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Gregory Maniatopoulos

University of Newcastle, Centre for Knowledge, Innovation, Technology and Enterprise (KITE), g.maniatopoulos@ncl.ac.uk

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THE IMAGINARY SIGNIFICATIONS OF THE IT MARKETS

Maniatopoulos, Gregory, University of Newcastle, Centre for Knowledge, Innovation, Technology and Enterprise (KITE) , Citywall, Citygate, St. James Boulevard, Newcastle upon Tyne, NE1 4JH, UK, g.maniatopoulos@ncl.ac.uk

Abstract

Drawing upon Castoriadis' (1987) notion of imaginary significations, this paper aims to advance the analysis of technology acquisition by exploring the ideological role of technology choice and consumption. The illustration of the theoretical background of this paper results in the formulation of two main research interests. First, the ways in which technological imaginaries form ideologies and how these ideologies influence institutional identities, narratives and actions associated with the evaluation of technology choice and consumption. Second, how such ideologies influenced by various socio-political, economical and technical conditions affect and constitute the technology selection process by providing a stabilized form of accountability.

Keywords: *Castoriadis, Technology Acquisition, Imaginary Significations*

1 INTRODUCTION

Recently considerable attention has been given to the complexity between technology, institutions and markets. Theory addressing the study of this relationship has traditionally focused on the social context of technology and markets by emphasising the contingencies and socio-political particularities surrounding the evaluation and assessment of technology acquisition and choice (Grint and Woolgar, 1997; MacKenzie and Wajcman, 1999; Williams and Edge, 1996), as well as on the techno-economic properties and features of organisations and technology marketplaces (Williamson, 1985; 1991). Although these studies have contributed towards the wider analysis of IT markets, often implicitly and/or explicitly they assume a clear demarcation between functional forms of analysis and more sociological approaches and therefore between the socio-political, economical and technical conditions that influence the evaluation and assessment criteria of technology choice and procurement (Pollock and Williams, 2007). That is to say they define a disciplinary domain in terms of a boundary and seek to analyse the assessment criteria of technology and its choice within it while attempting to create the settings in which these frameworks are applied (Callon 1998; 1999). Yet, although these polarised approaches highlight the wider technical, economic and socio-cultural conditions surrounding the assessment of technology acquisition, there is a surprising gap related to the nature and processes by which these conditions form ideologies and how these ideologies influence institutional identities, narratives and actions associated with technology choice and consumption (Bourdieu, 1984; Douglas and Isherwood, 1996). As such these studies often tend to misunderstand in important ways how the process of technology choice and procurement is in reality shaped by the ideological conditions of the communities that seek to appropriate them rather than by some exogenous variables, forces or relationships.

This paper takes as its starting point the value of exploring these theoretical lacunae related to the social study of IT markets. It attempts to provide a reflective conceptual framework by using Castoriadis' (1987) social and political theory to establish a structured understanding of the relationship between technology choice and ideologies of consumption. The aim of this position is neither to test Castoriadis ideas, nor to exemplify every aspect of his theory. Rather, this paper attempts to explore the applicability of some of Castoriadis ideas, and therefore to address the complex patterns of interaction between the perceived, the rational and the imaginary components of significations within the context of technology choice and procurement. Castoriadis' (1987) thought offers a reflective resource for the analysis of the complex character of technology choice and its relations to institutional desires, identity,

and imaginary practice. Drawing upon his interest in Marxist theories of economics – which he later rejected – Castoriadis sought to understand the formation of social and political life by exploring the distinctive *creative* role of the ‘*social imaginary*’. In stressing the novelty of Castoriadis’ thought, this paper aims to examine the imaginary significations of technology acquisition by exploring the ideological role of technology choice and consumption. It is hoped that this hermeneutic perspective will provide new insights into the study of technology and markets and also the possibility for a more constructive analysis that cuts across both functional forms of analysis and more sociological approaches. In this context, this paper seeks to make a contribution to the emerging discussion on the social study of the IT markets by elucidating more intangible factors and processes that influence, generate and eventually constitute technology procurement choices.

2 CONSUMPTION, MEANING AND TECHNOLOGY

Various attempts have been made to explore the relation between ideology, choice and consumption (Miller, 1995). Douglas and Isherwood (1996) seminal work provided important critiques of economists’ approaches to consumption by claiming that commodities are needed “to make visible and stable the categories of culture” (p.38). They stress the non-utilitarian character of consumption, examining the expressive, symbolic and orientational function of commodities in social life. Further, they argued that relations of consumption not only define the boundaries between social groups or function as important media of communication but also “they constitute the very system itself” (p.49). Bourdieu (1984) also sought to understand the cultural nature of consumption and highlighted the deliberate role of consumption to express taste and status differences. In so doing, he used the notion of distinction to refer to both the sense of meaning of classificatory schemes and the uses of things within hierarchical social relations.

This centrality of meaning to consumption has been developed also in the work of Baudrillard (1984) which provided the key for the critique of the Marxist theory of value: “As the ‘consumption economy’ has developed, so the value of commodities has been seen to derive less from the laws of economic exchange governing the market or from the ability of products to satisfy primary needs than from the way they function culturally as signs within coded systems of exchange” (Hebdige, 1994, p.226). For Baudrillard the distinction between “real” and “false” needs in the Marxist theory of economics is problematic as consumption becomes primarily about individuals and groups using commodities such as technologies as a way to project preference, power structures and status differences between themselves (Hebdige, 1994). Guided by these understandings choice becomes a primary instrument for the assertion of identity through referential statements about the self. In turn, consumption becomes an activity of self-expression, and is concerned with the production of meaning and identity. Underpinning this view is the notion that consumption is a cultural activity, rather than an economic affair (Baudrillard, 1984).

In the field of sociology of technology, studies addressing technology choice and consumption have traditionally focused on the characteristics and properties of technological artefacts by exploring the factors in determining the success or failure of technologies. Various studies have attempted to analyze the social context of technology with a focus on the interpretive flexibility of artifacts, whilst others, by following a more systematic approach, tried to analyze the socio-political context of technology development and consumption and the heterogeneous associations between human and non-human elements within the actor-network. Accordingly, each approach treats technologies and the social realm that constitute them as ‘seamless webs’ (Hughes, 1986), ‘socio-technical ensembles (Bijker and Law, 1992) or ‘networks of human and non-humans’ (Latour, 1987). An important characteristic that all those different approaches share is the view that the black box of technology must be opened in order to understand the social origins and workings of technological development. However, variously these approaches have been criticized for overlooking and/or oversimplifying the processes of technology acquisition and the social consequences of technical choice and thus for their exclusive focus

on the design stage of technology development and use (Pollock and Williams, 2007; Mackay and Gillespie, 1992; Winner, 1993).

In responding to these shortcomings, this paper employs aspects of semiotics in order to interpret the ways in which symbolic meanings influence and manifest “ideologies of consumption” related to technology choice (Baudrillard, 1984). In so doing, this paper starts from the position that discourses become the way in which individuals and institutions explain, expose and constitute their identities, actions, choices through social imaginary significations (Castoriadis 1987). This position directly implicates imaginary significations in the constitution of institutional action and reality.

3 THE SOCIAL IMAGINARY

The notion of ‘imaginary’, as an analytical object, has become a common reference in a number of social disciplinary fields such as cultural studies (Taylor, 2002; Marcus, 1995; Ivy, 1995), psychoanalysis (Lacan, 1989; Parker, 1997), feminist theory (Stoetzler and Yuval-Davis, 2002; Haraway, 1991), and science and technology studies (STS) (Hyysalo, 2006; Brown, 2003; Fujimura, 2003; Suchman and Bishop, 2000). Although these various disciplines share an interest in the notion of the ‘imaginary’, there are major differences across many of these contributions, with some approaches evoking visions, scenarios and expectations about the future (e.g. science and technology studies and sociology of expectations), whilst others highlight the socio-historical embedded patterns of imagination (e.g. anthropology, cultural and feminist studies).

In science and technology studies (STS) the notion of ‘imaginary’ becomes synonymous with visions and expectations about the future and focuses on the relationships between expectations, scenarios and longer-term transitions as well as on the rise and/or fall of various science and technology fields (Brown, 2003; Brown and Michael, 2003; Brown, et al., 2003; 2000). In seeking to understand the role of future-oriented representations, the analytical tendency of STS scholarship is to explore the status and role of future visions and expectations as embedded in the practices of and interactions between different actors (scientists, policy makers, industry actors, media, citizens, public authorities etc) involved in science and technology processes (Brown, 2003; Brown and Michael, 2003; Brown, et al., 2003). As such, science and technology studies (STS) have tended to examine the ways the rhetoric (expectations, hype and future imaginings) surrounding new technologies affect their construction, as well as their application. Similarly, in the sociology of expectations whilst there are differences across various approaches, a common theme is the constant subjective interplay between present, past and future by challenging any simplistic notions of linear temporal sequence and determinism (Brown, et al., 2003).

In contrast with these approaches, in cultural studies, the notion of ‘imaginary’ is becoming commonly used to refer to cultural beliefs, perceptions, meanings and models by highlighting the active and creative role of the imagination (Strauss, 2006). Similarly, in feminist theory creative situated imaginations play an important role in feminist politics, pleasure and the creation of scientific knowledge (Stoetzler and Yuval-Davis, 2002; Haraway, 1991). In this context, while the notion of ‘imaginary’ can easily be misunderstood to refer to visions, expectations and the role of imagination about the future, there are fundamental differences between the ‘dynamics of expectations’ and the ‘social imaginary’. Overall, expectation studies have variously attempted to mobilize the future into the present according to different representations, time frames and forms of organisational relationship by exploring the role of scenarios and foresight (Brown, et al., 2003). In so doing, these studies focus on statements, discourses or speech acts which explicitly manifest future-oriented representations (visions, metaphors, promises, and aspirations) and examine the fundamental important role of the dynamics of hope and hype in organising our future present/s (Brown, 2003; Brown, et al., 2003, p.8).

The idea of a ‘social imaginary’ as an enabling discursive matrix within which people imagine and act as world-making collective agents is closely associated with the work of Cornélius Castoriadis (1987) in his book ‘The Imaginary Institution of Society’. In his work Castoriadis’ provides a critical analysis of both functionalist and structuralist approaches concerning the constitution of social institutions and life. For

Castoriadis the problem with both approaches is that they attempt to explain social institutions and life in a “rational” form of analysis or what he calls from a “functional-economic” point of view. In so doing, they reduce the existence of the institution and its characteristics to the function the institution fulfils in society given the circumstances, by its role in the overall economy of social life (cf. Castoriadis 1987, pp. 115-116). As such the emphasis is placed on one and the same thing: “functionality, the unbroken chain of means and ends or of causes and effects on the general level, the strict correspondence between the features belonging to the institution and the 'real' needs of the society considered; the accent is placed, in short, on the complete and uninterrupted circulation between a 'real' and a 'rational-functional' element” (*ibid.*).

In order to acknowledge the fundamental and irreducible role of creativity in the constitution of the social-historical institutions Castoriadis develops a theoretical framework where the notion of “social imaginary” has a distinct meaning. Castoriadis’ notion of the “social imaginary”, based on the ontological status of imagination, highlights the importance of a common set of images, understandings and representations in understanding collective and shared action and public life (Tucker, 2005). For Castoriadis’ (1987) the notion of the ‘social imaginary’ refers to “the unceasing and essentially undetermined (social-historical and psychical) creation of figures/forms/images, on the basis of which alone there can ever be a question of “something”. What we call “reality” and “rationality” are its works” (Castoriadis, 1987, p.3). Drawing upon these ideas, the notion of the ‘social imaginary’ refers to the distinctive creative role of the imagination and its mutually constituting relationship with the political, cultural and the social life. For the purposes of this paper, its appeal lies in the way it places imagination as the main source of meaning in social and cultural life.

A core element of Castoriadis’ (1987) thought - which this paper will attempt to explore in the context of technology choice - around the constitution of society and its institutions is the idea of *imaginary significations* as the main sources of meaning in social and cultural life. According to Castoriadis’ (1987, p.150) the social imaginary is, primordially, “the creation of significations and the creation of the images and figures that support these significations. The relation between a signification and its supports (images or figures) is the only precise sense that can be attached to the term ‘symbolic’”. In this sense, imaginary significations can be understood as conscious and/or unconscious ‘symbolic representation(s)’ of human activity towards the creation of meaning and sense making. For Castoriadis ‘symbolic representation(s)’ entail perceptions of the real-rational, but also a further imaginary component, which ultimately stems “from the original faculty of positing or presenting oneself with things and relations that do not exist, in the form of representation (things and relations that are not or have never been given in perception)” (Castoriadis 1987, p. 127). As such “the social world is, in every instance, constituted and articulated as a function of such a system of significations, and these significations exist, once they have been constituted, in the mode of what we called the actual imaginary (or the imagined)” (*ibid.* p.146). In this context, imaginary significations play a key role in organising human behaviour and social relations, and are an ‘imaginary creation’ of any given society.

Guided by these understandings, ‘social imaginaries’ can be understood as ‘discursive’ evaluative frameworks that individuals create in order to ‘constitute’ their social surroundings, practices and institutions and make possible a society’s common practices or conditions of politics, economics and so on (Redhead, 2006). Similar to Foucault's (1970, 1971, 1972) notion of discourse, ‘social imaginaries’ both enable and constrain human expression and social action. These imaginary frameworks play an important role in shaping social reality while at the same time are continuously constructed. This notion of social imaginary significations centrally links the imagination to meaning, it creates a universe of meaning for individuals (Adams, 2007). Consequently, society itself is nothing but the institution of meanings (social imaginary significations). Discourse is the medium in which social imaginary significations become manifest and do their constitutive work (sense-making).

4 THE IMAGINARY CONSTITUTION OF TECHNOLOGY

Drawing upon Castoriadis' (1987) work, this paper attempts to examine the nature and processes by which imaginary significations form ideologies and how these ideologies influence institutional identities, narratives and actions associated with the evaluation of technology choice and consumption (Bourdieu, 1984; Douglas and Isherwood, 1996). The underlying assumption of this proposition is that imaginary significations and thus meaning is not inherent in the object (i.e. technological artifact), but related to its context. Interpreting technology consumption in terms of the symbolic order of the cultural context opens up new ways for examining the nature and processes of choice and procurement. As such the evaluation and assessment of technology acquisition can be better understood as a function of imaginary significations through the creation of images and figures that support these significations. In order thus to understand the process of technology acquisition it is important to explore the attached ideological set of meanings associated with technology. Extending Castoriadis' (1987) idea of the 'social imaginary' and for the purposes of this paper the significations and meanings of technological artefacts represent institutional '*technological imaginaries*'. Technological imaginaries can be understood as conscious or unconscious frameworks that institutions construct for interpreting, and constituting the role and function of technology and their relation with it. They emerge from the inter-subjective interplay between institutional meanings, values and beliefs that serve to mediate social reality. Technological imaginaries also provide the configurative properties of the environment in which the technology is expected to be diffused. The European Commission's strategy through the concept of the Information Society and the emerging e-Government agenda are examples of technological imaginaries.

In the context of technology assessment and choice, this paper suggests that technological imaginaries are the outcome of both rational techno-economic behaviour and discursive imaginary struggles that emerge at various points and in many forms by providing repositories of meaning about the content of technology and its application (Pollock and Williams, 2007). For the purposes of this paper, it is suggested that these significations and dominant interests are reflected in the form and functioning of technology in *imaginary practice*. This is an imaginary domain which individuals and institutions create in order to sustain and manifest 'representations' and 'projections' of possible alternative realities and visions of futures related to the content and application of technology. These 'representations' play a key role in the ordering and constitution of choice and contribute towards the fulfilment of institutional desires. Indeed, technological imaginaries not only define conditions of usage for technology but also to a great extent reflect ideological imaginaries of technology in i) society ii) institutions and iii) work that are expressed through the construction of societal narratives, organising narratives, and narratives of practice. As such, technology choice encapsulates not only the preferred techno-economic significations of the technology itself, but also reflects the wider socio-political and ideological conditions within which the meanings of technology are located. This proposition however does not imply a linear casual relationship between macro, meso and micro levels of imaginary significations, or meta-narratives, organising narratives, and narratives of practice. Indeed, all different levels of imaginary significations are intertwined in complex processes of negotiation of social order (i.e. summing up of interactions) (Latour, 1999). The negotiated 'level of ordering' is somewhere in between the inscribed imaginary significations about technology in society, institutions, work, and the performative techno-economic assessment of technology as ordered by developers, users and institutions in situated action. Indeed, it is the dialectic between all these different levels of significations, which specify the particular cultural and ideological forms influencing technology choice and consumption (that both technology choice and institutional practice become constituted). In turn, the resulted ideological orientations interpellate individuals and their institutions by encouraging new aspects of subjectivity (Bourdieu, 1984; Douglas and Isherwood, 1996). For example, the acquisition of certain technologies (i.e. Oracle, SAP, Microsoft etc.) can simultaneously provide evidence of membership and belonging to certain socio-economic groups, indicate valued relationships and incorporate imaginaries about knowledge practices, expertise (i.e. professionalism) and relations to other actors by encouraging engagement and identity formation (Orr, 1996; Noble and Lupton, 1998). This position implies that both technology choice and consumption

is an activity of self-expression, and is concerned with the production of identity (Mackay and Gillespie, 1992). This point highlights further the importance of social structures and power relationships within which the process of technology choice and consumption takes place (Kline and Pinch, 1999; Bakardjieva, 2005).

The notion of technological imaginaries is important in understanding the distinctive constitution of technology choice and consumption as a complex institutionally embedded pattern of imaginary significations. Indeed, technology choice cannot be understood as being pre-determined in any social or technological context, but rather as being 'performed' over time in the local and situated frame through the creation and constitution of imaginary significations. Subsequently, technology choice becomes stabilized through performative processes of negotiation of significations aiming to achieve rhetorical closure and community consensus. Indeed, performative imaginary significations, influenced by various socio-political, economical and technical conditions, affect and constitute the technology selection process by providing a stabilized form of accountability.

5 CONCLUSION

This paper attempted to provide a reflective resource for the analysis of the complex character of technology choice and procurement and its relation to institutional desires, identity, and imaginary practice. Drawing upon Castoriadis' (1987) notion of imaginary significations, this paper aims to advance the understanding of technology acquisition by exploring the ideological role of technology choice and consumption. In stressing the novelty of Castoriadis' thought this paper resulted in the formulation of two main research interests. First, the ways in which technological imaginaries form ideologies and how these ideologies influence institutional identities, narratives and actions associated with the evaluation of technology choice and consumption. Second, how such ideologies influenced by various socio-political, economical and technical conditions affect and constitute the technology selection process by providing a stabilized form of accountability. It is hoped that this hermeneutic perspective will provide the possibility for a more constructive analysis of the relationship between technology, institutions and markets that cut across both functional forms of analysis and more sociological approaches. These research interests continue the important work of theory development related to the complexity of IT marketplaces. The question is what further development is needed to improve the outcome of our understandings related to the social study of IT markets?

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