, Giddens (1979, 1981, and 1984) suggested the notion of ‘duality’ of structure and human agency thus contributing to the century-old debate of structure and agency. Since its arrival in mid 80’s, Giddens’ notion of duality has inspired many accounting studies without much critical scrutiny or development of this theoretical position (Baxter and Chua, 2003). Giddens’ idea has also influenced another seminal paper that has ‘duality’ at its core, namely, Burns and Scapens (2000). However, this unique characterisation of structure and agency has been subject to severe criticism by contemporary sociologists (Porpora, 1989; Thompson, 1989; Archer, 1982, 1995; Stone, 2005). These criticisms have rarely resonated in accounting literature (Englund and Gerdin, 2008; Englund et al., 2011).
While there have been adaptations of structuration theory resulting in models of management accounting change (Burns and Scapens, 2000), debates about whether any particular work of accounting researchers faithfully reflects the core spirit of structuration theory (Boland, 1993; Englund and Gerdin, 2008), the basic tenets of theory and its implications for accounting research remain surprisingly unchallenged in the accounting literature. This paper is an attempt to extend this debate by identifying the inherent limitations of Gidden’s theory of structuration and its manifestation in the accounting literature, especially with regard to management accounting research. Based on this critique and drawing on previous studies, the paper offers an alternate explanatory model inspired by ‘dualism’, adopted from Archer’s (1995) morphogenetic approach with empirical illustrations from a longitudinal case study on management accounting change. More specifically, the purpose of this paper is to present the morphogenetic approach as a methodological basis for understanding and explaining stability or change in management accounting. The morphogenetic approach identifies the ingredients of any explanation of social change, namely structure, culture, and agency, and the generic form of their interrelation. Porpora (2013) argues any particular social change or stability (in our case management accounting change and stability) will need to be explained by the particular structures, by the particular cultures, and by the particular agents involved. In itself, the morphogenetic approach identifies the inescapable form that every effective account of social change (or stability) must take when fully explicated (Porpora, 2013; pp.26)
The paper is divided into four sections. First, the paper briefly describes Giddens’ conceptualisation of structure and agency and its unique features. Second, the paper highlights the inherent problems in Giddens’ conceptualisation of structure and agency and how these manifest in management accounting research. This section, in particular, argues why the structuration and duality based studies, in our view, present an incomplete story of a) conceptualisation of management accounting, and b) change and stability therein. This is followed by a section introducing Archer’s (1995) morphogenetic approach and considering how it can be used in management accounting research using a case study. This section, in particular, demonstrates how the Archer’s morphogenetic approach provides us the explanatory programmes for fuller and deeper understanding of management accounting change. Final section summarises and concludes the discussion.

**Fundamentals of Structuration Theory: Structure and Agency**

In contrast to the emphasis that methodological individualists and collectivists place on either individuals or social structures as a proper unit of social analysis, a postmodernist shift in social theory resulted in the emergence of various alternatives to address the issue of structure and agency (Sayer, 2000). Structuration theory appears prominent amongst these alternatives. The most distinctive feature of Giddens’ theory was not only the rejection of notions of structures advanced by methodological individualists and collectivists, but also the rejection of realist notions of ‘dualism’, *i.e.*, the independent existence of material structures that condition agents’ actions and the power of human agency (more on this later). Dismissing the effect of material structures on conditioning agents’ actions, Giddens’ commented that “such conceptions are closely connected to the
dualism of subject and social object; ‘structure’ here appears here as ‘external’ to human action, as a constraint on the free initiative of the freely constituted subject” (Giddens, 1984; p16). Instead, Giddens (1976, 1979, 1981 and 1984) advanced a different conceptualisation of ‘structure’ and suggested that there is a mutual dependence of individual human agency and structure. According to Giddens, social structures do not exist independent of human agency. Structure can be identified as memory traces in the minds of actors in the form of rules and resources, which are involved in the transformations and reproduction of properties of social systems. These rules and resources are instantiated by the agent only when action takes place, and thus they structure behaviour. Giddens suggested that every action involves human agency as well the instantiation of structures (i.e., rules and resources in the minds of actors), thus forming a ‘duality’. He further claimed (1984) that agency and structure operate simultaneously and in a recursive manner in the actions of agents. It depends upon which way we look at the action; if we look at one side, we see structure; if we look at the other side, we see human agency (Archer, 1995).

**Critiques of Structuration and Management Accounting Research**

Enticing as it may look, many contemporary sociologists, especially realists, have highlighted some serious shortcomings in the fundamentals of structuration theory (Porpora, 1989; Archer, 1982, 1995, 2000; Sayer, 2000). These shortcomings are
concerned mainly with the conceptualisation of structure and agency. They are briefly discussed below.

The most serious concern is the theory’s denial of material relational conditions (material structures) that are prior to and that condition human action (Thompson, 1989; Archer, 1992). Critics argue that Giddens’ conceptualisation of structure does not fully account for the material constraints that are faced by an agent and that have no link with the agent’s mental perceptions (Porpora, 1989; Thompson, 1989; Archer, 1992, 1995). Thompson (1989, p.72) posed: “When a school leaver is faced with the choice of joining a youth training scheme or signing on the dole, the constraints which operate are not simply those of comprehensibility or sanctioning…[T]hese restrictions do not stem from semantic and moral rules but from structural conditions for the persistence (and decline) of productive institutions.”

Accounting studies inspired by structuration theory do not rule out the existence of material structural conditions and their impact on the actions of agents. For example, in Macintosh and Scapens’ (1990) paper, the economic downturn in the State of Wisconsin is one such structural condition that exists independently of the perceptual grasp of any of the actors involved in the case study. These structural conditions limit the ‘range of alternatives’ (Thomson, 1989), i.e., all state institutions could not get the same funding that they would have received were the economy thriving. Similarly, Conrad (2005)
stated that the economic and political structures surrounding the gas industry in the post-privatization era were markedly different from in pre-privatisation times. Realists would argue that these changed structures were not a figment of the imagination of any agents operating in the gas industry and had a real influence on the actions of those agents. It is interesting and somewhat puzzling to note that despite clear evidence of the existence of material structural conditions in their empirical work, these researchers still chose structuration as the preferred theoretical lens.

It becomes less surprising, however, when one considers Giddens’ response to the existence of material structural conditions in society and their absence in structuration theory. In an interview with Giddens, Christopher Pierson put to him that unemployment may present itself as a powerful external structural force to an agent in the job market and consequently does not leave the agent with an option to do otherwise (Giddens and Pierson, 1998, quoted in Stones, 2005, p.35). Giddens’ reply, according to Stones (2005), came across as ‘exasperating’. He replied, “I wouldn’t dispute that at all-it certainly is true for an individual facing the labour market. But I do not think that it in any way compromise[s] the logic of the relationship between agency and structure” (Giddens and Pierson, 1998, quoted in Stones, 2005, p.36).

While material structures are not given any ontological position in structuration theory, the emphasis is instead placed on ‘ideal’ or ‘cultural’ structures, i.e., stocks of knowledge
to interpret the social world and to make judgements about what is right and what is wrong. According to structuration theory, and this is the central tenant of duality, these stocks of knowledge have a ‘virtual’ existence in the minds of actors and are drawn upon at the time when actors indulge in practices (Porpora, 1989). It is crucial to note that in the structuration scheme of things, these ‘stocks of knowledge’ do not have an independent existence, because if they did, this would lead to a ‘dualism’ (of ideas and agency) rather than ‘duality’, which would be an unacceptable position for supporters of structuration.

Accounting researchers find Giddens’ concept of structure to be very useful in conceptualising and explaining accounting practices (Macintosh and Scapens, 1990; Burns and Scapens, 2000). Accounting studies have conceptualised accounting as a ‘structure’ that gets drawn (at the time of action) by agents while performing accounting and organizational practices and in the process gets reproduced, thus forming a duality. Englund et al. (2011), while surveying the accounting literature utilising Giddens’ theory, concluded that accounting researchers have conceptualised accounting mainly in two ways. It is conceptualised either as a generic set of concepts (profit, cost etc.) that act as interpretive or evaluative schemes, or as formal systems or artefacts (e.g., budgeting rule book or costing system with an organization). While dissimilar in some sense, both are ‘stocks of knowledge’ and inform action.
However, the important question here is whether accounting can be considered as a `structure’ in the structuration theory sense. For accounting to be considered a `structure’ in the structuration theory scheme of things, it has to satisfy two conditions: (i) it should have no independent existence outside of actors’ minds (i.e., virtual), and ii) it should not have any manifest existence before the time of action. In modern day society, many forms of knowledge, especially those in codified forms, like accounting, exist more in books and manuals than in the minds of actors (Archer, 1995, p108). This, in turn, means that this knowledge is not ‘virtual’, i.e., it does not lie only in the form of memory traces; it also means that the only moment of existence of this ‘knowledge’ is not the time of action. It exists prior to that moment when an agent draws upon it. While it is true that organizational actors carry many rules in their heads, this still does not deny such rules’ independent and a priori existence (Willmott, 2000).

Hassan (2010), in a study of the implementation of a new costing system in a hospital, explored how professionals like accountants and physicians draw on their stocks of knowledge to influence the emergent costing practices. However, can it be claimed, in the context of Hassan’s (2010) case study, that stocks of knowledge of medicine and accounting exist only in the minds of agents? If anything, we all know that the bulk of this knowledge exists in books and journals. Nonetheless, as explained earlier, accepting the a priori and independent existence of knowledge means giving an independent
ontological status to these ideas. This, however, is a position that runs contrary to the basic tenets of structuration.

In conceptualising agency, critics argue that Giddens runs into two problems. First, in the absence of material structural conditions, the power of human agency becomes overemphasized (Archer, 1995). For example, Giddens contended that at any point in time, the agent “could have done otherwise” and “an agent who has no option to (act otherwise) is not an agent” (Giddens, 1984). Thompson (1989) suggested that contrary to Giddens’ characterisation, some agents happen to be in position of having more options than others, but then, even they may come across constraints, external to their perceptions of meanings and morality, that leave them with no option but one. We will quote only one piece of accounting research here to endorse this view, and ironically, this research is also inspired by structuration theory. As the main finding of their paper, Jayasinghe and Thomas (2009) wrote: “The case study suggests that it is the strongly prevailing patronage based political system, as mobilised into the subaltern social structure, which makes individuals unable to change and exercise their agencies…(p.351)”

The second problem with respect to agency, which arises due to the denial of prior material structural conditions, is the motivation of agents (Archer, 1995). The realist account of ‘positions’ (more on this later) and their inter-relationship also incorporates interests which are bundled together in the ‘positions’. These interests furnish the agents
occupying those positions with the motivation to act in a certain manner. For example, the capitalist structure provides the position of capitalists with an interest and with the power (and hence motivation) to make more profit. However, the denial of any material structural context means that agents, in Giddens’ theory, have no vested interests to act one way or another. Accounting studies applying structuration theory (even though the theory does not recognise it) have clearly demonstrated agents’ vested interests arising out of their positions. These are discussed below.

Lawrenson (1992), in a structuration inspired study, claimed how the structure of industry facilitated the dominance of engineers over accountants in controls in the British railway engineering industry. It was an interesting claim, as in Giddens’ scheme, there is no theoretical place for agents’ motivation coming from their positions in material structures. In the context of exploring resistance to accounting change within a division of a large multi-divisional firm, Scapens and Roberts (1993) commented, “It is important not to dismiss resistance to accounting change as illogical and emotional. Such resistance is probably informed by a whole variety of very real concerns and fears.” Obviously, these ‘real concerns’ are linked with the real interests of agents occupying certain structural slots within an organization or society; the same was documented by Conrad (2005) in her study of the UK gas industry.
Critical Realism and Morphogenetic Approach (CR/MA)

In order to address the problems outlined above, we would like to propose Archer’s morphogenetic approach (1995) as a working methodology based on Bhaskar’s critical realism (1979 and 1997). The utility of CR/MA for undertaking organizational research is well established due to its growing popularity amongst management researchers (see Ackroyd and Fleetwood, 2000; Willmott, 2000; Mutch, 2002; Fleetwood and Ackroyd, 2004; Leca and Naccache, 2006; Llewellyn, 2007). In accounting research, Modell (2009), while advocating a case for mixed method research, has also suggested the use of critical realism as a theoretical choice. However, while the work of some critical accounting researchers, especially those who are critical of post-structuralist writing and analysis (e.g., Peter Armstrong (Armstrong, 2006)) resonates strongly with the basic tenets of CR, this theoretical combination (i.e., CR/MA) has rarely been used in the accounting literature to study management accounting and control. This approach, in our view, should provide a better insight into accounting practices, especially management accounting practices and their changes. This is because this approach not only gives importance (in terms of giving independent ontological status) to all aspects of social life, i.e., structure (including material and cultural) and agency, but also provides clear linkages between them.
For critical realists, when agents form collectivities (organizations, societies, economy), these have ‘emergent powers’ which differ from those of individuals. For example, the power of bureaucracy to work more efficiently is an emergent property that cannot be reduced to the powers of individuals. These collectivities are a system of objects and positions that are linked with each other internally or contingently. Two objects are said to be internally related when these (either one or both) need one another for existence (Sayer, 1992). For example, the relationship between landlord and tenant is an internal relationship in the sense that neither can exist without this relationship. Objects and positions that are linked with one another but do not need each other for existence are said to be contingently linked (Sayer, 1992) while the relation between an individual and a lump of earth, for example, is external in the sense that either object can exist without the other (Sayer, 92; p 89). While external or contingent relations can be of great importance to the two objects, this does not change the fact that the two objects can exist independently of each other.

For realists, structures (material or cultural – more on this later) have ‘causal powers’, i.e., these can cause social events. For example, the economic structure of free markets causes firms to compete with each other or can cause the capitalist to extract surplus or labour intensification etc. However, these causal powers may or may not be manifest, thus causing social events, depending upon their interaction with other structures at work. For example, the political structures may deter the capitalists from extracting labour from the
working class to the maximum (Burawoy, 1983). Thus, according to critical realism, social reality is 'multilayered'.

Social events and their empirical manifestation are the 'surface' level of reality. This surface level reality is caused by a 'deeper' level reality, i.e., structures and their interaction with each other and with the powers of human agency. Structures are inhabited by agents. For example, the positions of the capitalist and the labour are occupied by agents who have powers and properties that are different from those of the positions. Agents’ powers include the power to organize and reflect. Agents weigh the structural pressures and decide upon the 'right' course of action to take. Structures do not force the agents; they simply assign differential price tags to different courses of action (Archer, 1995). A capitalist may decide to go against the pressures of economic structure and not compete. However, the price that the capitalist may have to pay to go against the material structural pressures can be as high as the loss of the position itself (Sayer, 1992). Thus, in critical realism, explaining a social phenomenon will involve analysing first the structures at work and then the agential powers and properties of the agents living within those structures. Critical realist explanations will thus involve a temporal and analytical distinction between structure and agency. This analytical and temporal distinction is called 'analytical dualism'.
While critical realism provides a basic meta-theoretical framework, we need a working methodology for operationalizing the analytical dualism to explain social phenomena. Archer's morphogenetic approach (1995) provides us with this explanatory framework. Drawing from Lockwood's (1964) distinction between 'parts' of society and people, Archer (1995) devised a methodological scheme that can help researchers explain social change or stability.

**Structural Conditions-Time T1**

Since every generation of actors, whether in the corporate arena or in society in general, start their life enmeshed in a structural context, the first task for a researcher is to identify these structural conditions (Archer, 1995) or ‘parts’ at time T1. According to Archer, a distinction can be made between material and ideal (or cultural) structure. These are discussed below.

**Material Structures**

Material structure is composed of the internal relations between objects that are primarily human or material. These structures are, in turn, internally or contingently linked with other structures. In the management accounting context, if the object of investigation is organizational controls, the first task of the researcher should be to determine the internal and contingent relations relevant to the organization itself. The relationship between a
line supervisor and the labour in an organization is an internal one because the two positions cannot exist without each other (Willmott, 2000). On the other hand, the relationship between positions of managers in different functions, *e.g.*, marketing and finance, is contingent in the sense that both positions can exist without each other. The organization in focus, in turn, is always linked with other organizations, either internally or contingently. These are second-order relationships, and it is important for researchers to determine these second-order relations because these will have a bearing on first-order relations. The purpose of analysing these first-, second-, or where necessary, third-order relations is to determine the power and interests of positions relevant for budgets within an organization under investigation or other linked organizations. These powers and interests of positions are the conduits of structural pressures which affect the present generation of agents occupying these structural positions. For example, in a capitalistic economy, an organization is linked internally with shareholders (second-order relations), who have certain powers and expectations *vis-à-vis* individuals occupying senior management ‘positions’. These second-order relations operate within further larger relations (third-order relations), *e.g.*, the legal and economic institutions of the State. Depending upon the nature of these higher level relationships, certain powers are vested in capital providers *vis-à-vis* senior managers (second-order relations) of corporations, which in turn, influence the powers and interests of senior managers *vis-à-vis* their subordinates (first-order relations). The entire range of relationship dynamics helps explain the conduct of the different parties within and outside the organization, thereby influencing the nature of the management accounting and control practices.
In a structural context, it is possible that there are agents that find themselves in a better position than others (due to existing rules, relationships and resources). These distributional advantages have, of course, arisen due to previous interaction between agents. The structural context thus creates incentives on the part of some agents to lodge an effort to either change the system or, for those in a position of advantage, retain it. This is an example of a relationship of contradiction. The internal relationship between the superiors and subordinates in a corporation is that of contradiction in a typical capitalist system. Senior managers’ success is to bring the labour (cost) down, whereas the labour’s interest is to hinder such success. These relations of contradiction can exist in first-order relations, but are often influenced by second- or third-order relations. On the other hand, it is also possible that the relations making up a social object are those of complementarity. In this case, agents occupying structural slots would have no structural pressures to change the system. In many accounting studies, we see examples of first-order relations, whereby senior managers are not concerned about economic efficiency and the intensification of labour. Lax management control practices within these organizations are a function of second- and third-order relations within which these first-order relations are working (Uddin and Hopper, 2001).

The structural matrix at time T1 pushes the agents to adopt certain strategies depending upon the nature of the relations (internal or contingent) or the inherent contradiction or
complementarity in the relations. Archer suggested that this results in four types of structural pressures impinging upon the agents occupying structural slots (see Table One).

[Insert Table One]

If the relationship between positions within organizations or between organizations (first- or second-order relations) were that of internal necessity and contradiction, this would ‘push’ the agents belonging to these positions/organizations to adopt a strategy of ‘compromise’. This is understandable given that the existence of one position/organization is linked to the existence of the other. If acting in accordance with Archer’s scheme, line managers and subordinates within an organization will follow a strategy of compromise. The nature of this compromise will be a function of the resources available with position holders (e.g., skilfulness of labour), second- and third-order relations within which these first-order relations are operating (State policy, e.g., labour welfare and redundancy laws), and at the same time, it is influenced by certain other contingencies, e.g., labour supply and demand, availability of new technology etc.

On the other hand, if two positions/organizations with contradictory relations are contingently linked, then the agents will not hesitate in following a strategy of ‘elimination’ of the other position/organization. As explained earlier, the relationship
between managers of different functions within an organization is that of contingency; it is also a relationship of contradiction (Armstrong, 1987). Rivalry amongst professional groups within organizations (Ezzamel and Burns, 2005) is a reflection of a strategy of ‘elimination’ being followed in the fight for the structured vested interests. This contingent contradictory relationship will also have a bearing on the shape of the management control practices of the firm, e.g., operational vs. financial controls as the predominant mode of control within a firm. Internal relations of complementarity will result in agents following a strategy of ‘protection’ of the status quo. A good example is relations between senior organizational management and consultants. The latter cannot exist without the former and both groups complement each other (Sturdy, 1997). Contingent relations of complementarity will result in agents following a strategy of ‘opportunism’. Agents will protect the status quo only until other more profitable relationships become apparent. On finding these opportunities of resource advantage, the relationships can turn hostile. Archer (1995; p.226) gave the example of mercantilism, which according to Marx, paved the way for the move to capitalism from earlier feudal modes of production. Profits associated with trade created a situation where the interests of mobile wage-labour converged with capitalists setting up manufacturing facilities as opposed to feudal land owners.

**Cultural or ideal structures**

Understanding the material structural dynamics at time T1 is central for explaining the management controls in place and the structural pressures on agents to either change or
retain them. However, a cognizance of the ideal structures at time T1 is also very important. Agents are not only enmeshed in structural conditions, but are also immersed in ideal (or cultural) structures. The ideal structures, according to Archer, represent a ‘world of ideas’ to which the law of non-contradiction can be applied, thus roughly equating it with Popper’s (1979) ‘World Three’. Popper (1979) distinguished between three worlds: ‘World One’, which refers to physical states and objects; ‘World Two’, which refers to mental states and processes; and ‘World Three’, which refers to the products of mental states. So, all theories, beliefs and writings which are a product of the human mind are categorised by Popper as ‘World Three’ or, as Archer put it, the ‘contents of libraries’ (Archer, 1995; p179). All these theories, beliefs and writings which are in a propositional form *i.e.* which make certain truth claims and thus stand in some logical relationship to one another are called ideal structures or culture (Archer, 1995; p180).

Ideal structure or culture possess the same characteristics which are the hallmark of material structure, *i.e.*, these are independent and prior to any social interpretation or actions based on these, and have a conditioning effect on socio-cultural interaction. Any proposition logged on to society’s propositional register will remain there independent of our reception and interpretation of it. Accounting, in Archer’s (1995) theoretical scheme can be conceptualised as ‘culture’ or ‘ideal structure’. For example, what is accounting? According to one proposition, it is a neutral technology designed to measure, record and report objectively economic transactions. However, a contrary definition of accounting is that it is a partisan technique with a conglomeration of concepts designed to benefit a
particular group at the expense of others (Tinker et al. 1982; Cherns, 1978). These two propositions or truth statements have been logged onto society’s propositional register by their respective authors. These propositions influence agents in terms of their conditioning effects.

Like with material structure, Archer (1995) also elaborated on the conditioning effects of ideal structures (culture) in terms of the likely course of action to be followed by agents depending upon the relationship between the ideas that they hold. Ideas, according to Archer, can have a relationship of logical contradiction or consistency. The above two ideas about ‘what is accounting’ provide an example of a logical contradiction in the sense that both cannot be true at the same time (i.e., partisan vs. neutral). The relationship between ideas can also be either that of internal necessity (i.e., drawing one necessarily means drawing the other) or that of independence. This ‘two-by-two’ matrix thus gives four possible scenarios within the realm of a cultural system and four corresponding ‘likely’ courses of action (strategies) for agents subscribing to these ideas (see Table Two).

[Insert Table Two]
The conditioning effect of ideas on agents’ likely strategies is essentially the same as was the case with structures. If ideas are internally related but contradictory, then a strategy of compromise will be followed. Agents will make corrective repairs to their respective ideas to ensure that these are not in contradiction to one another. On the other hand, if two contradictory ideas are contingently linked, followers of respective ideas will launch a frontal attack to try and eliminate the other idea. Ideological fights between different groups are an example of this.

For example, public sector entities should be run either solely for the purpose of public welfare without discrimination or with consideration of economic efficiency and cost effectiveness (Politt, 1995) are two ideas for public management. These ideas, according to Archer’s (1995) theory, are contingent (invoking one does not involve invoking the other) and logically contradictory (equity vs. cost efficiency) (Politt, 1995). These ideas will be drawn by agents in their efforts to bring about or resist changes at time T2. In any case, at time T1, these ideas stand independently and have the ability to condition agents’ actions at time T2. For example, the idea that workers of the same ethnicity as their supervisor should be treated ‘leniently’ (Wickramasinghe and Hopper, 2005) will have a conditioning effect on the supervisor’s behaviour and thus shape the kind of management controls in place. However, it is important, at least from a morphogenetic perspective, to separate the conditioning effect of structure from culture. For example, in Dent’s (1991) study, is it the change in the structural pressures that demand that senior executives in the
Euro Rail case-study to extract more economic productivity from labour? This will be a scenario when the senior executives are being evaluated on the basis of economic productivity. On the other hand, another situation could be that the senior executives have become more concerned about economic efficiency because of the change in the ‘culture’ of the place. At times, the two, *i.e.*, structure and culture, can work in opposite directions causing agents to choose one at the expense of the other (Wickramasighe and Hopper, 2005). Agents at times may bow before structural pressures; however, history is full of examples of altruistic choices made by social agents, thus sacrificing material benefits for cultural reasons.

*Social Interaction-Time T2*

Once material and ideal structures and their likely ‘push’ on the agents have been identified, researchers should focus their analysis on agents and their powers and actions. Agents take actions (or in-actions) to pursue their interests delineated through a prior structural (or cultural) context. The prior structural context gives some agents the motivation to maintain the status quo whereas others try to change the structure they inherit. The action episode thus involves reflection and strategic action in a fight for either the retention of the structural context or its change. These actions of the agents result in either a change in the structural context (morphogenesis) or its continuation (morphostasis) at time T3. Archer categorised agents into primary or corporate agents. Corporate agents are those groups who have a say in the present structural domain. They
are agents who are articulate and organized (ibid; 258). Primary agents, in contrast, are inarticulate and unorganized. They are used and abused in the fight for change or the status quo by corporate agents in any social change episode. However, in their strategic manoeuvring, corporate agents elicit the support of primary agents, and during this process, many primary agents become converted into corporate agents. The interaction phase thus involves a process of new fragmentations and integrations and a redefinition of corporate agents and primary agents. The end result of this interaction phase is social change (if it takes place) of a kind that no one expected (Archer, 1995). For example, the state-led change efforts in the UK health sector, in the form of new funding-holding arrangements, converted primary agents (general practitioners) into corporate agents (Broadbent et al., 2011). The general practitioners became much more organized and openly resisted the efforts of the State to implement certain management control changes (Broadbent et al. 2001).

**Social and Structural Elaboration-T3**

The end result of social interaction, as mentioned above, is change in all three phases, *i.e.*, changes in structural conditions (or lack thereof), changes in cultural conditions (or lack thereof) and changes in agents (or lack thereof). The first two represent ‘parts’ of the society and the last represents ‘people’. In Archer’s scheme of things, as discussed above, the link between T1 and T2 is vested interests and the situational logic of action. Structural conditions provide agents with vested interests and the situational logic of
action. The next important question is the link between T2 and T3, *i.e.*, what factors contribute to social elaboration in terms of either morphogenesis or morphostasis. This link, according to Archer, is exchange and power (*ibid*, p.296). Each group has certain resources at its disposal. Archer categorized three kinds of resources: wealth, expertise and political sanctions (*ibid*, p.296). It is the exchange of these resources between groups which results in one kind of social outcome or another. For those corporate groups who have a vested interest in the protection of the status quo, the effort will be to employ the resources at their disposal to ensure that the structural conditions remain the same. The primary agents, whose projects are being obstructed in the present scheme of things, do not turn into corporate agents because of their problematic condition. Conversion into corporate agency involves the accumulation and deployment of enough resources and organization with other groups (hopefully with resources) to mount a decent challenge against the vested interest group. The eventual outcome will be a function of who brings what to the table (in terms of resources) and the relations between these resource-holders. If sufficient resources are brought in and there is sufficient organization of those trying to bring about a change, then a change is likely to take place. Efforts by the State to effect changes in the management control practices of the education and health sector in the UK and the countering efforts of the education and medical professionals to resist these changes is a good example of this (Laughlin *et al.*, 1994; Broadbent and Laughlin, 1998; Broadbent *et al.*, 2001).
the above theoretical elements of morphogenetic approach are guidelines for investigators about how to investigate what they seek to explain (Archer, 1995; Porpora, 2013). The morphogenetic approach provides guidelines about how analytically to break up the empirical material in hand to form the three temporal phases as described earlier making up a single morphogenetic cycle, which ends in either change or stasis and represents the start of the next cycle. It is the researchers (accounting researchers) job to develop a theory, practical social theory (PST) in Archer’s terms, applying these guidelines. MA approach will be assisting to account for the ‘who, ‘when’ why’ and ‘what’ of change. Archer herself using the Morphogenetic Approach (Archer 1995) examined two morphogenetic cycles to advance a PST about the social origins of State educational systems and their effects (Archer, 1979).

In the following section, we present a case study which illustrates the use of the morphogenetic approach for explaining management accounting change. Since the purpose is to introduce this research approach to accounting researchers, we have described our data collection and analysis efforts with three distinct analytical phases of morphogenetic approach, i.e., T1, T2 and T3.
Case Study

The case study concerns a public sector organization, namely, the Civil Aviation Authority (CAA) in Pakistan. CAA was set up by the Pakistan Air Force (PAF) in 1984 and had been continuously headed by serving or retired PAF officials until 2006. CAA’s primary functions include airport management, air navigation control and the regulation of aviation activities. Even though it has an independent board, all important decisions are made by the controlling ministry, in this case, the Ministry of Defence. Two important features need to be noted. First, CAA was a fairly profitable and cash-rich organization, unlike most of its counterparts. Second, apart from the relevant ministries, the organization was subject to the operational control of the PAF.

CAA has undergone a number of changes, especially in relation to management controls. The efforts to change management controls to public sector organizations began when an ex-Citibank senior executive became the Prime Minister of the country in 2004. His appointment as Prime Minister, which was seen as a political strategy of the then president of Pakistan, coincided with the economic and political pressures that Pakistan faced (Mahmood, 2007). As part of the governance reforms, the Prime Minister demanded all public sector entities adopt business-like management practices. CAA was on the top of the Prime Minister’s list of reforms. In 2006, the Prime Minister appointed the former national head of a multinational firm as Director General (DG) in order to
provide an impetus for change within CAA. The new DG (pseudonym FR) subsequently created a change team, which mostly comprised young officers of CAA who had a business degree and thus essentially subscribed to the same commercial ideals that FR and the Prime Minster held. At the same time, some business managers with private sector experience were hired for making the desired changes. The new DG, newly hired business managers and the change team thus created a pro-change managerial bloc that attempted to bring about a number of changes in management controls of the CAA. While the broad research involves an explanation of all the changes that took place in the various aspects of the management control systems of CAA, for this paper, we are going to focus only on two aspects, i.e., changes in the financial information system and in cost control.

In line with the requirements of the morphogenetic approach, we need to analyze the change (or lack thereof) in three distinct analytical phases: T1 (year 2006), the time when the new DG joined; T2, the interaction sequence between different agents (2006-2008); and T3, the end result of the interaction sequence (2008). Our active involvement with the case site started towards the end of 2007 and lasted for around ten months, i.e., until September 2008.
In order to understand the management control practices and changes therein, as researchers, we first needed to understand the structural (material and ideal) conditions at time T1. These conditions had themselves arisen out of the results of social interaction in the previous morphogenetic cycle(s). These were the conditions which produced the particular type of management control practices within CAA at time T1. This meant that we needed to identify internal and contingent relations within and around CAA and whether these relations were those of facilitation or contradiction. We also needed to understand the ‘ideas’ (cultural conditions) prevalent within and around CAA at time T1.

In terms of data collection and analysis efforts to identify the structures at work, the following line of questioning given by Sayer (1992) was extremely helpful: “What does the existence of this object (e.g. CAA), in this form, presuppose? Can it exist on its own as such? If not, what else must be present? What is it about the object that makes it do such and such?” (p.91). These questions, as suggested by Sayer (1992), may appear simple, but the answers can be quite complex and can help in identifying objects and positions that together form a structure. These questions indicate the retroductive mode of inference, which is a hallmark of critical realism (Danermark et al., 2002). According to this mode of inference, the researcher tries to identify the transfactual conditions which must be present for the phenomenon at hand to take place. The phenomenon at hand is
normally at the level of the ‘empirical’, and transfactual conditions are at the level of the ‘real’, i.e., structures and their generative mechanisms. The identification of such structures requires a limited regress from the level of the empirical and actual to the level of the real. This will normally take the form of tracing actions back to rules and then to structures (Sayer, 1992; p.112). Identifying the structures at CAA involved such tracing back. For example, during our interviews with accounting department officials, we observed that the organization had a fairly unique financial information system. We traced it back and found that it was due to the financial rules and regulations applicable to CAA. These rules, as we learnt, were applicable to all public sector entities operating under different ministries. This eventually led us to identify the internal and necessary relationship between CAA, the Ministry of Defence, the Ministry of Finance and the Auditor General’s Office, due to which certain accounting or budgeting practices have emerged. Our interviews with employees were thus an important source of information for identifying such structures; we asked them about their various actions (budgeting and accounting practices) and their rationale.

Other important sources of information included a literature review to understand the broader politico-economic conditions of the country. This review included a review of the historical literature of CAA, as well as the broader politico-economic historical literature, e.g., commentaries by analysts on Pakistan’s political and economic situation and about the public sector in general, and reports by international and national institutions, such as by Transparency International and by the National Anticorruption Commission. In order to develop a better understanding of the structural conditions faced
by managers of public sector organizations, we also collected news reports relating to CAA and related organizations which had appeared in the national and international media in the five years preceding the research\textsuperscript{xiv}. Another important source of information on the structural environment in which managers of CAA were enmeshed included a review of official documents\textsuperscript{xv}. The data collection and analysis methods described above helped us in identifying the material and ideal structures at work within CAA. These are discussed below.

**Material Structures**

As far as material structures were concerned, CAA comprised a number of internally and contingently related positions. Internal relations were those between superiors and subordinates within each functional area whereas the relationship between functional areas was that of contingency. These functional areas, e.g., air traffic control, passenger facilitation, project management, finance *etc.* were called directorates. There were 12 layers of organizational hierarchy within each directorate with corresponding pay groups. Pay groups 1 to 6 were those of ‘staff’ or the workers (pay groups 1-3 being the manual worker and 4-6 being the supervisors), whereas 7 to 12 were those of ‘officers’. PAF officers brought with them a strict ‘command and control culture’ to CAA which resonates with military institutions all over the world (Osiel, 2009). Workers (manual workers and staff members) did not have any ‘voice’, and any efforts by them to organize themselves were immediately crushed by successive DGs as the field work revealed. Hence, unlike most other public sector organizations, there was no formal labour union at
CAA as this entity had historically been founded and run as a military institution. The lack of a worker voice was further compounded by the presence of a huge number of temporary workers (daily wagers) with no usual employment rights, such as medical allowance, housing facilities *etc*. Because of their fragile employment condition, they were often ironically considered as ‘best employees’ by senior management.

In Critical Realist terms (Sayer, 1992; Archer, 1995) CAA was internally related with three other organizations, thus forming a larger structure. These included PAF, the Ministry of Defence and the Ministry of Finance. These organizations were internally linked because CAA, in its present form, could not exist without these organizations. The Ministry of Defence was the parent ministry that controlled CAA, and it had the right to approve or reject any decision made by the CAA board. Important decisions, *e.g.*, where to set up an airport or whether a particular airline should be allowed to fly within Pakistan, were all taken primarily by the Ministry of Defence. Appointments of Board members including the DG (the executive head) of CAA were also made by the Ministry of Defence. The relationship between CAA and the Ministry of Defence was that of contradiction, because CAA wanted to retain control over its strategic affairs but was not allowed to do so by the Ministry of Defence. For similar reasons, the relationship between CAA and PAF as well as the Ministry of Finance was also that of contradiction. As mentioned before, PAF would regularly send its officers to CAA on contracts ranging
from one to five years. These officers would occupy important positions that could have otherwise gone to non-military background CAA managers.

Similarly, while CAA was a profitable and cash-rich organization, it needed to prepare its budget and accounts in accordance with the requirements of the Ministry of Finance. A member of the Ministry of Finance would sit on the board of CAA to approve its yearly budget. According to one senior manager of CAA, “We wanted to earn and burn, but they wouldn’t allow us”. When an internal relationship is that of contradiction, as was the case between CAA and the other three organizations, it leads to a situational logic of compromise (Archer, 1995). The broad contours of the financial information system and cost control within CAA at time T1 were a reflection of this ‘compromise’ between CAA and the three internally related organizations.

**Ideal Conditions**

The central organizing idea of CAA was that CAA focused on passenger safety and, to a lesser extent, passenger comfort (Burawoy and Luckacs, 1991). This was reflected in our interviews with a number of important PAF officials who joined the organization at the time when CAA was formed. Commercial success was important only to the extent that it would help in achieving the above two aims. The second ‘idea’ at time T1, which was important for our purpose here, was the role of accounting. The first DG (a serving air marshal) brought with him some trusted retired finance colleagues from the air force. The
purpose of hiring these colleagues was, in the words of one first-generation CAA manager, ‘to make sure that his tail was clear’. PAF officials wanted to create a system of accounting to ensure that there was no embezzlement of funds: “What we didn’t want was a ghapla (fraud/embezzlement of funds). Our reputation was at stake. Air Force reputation was at stake. We couldn’t afford that... ”. This idea and its reinforcement over the years created a strong belief within the accounting managers that they were the custodian of the funds and financial records. However, this identity of accountants precluded any notions of them being stakeholders in the business decision making. This was a message that we encountered in all our interviews with senior managers in the accounting group.

Another idea at play at time T1 was the role of senior managers within the organization. Our field work revealed that senior managers assumed their role to be that of ‘protector’ or ‘godfather’ of their subordinates. A senior manager in a department who could not protect his men was not worthy of being a senior manager; he could punish an employee himself, but could not let ‘others’ cause harm to him. Senior managers who could protect their men, their budget and their turf were celebrated, whereas those who could not were ridiculed as ‘weaklings’. For example, referring to another colleague in a strongly disapproving manner, one senior manager commented: He is a weakling. [He] could not protect his man from the inquiry committee. You can punish the men working for you, but you cannot let others cause them any harm."
In line with ideal and structural conditions, the financial information system emphasized multiple layers of authorization, approval and documentation to ensure that there was no embezzlement of funds. This was in accordance with the requirement of the Ministry of Finance. This, in turn, gave a lot of power to the Directorate of Finance within CAA. All other functional areas needed repeated approval from the Directorate of Finance for incurring developmental and routine expenses. This created a relationship of contradiction between the Directorate of Finance and other directorates in CAA. Another implication for structural and ideal conditions prevalent at time T1 was that the financial information system was never used for business decision making. A professional accountant was hired at the inception of the organization to produce financial information in accordance with the customs of ‘modern’ organizations. However, from very early on, this activity was considered unimportant: “We didn’t even know what he (person hired for preparing financial statement) was doing. Preparing the balance sheet was...what should I say? ...a routine matter. The DG never looked at it. No one ever did.”

As far as cost control was concerned, this was also in line with the demands of the structure already in place. There were no strict financial efficiency expectations of the Ministry of Defence from CAA. So the pressure on the senior managers of CAA to extract surplus labour from their workers was minimal. Cost control involved only ensuring that the expenses incurred were in accordance with the approved budget.
Budgeting was incremental in nature, which meant that drastic cost cutting measures were never expected. The financial information system and cost control practices described above remained more or less unchanged from the day of the formation of CAA until 2006, which is when a new DG took charge of the organization.

**T2: Social Interaction at CAA**

The social interaction phase of the study involved a focus on the perspectives, projects, strategies and actions of the present generation of agents. These perspectives and projects arose out of the material and ideal conditions at time T1. Data collection and analysis in this phase was critically dependent upon the interviews with key agents. When our data collection period started, change efforts were underway. Some of the changes had obviously been initiated before the data collection efforts began, but this was a matter of the recent past and the memories were fairly fresh in the minds of actors. In total, 52 interviews were conducted with different social groups and agents within and around CAA (see table 3 and 4 for details). A social group, according to Archer (1995), is a group of agents sharing the same life chances. This made it important for us to interview members of different directorates, senior management, permanent workers, and temporary workers and agents belonging to the Ministry of Defence etc. In our case, data collection from different social groups was quite challenging. When we reached the data site, the relationship between the workers and senior management (especially pro-change senior management) had become quite strained. In an environment of mistrust, we had to
tread our way carefully when collecting data. We devised two strategies to ensure that we were seen by our respondents, especially the workers, as trustworthy independent researchers. First, we made our contact with workers through a media correspondent, who had their complete trust. He was covering the change program for a major newspaper and had a sympathetic leaning towards the workers. Second, we used two different locations to conduct most of our interviews with workers and the management.

The other most important source of information was a review of the directives and memos written from the DG’s office. These directives provided us a valuable insight into the perceptions, intentions and actions of the DG and his change team. The perspectives, aims and actions taken by different social actors were coded and compared across the social groups to develop an understanding of the conditioning effects of structures and the strategies of different actors.

Efforts to Effect Changes

The social interaction phase in this study started when FR joined as DG of CAA. Because of his commercial background, he subscribed to ideas which differed from those of his predecessors; nothing else had changed much in the larger structure of the State and its institutions. The military was still a dominant institution. The political system remained unchanged where the interference of politicians and the military in the affairs of state-run institutions was considered normal. Due to its poor economic performance, the State had become heavily indebted to international financial institutions. This situation pushed the
State to either comply or, more importantly, ‘appear to comply’ with the instructions of the international donor or financial agencies (Hopper et al., 2009). This was the context in which FR was appointed by the Prime Minister ‘to bring about change in a public sector organization that had not been able to do much in the past’ (Interview Excerpt of a Senior Pro-change Manager). This context meant that the structural pressures and interests associated with the position of DG were different from those of his predecessors. Also, as mentioned above, he had ideas which were radically different from those of previous DGs. The same was the case with members of the change team and recently recruited business managers. For example, regarding organizational profitability, one of the pro-change managers said: *"Yes, it (CAA) is profitable but it can become much more profitable... For an organization to become dynamic and vibrant, its financial muscle should be strong."

Similarly, with regard to the accounting information system, pro-change managers felt that the accounting information system was too outdated and inefficient. It required unnecessary authorizations and thus delayed capital spending. Pro-change managers are clearly, in Archer’s terms, corporate agents with clear objectives and sufficient power and organization for the pursuit of those objectives (Llewellyn, 2007). The pro-change group came up with two significant change agendas in order to improve cost control and the financial information system. The first was related to the automation and integration of the financial information system and the removal of any unnecessary steps required for
the authorization of expenditure. In the second, change involved assessing the manpower requirements and cutting the labour cost.

In order to implement these changes, different strategies were adopted by the pro-change managers. Based on our empirical analysis, these strategies can be broadly classified into two categories: consent and coercion (Gramsci, 1971, Burawoy, 1985, Uddin and Hopper, 2001). One aspect of the strategy was to create consent amongst senior managers by tempting them with ‘modern’ scientific management ideas. A three-day vision exercise was set up for the purpose of introducing modern management ideas. Through Harvard Business School readings and a talk by the faculty of the most prestigious school in the country, an effort was made to show that the basic ideas underpinning the CAA management were a relic from the past which desperately needed to be changed. Many directives from FR’s office also emphasized that the introduced changes were the way modern organizations are managed. The second aspect of the change strategy was coercive, which was targeted especially against lower ranked officials, permanent workers and the daily workers/wagers. There was, at times, an implicit and at other times, an explicit threatened use of disciplinary resources to curb any resistance to the proposed changes. For example, on one occasion, FR wrote a memo threatening that those opposing change would be dealt with ‘strictly’. Similarly, some workers, who were believed to be resisting the change, were transferred to distant airports. Similarly, much to the anger and fear of lower-level employees, a directive was issued by FR that the
number of daily wagers at all airports should be reduced by 15%. This drastic action seemed to have caught most of the managers and lower level employees by surprise.

**Change and Resistance Efforts**

These change efforts affected the accounting directorate, senior managers and workers within CAA. Reducing the layers of authorization would have definitely meant a reduction in the accounting group’s powers and thus, this initiative ran contrary to the group’s material interests. On the other hand, the introduction of a new financial information system could, in theory, be seen as enhancing the group’s power and thus was in their material interests. However, this move was also not favored by the senior managers in the accounting group. This was partly because of the group’s lack of IT knowledge and more importantly, due to the difference in ideal conditions to which they subscribed. In their interviews, accounting managers explained to us that the role of accounting was to ensure the judicious spending of budgets and the proper recording of transactions, and this role was not facilitated at all by a computerized financial information system. When asked whether the new financial information system would change their work, their answer was always the same: no change. In fact, one of them said, “Now I get the expense requisition on paper, I look at the available budget, which is annexed to it, I look at all the authorisations on paper, and if everything is correct, I approve it. When the New Financial Information System arrives, I will probably get all this information on a computer and instead of putting my signatures, I will probably press a button.”
Thus, both these change efforts ran contrary to the group’s interests, when subjectively evaluated by the agents. However, due to the pressure imposed by the new DG and the pro-change group, it was difficult for the group to resist the changes openly (Ezzamel and Burns, 2005). Resistance had to take a ‘subtle’ approach (Scott, 1985; Hodson, 1995). These subtle resistance strategies involved ‘delaying’ the implementation of these changes on ‘technical’ grounds. According to many interviewees, accounting managers would sit in committee meetings about the implementation of the new financial information system and raise objections so that the pace of implementation would slow down. The success of this strategy can be seen from the fact that the committee took almost one year to finalise which consultants would eventually implement the system.

With regard to the initiative to reduce the need for repeated authorisation for payments, this created a major rift between two of the professional groups within CAA, i.e., accountants and project engineers. At the time of approval of capital projects, these were subject to serious scrutiny by all concerned departments, including finance. Once the project was approved and funds for the following year were allocated to the project, the project managers still had to send the case back for approval of payment from the central Directorate of Finance. This was despite the fact that every large project team would include a Directorate of Finance official on site, whose authorisation was necessary for every transaction. The initiative to reduce extra layers of authorisation resulted in the
two groups adopting a strategy of ‘elimination’ (Archer, 1995). This is understandable as the two groups were contingently related and their relationship was that of contradiction. The accountants tried to protect their ‘boundaries’ from incursion by using arguments about the improved financial benefits accruing from the central treasury management through the Directorate of Finance (Abbott, 1988). However, the Project Directorate, to challenge the finance argument, produced alternative calculations of financial loss due to delays in project implementation (Ezzamel and Burns, 2005). The jurisdiction of finance had been created and protected within CAA through the financial rules and regulations of the State. The Directorate of Finance then tried to protect its boundaries by invoking legal provisions, claiming that this move was ‘legally’ not acceptable. The matter was eventually sent to the Auditor General of Pakistan, who rejected the position of the Directorate of Finance thus dismantling all the legal boundaries that the Directorate of Finance was trying to create.

The efforts of the pro-change group to bring the labour cost down were resisted by senior managers due to pressures emanating from both material and ideal structures. As described earlier, there were no material pressures on the senior managers of CAA to bring down the cost of labour. In addition, there were ideal structures of being ‘protectors of juniors’ that also pushed the senior managers to resist the efforts to control costs through labour cost reduction. As mentioned previously, the resistance strategies of the senior managers took a ‘subtle form’. FR asked each director to determine exactly the
number of positions required in their respective directorates. This was a first step towards determining ‘excess manpower’, which could eventually lead to labour redundancies. In this situation, each director had to do what was ‘right’ according to the cultural conditions, i.e., to protect his men. All the directors did an analysis and eventually asked for more positions than those already present. This analysis could not be challenged either, because senior managers within functional areas ‘claimed’ that they were best placed to know about the ‘operational requirements’ of their fields. Another example of the resistance shown by top level managers to the DG’s effort to make employees redundant was the work of the outsourcing committee. The DG established this committee of senior managers, giving them a clear mandate to identify activities which could be outsourced and to provide the cost-benefit calculations. The committee adopted two strategies for resisting this activity. First, they ‘slowed down’ the process, with several months and repeated reminders from the DG being required before they eventually submitted their report. In their report, the senior managers ‘redefined’ the meaning of outsourcing. From a cost-cutting drive, it became a drive to improve quality, emphasizing that in this process, no employee should be fired. In this process of ‘redefining’ outsourcing, they did not come up with a cost-benefit analysis. Indeed, they did not perform any cost-benefit analysis, citing their ‘lack of knowledge’ of the process. The fact of the matter was that what they were suggesting, i.e., retaining employees and still outsourcing entailed only additional costs.
At the level of workers, there was a lot of ‘backstage’ resistance to the notion of firing employees (Scott, 1990). The workers, in their ‘gossip’ at airports, rejected this exercise as an ‘efficiency drive’, citing examples of wasteful spending decisions by senior management, e.g., buying new cars for directors and paying lucrative salaries to newly hired professionals. The workers rejected the view of the change program as an economic efficiency drive. Instead they ‘defined’ this drive as the unilateral violation of a contract between employer and employees in a public sector domain whereby employees, at one time, opted for lower pay in return for job security. Once the economic efficiency criterion was rejected, FR’s redundancy efforts were projected as efforts to inflict pain on the working class.

What converted this backstage resistance into ‘front stage’ organized resistance was the disciplinary action which was brought against the protesting workers and the redundancy orders made in respect of the temporary worker. As mentioned previously, workers who were raising their voice against any possible downsizing were transferred to distant airports and a directive was issued by FR to all senior managers to reduce the number of daily wagers by 15%. A sense of widespread abuse created a spirit of solidarity (Linhart, 1981, quoted in Hodson, 1995), which had earlier being kindled by backstage resistance (Scott, 1990). The workers (permanent and daily wagers) challenged the orders of FR and other senior managers in the legal court. Mounting a legal challenge against the management’s orders was not an easy course of action for the workers. Significant
amount of financial resources was required to hire the legal team who would fight this case, and this action could have brought the wrath of senior management down upon the individuals involved in this act of ‘revolution’. During this study, the worker respondents told one of the authors how they galvanized support against the management’s ‘oppression’ and how they persuaded their colleagues that this was a fight worth fighting. Small contributions from a large number of employees enabled the worker not only to obtain an interim relief order from the courts against management orders relating to the transfers of ‘workers’ but also enabled them to win the right to form a labour union. As a result of the court orders, elections were held and an elected labour union came into power. This was an unprecedented achievement in the history of CAA. Similarly, the daily wagers filed a petition in the Supreme Court of Pakistan against the management’s redundancy orders. At the same time, they asked the apex court of Pakistan to change their status to that of permanent employees, given their length of service at CAA. They not only mounted a legal challenge but also organized demonstrations and protests outside airports. Additionally, they organized a media campaign whereby the plight of the daily wagers was presented in the media. For the daily-wage workers, it was an overt, open and fairly bold organized resistance in the face of structural pressures. However, this organized effort resulted in the Supreme Court of Pakistan issuing an interim relief order against the management’s redundancy plans. At the same time, this movement created a fairly substantial pressure on the CAA management, and it started a dialogue with the daily wage workers to reach some kind of a compromise.
**T3: Social and Structural Elaboration**

The social interaction phase resulted in changes in the structural and social elaboration, *i.e.*, there were changes in the structures and agents at the level of CAA, the details of which have already been described in the previous sub-section (T2). The changes in the structures came in the form of changes in the powers of the Directorate of Finance, and the permanent and daily workers. It is important to note that these were changes associated with positions, which would affect all agents that would occupy these positions in the future. At the same time, there were social changes, *i.e.*, changes in agents’ powers and perspectives. Certain primary agent groups became corporate (Archer, 1995). Daily wagers and permanent workers were two such important groups. The social interaction phase not only made them fully cognizant of their interests, but also made them organized to achieve these interests. In this process of social and structural elaboration at the level of CAA, certain management accounting and control practices were also changed. For example, the authorization and approval process involved in financial transactions was changed as a result of the structural elaboration. Similarly, certain new management control practices that the new senior management was trying to introduce, *e.g.*, pro-active cost management, could never become permanent. Already, during the field work for this study, it was noted that the newly elected ‘labour leaders’ had started to assert themselves in certain management control activities. These new conditions created new kinds of positive and negative effects for the next generation in
the form of facilitation or obstruction, thus creating incentives for various agents to retain or change the management control practices during the next morphogenetic cycles.

It is important to note that certain ideas that prevailed at time T1 remained unchanged at time T3 i.e. morphostasis. These unchanged ideas (e.g., the role of accounting as custodian of funds rather than a critical input in decision making or the role of seniors as ‘protectors’ of their juniors) would continue to play an important role in future morphogenetic cycles.

**Concluding Remarks**

The paper intends to contribute to the methodological debates in accounting by identifying the inherent limitations of Gidden’s theory of structuration and its manifestation in the accounting literature, especially with regard to management accounting research. Previous studies in accounting, particularly those of Ashraf and Uddin (2013a & b), Modell (2009) and Llewellyn, (2007) have advocated critical realism as a potential alternative to deal with structure-agency problem in explaining accounting practices. The main purpose of this paper is to advance this philosophical position and make a case for adopting Archer’s (1995) morphogenetic approach as an explanatory framework. To this end, the paper primarily draws on previous studies and empirical illustrations from a longitudinal case study on management accounting change. The
following summarises the contributions of the paper highlighting the potential contributions critical realism and the morphogenetic approach (CR/MA) could make in providing better insights for conceptualising management accounting and to explain change (or stability) in management accounting and control practices.

Morphogenetic approach conceptualises management accounting as a set of ideas or cultural conditions that have the ability to cause actions. These include both written and unwritten rules. In the case of CAA, for example, the accounting rules and their logic e.g., to avoid embezzlement had been devised by previous generations and were independent of the present generation’s reception of these rules. The present generation could endorse these rules (e.g., the accounting managers’ endorsement of them) or interpret them as ‘unsuitable’ and so reject them (e.g., the change team’s rejection of them). Sometimes, this endorsement, rejection or amendment could also be for material reasons. Nonetheless, these ideas stood independently at time T1, with the power to cause action at time T2.

This theoretical conceptualisation of accounting, we believe is superior to structuration theory based conceptualisation of management accounting (as virtual structures). We have already established in the paper the problems associated with treating accounting as virtual structure.

With regards to management accounting and control practices and changes therein; contrary to structuration theory, the morphogenetic approach emphasizes that it is important for researchers not to focus exclusively on ‘actions’. We would argue, as many
management accounting studies have demonstrated, management accounting research must look at the ‘context’ within which these actions or practices are taking place. For research within critical traditions, context includes the ‘material’ relations within and around the case organization (Armstrong, 2008) as well as the ‘ideal’ conditions (Willmott, 2000). The morphogenetic approach provides us with a tool kit to understand these structural conditions. Understanding these structural conditions means appreciating their nature (contingent or necessary) and their way of working (facilitation vs. obstruction). This insight enables a researcher to understand the ‘situational logic’ within which various agents are operating and the course of action they are likely to follow. In the CAA case study, we identified and analysed material and ideal structural conditions for different agent groups, e.g., accounting department, pro-change managers, workers etc. Analysing these structural conditions helped us better understand the motives of various agent groups for changing management controls in different directions. It is important to note that critical realism does not give primacy to either material or ideal structures. For example, the accounting department in CAA opted to resist efforts to bring in a new financial information system, even though the new system was in their material interests.

The empirics of the case study, as is the case with empirics of other structuration-based accounting studies, clearly hints at the existence of prior material and cultural conditions, as well as the powers of human agents and their limitations. A structuration-based
approach to explain these changes would have been less satisfactory given the concepts such as duality, virtual structures and unbridled agential powers etc. The structuration approach, for example, could not have explained the motivations for different groups of agents to change management controls or to resist such changes. These motivations stemmed from pre-existing structural conditions, for which there is no space in structuration theory. For example, the pro-change managerial regime was keen to bring about changes in the management controls of CAA because of the structural conditions within which these managers were operating. These conditions included the circumstances within which the new DG was appointed, which in turn, were linked to the economic conditions faced by the country. Any effort to explain the actions of these managers without incorporating these ‘real’ structural conditions would have been incomplete.

However, structural conditions (material and ideal) are not deterministic in explaining social outcomes. In order to achieve material and ideal interests, agents have to reflect subjectively on the structural condition and devise strategies. The strategies that the change team devised to effect the desired changes included propagating their suggested changes as ‘modern’ and ‘contemporary’. The more pronounced strategy was direct coercion, i.e., the use or the threat of disciplinary measures. Different organizational groups adopted different strategies for resisting these change efforts. For example, senior management adopted ‘subtle’ resistance strategies (Scott, 1985) in the form of ‘delaying’
and ‘defining it differently’. In addition, the labour was involved in a lot of backstage resistance (Scott, 1990) where they tried to de-legitimize the change program by ‘defining it differently’. In their definition, the change program was not a program for bringing about economic efficiency. Instead, it was a program that was meant to inflict pain on the workers and to reward those working at a higher level in the organizational hierarchy. This backstage resistance became front stage when senior management took strict actions, e.g., transferring resisting members to distant airports and giving instructions to remove 15% of the temporary workers. All these actions and counter actions resulted in some changes in the structural and social conditions at time T3 with corresponding changes in the management controls within CAA. These changed conditions at time T3 have created new incentives for effecting changes (or resisting these) in the management controls of CAA in future morphogenetic cycles.

It is important to note that CR/MA provides researchers with an analytical toolkit (T1-T3) that enables them to deal with empirical material at hand to come up with practical social theorisation (Archer, 1995; Porpora, 2013). The researcher needs to understand the structural (material and ideal) conditions at time T1. The phenomenon at hand is normally at the level of the ‘empirical’, and trans factual conditions are at the level of the ‘real’, i.e., structures and their generative mechanisms. The identification of such structures requires a limited regress from the level of the empirical and actual to the level of the real. This normally takes the form of tracing actions back to rules and then to
structures (Sayer, 1992; p.112). Identifying the structures at CAA involved such tracing back. This is followed by identifying the agential interactions at time T2 and outcome at time T3. Interviews with key people and observations were needed to understand the interactions and new elaborations of structures. This results in explanation of social change or lack thereof through practical theorisation. For example, in our case, the identified structural and ideal conditions and their influence on various agents are an example of practical social theorization. Similarly, identification of strategies of different agents at time T2 is an example of practical social theorisation. Pro-change managers propagating their proposed changes as ‘modern’, as well as the use of more coercive forms were examples of strategies that they adopted. Strategies of opponents of change include ‘subtle’ actions like ‘delaying’ and ‘defining the changes differently’. These are all examples of practical theorisation that we developed from our empirical analysis.

Critical realism and morphogenetic approach is of course, not the only explanatory framework being used in the accounting literature that takes into account both the subjective and objective dimensions of research objects. In fact, Kakkuri-Knuuttila et al. (2008) contend that most accounting researchers straddle the subjective-objective divide in an unacknowledged fashion. Ahrens (2008), in response, readily accepted Kakkuri-Knuuttila et al.’s (2008) position but argued that this straddling of the paradigm is not unacknowledged. Rather, according to Ahrens (2008), management accounting research epitomises overcoming the subjective-objective divide. It is difficult to disagree with
Kakkuri-Knuutila et al. (2008) and Ahrens (2008) regarding the importance of incorporating both subjective and objective dimensions in social theorising. However, in the presence of a plethora of theoretical perspectives which try to overcome the subjective-objective divide, what is of prime importance is how to overcome this subjective-objective divide. Some of these approaches e.g. actor network theory are criticised for a flat ontology (Mutch, 2002); others e.g. structuration theory for conflating structure with agency (Archer, 1995); and still others e.g. Foucauldian perspective for de-centering both structure and agency by giving primacy to discourses (Sayer, 2000). Critical realism gives distinct ontological status to structure, culture and agency without conflating or decentering the three. These are further described below.

If we were to give emphasis to material or cultural conditions alone, in the CAA context, this would be akin to saying that efforts to introduce new management controls were being driven by material interests (e.g., pressures on the State from donor agencies to effect reforms), whereas the managers trying to resist these changes were being driven by ‘ideal interests’. However, an analysis conducted along these lines would have given a useful but somewhat incomplete picture of the situation. Both the agents (managers) trying to bring about change and those resisting change were being influenced by both structural and cultural conditions. From a morphogenetic perspective, the pertinent questions are, for example, what is the relationship between the agents (managers) and different structural conditions? Is this relationship one of contradiction or of
complementarity? A thorough analysis of structure might reveal the ‘material vested interests’ on the part of agents (managers) to resist or welcome the changes. Acceptance of change vs. its resistance could very well be a function of the differentially placed agents (managers) in the structural domain and their associated vested interests.

In relation to cultural conditions, critical realism and especially Archer (1989, 1995) distinguishes ‘culture’ from ‘socio-culture interaction’ giving it an independent existence. For critical realists, culture is not a ‘state of mind’, but an independent ‘product of minds’ of previous generation which has the potential to influence present generation ‘states of mind’. The current generation, through their socio-cultural interaction, can reject, amend, endorse or reinterpret this independent standing product of minds of previous generation thinkers (cultural morphogenesis or morphostasis), but this activity takes place in the presence of the cultural conditions existing at time T1. This differentiation between culture and cultural interaction results in a better understanding of the emergence of culture or of a cultural system in a research setting (cultural conditions → socio-cultural interaction → cultural elaboration).

Conflating ‘culture’ with ‘structural’ pressures has been reflected in cultural studies. For instance, arriving late or absenteeism often had been attributed to culture (see Wickramasinghe and Hopper, 2005). With respect to CAA, this was similar to claiming
that managers were not conducting a cost-benefit analysis of outsourcing because they did not know how to do it. We would like to argue that this defiant behaviour primarily stems from structural conditions. All these issues of ‘our ways of life’ and ‘ethnic mobilization’ are ideological weapons (socio-cultural interaction) which are no doubt used to legitimize action and organize resistance to gain an advantage on structural grounds (Vallas, 2003). However, their importance seemed to have been over-exaggerated and not differentiated from the structural conditions in culture studies (Dent, 1991). We are not contesting the claim that cultural conditions do not affect management control practices. For example, the issue of ethnicity and its impact on management control practices are clearly visible in many studies (Wickramasinghe et al., 2004). But, by clearly distinguishing between structural and cultural conditions and between cultural conditions and socio-cultural interaction, the effect of each of these items should provide better insights into management controls.

Finally, it is important to mention other dualism-based theoretical frameworks, which have been appropriated by accounting researchers and which resonate closely with critical realism in terms of their ontological assumptions. These are the Bourdieusian approach (Oakes et al., 1998; Everett, 2003, 2004; Neu et al., 2003; Goddard, 2004; Jayasinghe and Wickramasinghe, 2011), the Habermasian framework (Laughlin et al. 1994; Broadbent and Laughlin, 1998; Broadbent et al., 2001) and the Labour Process
Theory/Cultural Political Economy (Uddin and Hopper, 2001; Wickramasinghe et al., 2004; Wickramasinghe and Hopper, 2005). Whilst not discounting the contributions\textsuperscript{Xvi} of these three approaches in accounting, we would argue that the morphogenetic approach based on critical realism does provide clear guidelines and perhaps added explanatory power. This added explanatory power comes from the systemic manner in which the morphogenetic approach explores the links between material, culture and agency. This systemic approach not only identifies and distinguishes between material, culture, and agency but also provides clear linkages between material and cultural conditions and agency, on the one hand, and between agential interactions and material and cultural transformation on the other.

References


Giddens, A. (1979) ‘*Central Problems in Social Theory*’, London, UK; Macmillan


Table 1

<table>
<thead>
<tr>
<th>Relations Between Positions or Organizations</th>
<th>Contradiction</th>
<th>Complementarity</th>
</tr>
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<tbody>
<tr>
<td>Internal Necessity</td>
<td>Compromise</td>
<td>Protection</td>
</tr>
<tr>
<td>Contingency</td>
<td>Elimination</td>
<td>Opportunism</td>
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Table 2

<table>
<thead>
<tr>
<th>Relations Between Ideas (Cultural System)</th>
<th>Contradiction</th>
<th>Complementarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Necessity</td>
<td>Compromise</td>
<td>Protection</td>
</tr>
<tr>
<td>Contingency</td>
<td>Elimination</td>
<td>Opportunism</td>
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</table>

Table 3 - Hierarchy of Interviewees

<table>
<thead>
<tr>
<th>Managerial Hierarchy Level</th>
<th>No. of Persons Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management (including retired Personnel)</td>
<td>14</td>
</tr>
<tr>
<td>Upper Middle Management (including retired)</td>
<td>09</td>
</tr>
<tr>
<td>Middle Management</td>
<td>10</td>
</tr>
<tr>
<td>Lower Grade Employees including Daily Wagers</td>
<td>15</td>
</tr>
<tr>
<td>Consultants/Ministry Officials</td>
<td>04</td>
</tr>
</tbody>
</table>

Table 4 - Years of Employment of Interviewees

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</thead>
<tbody>
<tr>
<td>Average experience of persons interviewed</td>
<td>15 years</td>
</tr>
<tr>
<td>Minimum experience</td>
<td>01 year</td>
</tr>
<tr>
<td>Maximum experience</td>
<td>26 years</td>
</tr>
</tbody>
</table>

\[ This paper is concerned only with the basic tenets of structuration theory: the way Giddens conceptualised structure and agency and duality. For detailed explanations of structuration theory, please see Macintosh and Scapens, (1990). \]

\[ Rules include agent’s perceptions of moral rules, i.e., what is right and wrong (legitimation structure) and semantic rules, i.e., what does ‘this’ mean (signification structure) as well as resources that the agent perceives her/himself to possess vis-à-vis other agents (domination structure). \]
An exception is Llewllyn (2007), in which she used Giddens and Archer conceptualization of agents in the context of an empirical study of merger between two pharmaceutical organizations.

In the context of the morphogenetic approach (1995), we have used the terms ‘culture’ or ‘ideal’ interchangeably.

How the future generations of actors ‘take’ these statements, interpret them, disagree with them, convince others about the one they believe in, and try to reconcile the differences between the two, is a matter of social interaction. As a result of these interactions, there may be a change in these propositions which will have their own conditioning effects on the next action sequence. But the point remains that these propositions have their distinct ontological existence independent of their reception by agents.

Willmott (2000) gives two examples of constraining contradiction from the organizational world. His cited examples include the constraining contradiction between the bio-chemist and biological perspectives on sex hormones and the contradictions between child-centred learning philosophy and the philosophy of the Scholastic Aptitude Test (SAT).

Pakistan, a country located in South Asia, came into existence in 1947, when the British rulers left India. Like many colonised countries of Asia and Africa, Pakistan has a troubled history, which is marked by military takeovers, corruption and the interference of politicians in State institutions for vested interests (Talbot, 1998; 2003). The last military intervention took place in 1999 and continued until 2008.

Changes to management controls included the whole package consisting of performance measurement, organisational structure and accounting system.

Not surprisingly, a similar appointment strategy can be found elsewhere during economic and political crises, most recently in Greece and Italy.

Perhaps this is not surprising as CAA is very profitable already.

For this purpose, we used two sources: Lexis-Nexis, which apart from covering internal news and media reports covers five major newspapers of the country; and five national dailies of the country, covering news on public sector organizations in general and CAA in particular.

This included the review of CAA Ordinance 1984, the General Financial Rules of the Ministry of Finance, the Rules and Procedure Manuals of CAA, the Yearly Statistics Book, Annual Financial Reports etc.

This particular managerial behaviour is not uncommon in other cultures. For example, in his classic book on the subject of morality in corporate management in a Western context, Jackall (1988; p.18) wrote, “The general rule is that bosses are expected to protect those in their bailiwicks. Not to do so, or to be unable to do so, is taken as a sign of untrustworthiness or weakness.”

We did not want to be seen coming out of management offices (after our interviews etc.) by workers. In an environment of complete mistrust, we could have been perceived as researchers ‘planted’ by the management to get inside information from the other camp.

This empirical observation clearly delineates a critical realism stance vis-à-vis classical economic theories and orthodox Marxism. Critical realism does not support the concept of homo oeconomicus suggested by orthodox classical economics. At the same time, despite strong affinities with classical Marxism, critical realism does not support the foundationalism associated with Marxism. As per critical realism, economic structures are important in conditioning human behaviour, but whether these are the most important structures is a contingent issue. The importance of economic vs. other structures should be a subject of empirical inquiry rather than a case of theoretical determinism. For details about the position of critical realism vis-à-vis other political economic theories, please see Nielson (2002).

The Bourdieusian approach is mainly appropriated in the area of governance and accountability. This approach may well be very useful in management accounting research. It is also argued that Bourdieu’s work is grounded in critical realist philosophy (Fowler, 1997). On the other hand, the ‘steering mechanism’ and ‘modes of production’ are concepts used by the Habermasian and Labour Process/Political Economy research streams respectively to link management control practices within organizations to broader social
structures. All three research streams are commendable for the insight that they provide when looking at management control practices within public sector entities.