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Ioanna Chini

London School of Economics and Political Science, i.chini@lse.ac.uk

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EXPLORING THE EFFORTS OF THE GREEK STATE TO IMPLEMENT ICT PROGRAMMES: AN ALTERNATIVE INTERPRETATION

Chini, Ioanna, London School of Economics and Political Science, Houghton Street, WC2A 2AE, London, UK, i.chini@lse.ac.uk

Abstract

Drawing from literature on the national responses to the information society, the paper builds on existing research on government intervention in response to ICT, in particular with reference to the continuing, if not always successful, efforts of the Greek state to implement ICT innovations. Appropriating Foucault's notions of rationalities of government, regimes of truth and knowledge, the paper critically investigates the discourses invested in the Programme at the point of origin, in the negotiating table between the European Commission and the Greek central government policy-makers. The paper goes on to argue that the problems encountered during implementation can be analytically understood as the external manifestation of the clash between the dominant discourses and visions about the role of technology in European integration inscribed in the Programme, and a range of alternative forms of thinking and acting by a wide range of local actors in various implementation sites. These alternative interpretations, which show themselves in a range of subversive practices, uphold the supremacy of national contextual differences, and indirectly, but very effectively, challenge the rationale by which the plans for ICT innovation at the national and supranational level were constituted.

Keywords: *Information Society, Foucault, Regime of Truth, Greece, European Union*

1 INTRODUCTION

Government action in response to technological progress has often been the focus of the academic community, which sought ways to analyse and theorise on the distinct institutional arrangements which have proved conducive to innovation. Particularly with regards to ICT as a pervasive generic innovation, there appears to be growing consensus within academia and policy that government intervention is necessary for harnessing its potential and for dealing with emerging concerns, such as privacy and data protection, new forms of illicit activity, new manifestations of social and economic divides etc.

The academic community can be traced to two traditions, largely impermeable to each other. On the one hand, an established body of research can be found which attempts to model and theorise on the factors which lead to successful government ICT policies, as well as the types of ICT policies which lead to generally accepted measures of development (economic growth, productivity etc.). On the other hand, there has also been mounting interest in providing in-depth explorations of specific country cases, which result in rich, contextual descriptions of national policies, often however lacking a solid theoretical grounding.

The efforts of the Greek state to implement ICT innovations through policies and programmes have received some academic attention, mostly resulting in studies of the latter category. A limited number of studies providing rich descriptions of the Greek ICT policies and programmes exist, although there is need for more theoretically informed accounts. Moreover, with the focus being succinctly on the national level, it can be argued that inadequate attention is given to the wider institutional environment, for example international or supranational organizations, technological fashions which travel globally etc. Overall, the literature on Greece's ICT programmes has in one way or other, sought to explain the apparent failures of ICT programmes to be implemented, despite the existence of apparently good policies. The paper seeks to illuminate this point through a different perspective by addressing the effects of the role of the European Commission of the European Union (EU) in ICT decisions.

The paper is theoretically based on Foucault's work on government and knowledge. The analysis appropriates ideas of the rationality of government, the constitution of regimes of truth and their contestation through subjugated knowledges which form a fragmented organizational, or policy field. The paper argues that the failure of implementation, to which both the academic community and the practitioners converge, can be alternatively understood as the external manifestation of a clash between the regimes of truth embodied in the Greek ICT programmes, whose visions and priorities originate in the EU and the central administration, and the subjugated knowledges which a range of actors enact as they are called to make sense of, and implement, ICT innovations in various local settings.

The paper is structured as follows. To begin with, I place the paper in the context of existing literature on the national attempts to foster innovation, while examining in some detail recent studies on the Greek case. I go on to explain how a nuanced appropriation of Foucault's ideas about the rationality of government, regimes of truth and subjugated knowledges can shed light on an alternative interpretation behind the problems facing implementation. I then go on to present a short chronological narrative of the implementation of policies and investments undertaken by the Greek government throughout a six-year period. It is followed by a genealogical analysis revealing an alternative interpretation of implementation as the contestation and occasionally subversion of the dominant regimes of truth, which I identify as technology in the service of European integration and the technological imperative, by a host of actors in geographically dispersed loci of implementation.

2 LITERATURE REVIEW

The role of governments in fostering and promoting innovation has been accepted and widely practiced, if less well researched in the academic circles. A prominent example of research on innovation policy is the literature on the national systems of innovation. A consistent stream of research on national (and for that point, international and regional) systems of innovation has explored the individual conditions which foster learning and innovation within different contexts, and emphasised the variety of ways in which state intervention is implicated in maintaining and shaping these institutional conditions (e.g. Archibugi *et al.* 1999, Petit 2003).

Within the context of innovation, ICT features prominently, mainly because of what Freeman and Perez described as its generic pervasive nature, i.e. its capacity not only to shape specific industries, but to have a significant bearing on all industries and sectors of socio-economic life (Freeman & Perez 1988, p.60). However, there exists no cohesive body of literature seeking to understand government responses to ICT as a particular type of innovation, and thus the stock of existing knowledge remains fragmented and limited.

Caught up in a dominant liberal discourse, ICT is implicitly understood as the prerogative of businesses, as a technology which is too dynamic to be managed by the state, and which, in any case, is intrinsically better aligned with business targets of economic efficiency. This almost ideological stance has been opposed by a number of researchers, who through the years have called for more attention to be paid to the effects of government action for ICT, in its attempts either to foster a conducive environment for businesses to innovate, or to actively promote ICT innovation in use (King *et al.* 1994, Pick & Azari 2008, Shih *et al.* 2008, 2007). These studies focused on the creation of prediction models drawing mostly on economic data. Questions can however be raised as to the contextual sensitivity and appropriateness of such models, i.e. whether they can be applied independently of the national context and the variations of institutional conditions that it implies.

This limitation is addressed in a range of country-specific studies which aim to highlight in detail the specific ways in which national contexts matter for, and are changed by, the implementation of ICT policies and programmes (Silva & Figueroa 2002, Falch & Henten 2000, Sadagopan & Weckert 2005, Sancho 2002). With the exception of a broad concern with institutions, however, such rich case studies

can be criticised for not being adequately concerned with creating theory or providing theoretically-informed accounts.

The government interventions for ICT innovation in Greece have recently attracted some attention. Iosifidis and Leandros (2003) present in a rather descriptive way the range of policies taken by the Greek state towards the promotion of ICT innovation, while Buhalis and Deimetz (2003) touch on government policies for the promotion of information technology to SMEs (Small to Medium Enterprises) in their analysis of e-commerce penetration in Greece. Moreover, Tsipouri and Papadaku (2005a, 2005b) provide two comprehensive reports on Greece from the perspective of a national system of innovation, and report on the particular policy efforts and related administrative arrangements undertaken to make ICT policy work in the country.

Most of the academic research examining the Greek government's attempts to promote technological innovation has explained the problems faced with ICT investments in terms of failure of implementation. Caloghirou and Constantelou (2006) argue that although a robust approach of policy formation has usually been followed, inadequate policy implementation has resulted in limited results. Boucas (2008) accounts for the implementation impediments by tracing their roots in the traditional relations between the state, the economy and the society. He argues that characteristics such as political patronage creating an unhealthy link between the IT industry and the political elites, widespread political strife, and an inadequately developed civil society account for the creation and maintenance of institutional conditions which do not "fit" with the conducive environment necessary for the development of an information society. Avgerou and McGrath (2007) take a different turn on the issue of the failure of implementation as they seek to explain the fragmented process of implementing IT-enabled organizational reform in the country's largest pension fund by linking broader societal developments with a distinct emphasis on individual agents. Their discussion suggests that the proposed reforms and associated information systems were incongruent with the people's aspirations, life choices, and overall ideas of a meaningful life, i.e. their aesthetics of existence.

Interestingly, the role of the European Union in the country's decisions on ICT has not been adequately accounted for or critiqued, with the exception of Tsipouri (2001) who explores the related field of research and development (R&D). Tsipouri discusses the role of the European Union on programmes of research and development, as well as the impact of such supranational intervention on policies of IT diffusion, but the emphasis of the paper resides firmly on the European side rather than its impact of the national responses.

Drawing from the wider area of policy, Spanou (1998) questions the apparent inability of the Greek administrative apparatus to implement EU interventions. She argues that although formal practices (such as legislation) appear to be effectively shaped by the EU's reform agenda, the informal practices which lie at the heart of the Greek public administration exhibit increasing resilience to reform. Instead, Spanou suggested that rather than subsiding, they are further reinforced, as they form the basis through which further EU interventions can be implemented.

The above discussion highlights the existence of gaps in the literature. On the one hand, although the structural characteristics of the Greek society play a part in the shaping of the institutional environment in which efforts to foster innovation through ICT investments are undertaken, I would argue that there is a need for a more detailed linkage of such macro-structures and their direct effects on the implementation level. Also, the effects of the EU's actions in the area of ICT remain markedly under-researched. In this vein, this paper presents a different kind of argument, which seeks to trace at a lower level what it is that the impediments of implementation show. I argue that we can trace more detailed reasons of the difficulties of implementing ICT innovations in Greece through a careful consideration of the conflicting rationalities at play. This requires on the one hand an understanding of where the momentum for these ICT interventions comes from and the rationalities behind it, and on the other hand an appreciation of the competing rationalities at the many loci of implementation.

3 THEORY

The research is grounded on Foucault's concept of governmentality, which he developed in his later lectures (2007), when he attempted to veer away from power and discourse as autonomous forces and bring agency back into the discussion. Governmentality reflects the concern with the particular ways, practices and rationalities through which government takes place. It concentrates on the ways in which individual and collective behaviour becomes the object of governing, and challenges us to question the ways in which this happens.

Government is closely intertwined with thought and the production of truth. To govern means to govern based on a rationale, or a process of thinking, which in certain points in time assumes the status of truth. Thought congealed in practices of government becomes taken for granted and is rarely challenged (Rose 1999). The production and reproduction of truth determines the options that appear as feasible for individual action, while rendering other options unthinkable (Foucault 1980). What becomes important, then, is to understand the thought, or rationality, of government in order to reveal the way agency is constructed.

Within a technology of power, individuals are not forever bound into a state of passive subjection. To the contrary, one's desire to conduct oneself otherwise, or to be conducted otherwise, through different means and towards different ends arises as soon as a particular modality and technology of conduct emerges and manifests itself *within* each technology of power. In his lectures on governmentality (Foucault 2007), Foucault uses the word 'counter-conduct' to designate the ways in which subjects attempt to subvert the conditions of their subjectification.

Thus, a regime of truth may be the dominant way of thinking but it rarely remains unchallenged for long or in all loci. In this respect, its hold is challenged by conflicting rationalities, or knowledges, which may remain subjugated, but still produce visible effects of contestation. However, critique for Foucault is of an essentially local nature: "what this essentially local character of criticism indicates in reality is an autonomous, non-centralised kind of theoretical production, one that is to say whose validity is not dependent on the approval of the established regimes of thought" (Foucault 1980, p.81). Bringing to the light the local moments of contestation allows us to see not only the dominant regimes of truth at play, but also forms of alternative conduct, which "tend to redistribute, reverse, nullify, and partially or totally discredit" them (Foucault 2007, p.204).

4 RESEARCH DESIGN

The research has been conducted through semi-structured interviews with participants in Brussels and in Athens. In Brussels, interviews were conducted with participants from various institutions within the European Commission, including the Information Society, Regional Development and Employment Directorate Generals. In Athens, interviews with current and former policy-makers, civil servants within the public administration, public procurement managers of software development and consulting companies, as well as researchers were conducted.

The interviews followed the form of a narrative, revolving broadly around the researcher's themes. Extensive notes were taken during and immediately after the interviews. Further material, including paper clips, official publications, press releases, website postings, newsletters, evaluation reports, consultancy reports, was collected and was critically analysed to highlight different aspects. This information was also used to triangulate as much as possible the information given by informants.

The body of data was analysed through the principles of a historical case study: determining patterns, trying out causal chain scenarios and establishing empathy with the protagonists of the story (Mason, McKenney et al. 1997). The researcher's impressions were compiled in an analytical narrative (Mayntz 2004), which highlighted important and recurrent themes, as well as temporal linkages. The analytical narrative recounted the policies designed and implemented on ICT for almost two decades, 1985-2006, tracking in parallel the history of Greek and European efforts to make sense of ICT.

5 BACKGROUND AND CONTEXT

In 2000, a government-led ICT programme mainly financed by the European Commission's community funds came into effect with a six-year period of completion. The Information Society Programme (*Επιχειρησιακό Πρόγραμμα Κοινωνία της Πληροφορίας*) provided a common identity for a wide range of interventions within the society and economy, comprising four broad action areas: education and culture, e-government, financial assistance to small businesses (Buhalis & Deimezi 2003), and telecommunications.

The wide scope of the Programme, its far-reaching ambitions, as well as a budget many times greater than the allocated budgets of similar ICT programmes of the past created a widespread feeling of apprehension within the circles of the Commission and the Greek central government. It was feared that the limited capacity of public administration bodies for ICT innovation would prove an insurmountable hurdle for the implementation of the Programme, and that the size of the budget would in effect trigger questionable practices of misappropriation of funds, of the sort with which both the Commission and the central government were familiar. These problematizations culminated in the establishment of the tri-partite organizational structure for the management of the Information Society Programme, comprising the Special Secretariat (political representation of issues of the information society) and Managing Authority (financial and organizational administration of the Programme), InfoSoc Ltd (executive agency for project management) and the Observatory of the Information Society (research and policy think tank).

The Information Society Programme set off to a slow start, as the staff in the new organisational structures sought their position within a complex and highly institutionalised public bureaucracy. The Special Secretariat introduced an elaborate planning stage which intended to match the functional needs of the potential beneficiaries with the action areas of the Information Society Programme. Thus, public authorities and state-controlled companies were asked to create 'business plans', documenting the 'as is' status, and expressing the 'to be', i.e. their vision in terms of ICT innovation for a five-year period. The help of consultants was solicited, but the business plans, whose concept of forward planning was foreign to the operational routines of public authorities, were hastily prepared and proved less innovative than expected. The onus was then on the Special Secretariat to shape them so that their content fall within the action lines of the Information Society Programme.

With public authorities preoccupied with the execution of business plans, and the Managing Authority preoccupied with their evaluation, the implementation of the rest of the Programme was notably slow. Indeed, the first two years (2000-2002) the only other project that took off was the procurement of IT equipment for school labs. Fierce competition among IT companies for the very few released invitations to tender frequently resulted in appeals against the results and protracted legal proceedings. The forward planning process proved, however, too long and politically unacceptable. The acutely felt fear that the Information Society Programme was slow in achieving its objectives finally led to the demise of the first leadership of the Information Society Programme in 2002.

In the following two years, some progress was made as the Information Society Programme gained visibility and public and private organisations strived to put forward proposals for information systems that were aligned with their business plans, as well as in accordance with a wide range of selection criteria. Overall, however, the take-up of the Information Society Programme was the slowest of all other EU-financed programmes, and concerns about the slow implementation voiced through the press, in parliamentary sessions, as well as in meetings with Commission officials, became louder.

In April 2004, a new leadership was brought in amidst growing fear and media attention regarding the apparent failure of the Information Society Programme to facilitate ICT-enabled innovation and reform. The emphasis of the new leadership was geared towards demonstrating immediate results by speeding up the implementation of the programme, removing administrative and legislative holdups and easing operational bottlenecks. They established a different structure, the Digital Committee, a light-weight

collaborative schema of top policy-makers bridging bureaucratic silos and political conflicts, in order to provide the top-level momentum to expedite stalling ICT investments. They also took an active stance in the IT industry attempting to dispel relations of mistrust and opportunistic behaviour which regularly resulted in delays from appeals against the tendering results and legal proceedings.

In 2006, at the time of the field visit, the rate of implementation of projects of the Information Society Programme had risen. Projects in many areas of the wider public sector, central and local government, as well as projects of telecommunications and assistance to small-to-medium enterprises (SMEs) were into full swing, and the small national IT industry was kept busy. Plans and budget items changed as funds were pulled out from stalling projects and actively funnelled into other areas. There was a widespread feeling of urgency; the impression was that this was a race against time. The initial delays had to be compensated for, the information systems projects needed to be completed within the specified deadlines, and the budget of the Information Society Programme needed to be fully allocated and expended.

6 ANALYSIS

6.1 Unpacking the ‘failure of implementation’

Policy-makers in the Commission remained sceptical of the ability of the Greek implementation mechanism to bring the Information Society Programme to a successful end. Their scepticism was eloquently expressed by an official in the Commission, while commenting on the latest Greek ICT strategy: “The Greeks are good in making policies and strategies; it’s when it comes to implementing them that the problems begin. And the problems are often crippling”. He was referring to practices and phenomena which had been documented in monitoring and evaluation reports, such as the delays experienced in the procurement and development of a large number of information systems project, which occasionally meant that projects needed to be abandoned and the funds transferred to other activities, as well as the limited use of information systems by their intended users (Monitoring Committee 2001). The interviews revealed further problems, such as the difficulty of central and local government authorities, and the wider public sector (the beneficiaries) to make project proposals for information systems within the scope of the Information Society Programme; the derailment of projects away from the initial agreed scope; and the emergence of an intricate and self-sustaining web of (overt and covert) relations between beneficiaries of ICT investments and the IT industry, often described as corruption, clientelism, or simply the most efficient way of dealing with meaningless demands and red tape.

The view that a successful policy formation was followed by a problematic policy implementation was echoed across the board, from political figures in the Greek government and higher civil servants to sales managers in IT companies dealing with public procurements. The statement seemed to invite remarkable consensus, even when stakeholders’ views diverged when it came to the causes of the problems or their solutions.

Designating such a disparate host of issues as issues of implementation can be said to have two important implications. On the one hand, it constitutes them as issues of a technical nature, to which a technical solution, such as better project management, enhanced skills and technical capability, or more transparent procedures, can be applied. Moreover, the assumption of a two stage process of policy formulation and implementation creates a false dichotomy, which has long not been challenged by scholars in the policy and political science fields, who argue that the distinction between formulation and implementation sustains a pretence of rational planning and the existence of a cause and effect relationship, which is far removed from practice, while it also fails to account for the formulation of policy during its implementation (see, for example, the established review by Sabatier 1988). It also precludes the emergence of alternative interpretations which see the whole process as a phenomenon, whose facets create limitations and affordances, and shape the identity of the whole. In the following analysis, I suggest that some of the problems which are faced into the implementation stage can be

understood as discordance between the assumptions and rationality behind the emergence of such programmes of action, not just the way they are being put into action.

6.2 Problematising on the unproblematic policy formulation

Current efforts to understand the progress of the information society programmes in Greece (both current and past) have been inwards-looking, occasionally acknowledging as a given the role of the European Union in the emergence of ICT investment programmes in Greece, but not problematising on its implications for their implementation (Tsipouri & Papadakou 2005a, Boucas 2008) (Avgerou & McGrath 2007). The role of the European Union is however more intricate and pervasive, as the burgeoning literature in Europeanization suggests (Featherstone 1998, Featherstone & Papadimitriou 2008, Morth 2003, Ioakimidis 2001). In particular for the area of ICT policy in which the EU and the Commission specifically has played a major part for the past two decades (Chini 2008), failing to account for its influence unnecessarily limits the scope of explanations for the phenomenon. Thus, at a first level, one can trace transfers of funding providing important resources for projects in ICT, whilst a hefty regulatory framework transferred from the EU to the national level shapes the available courses of legitimate action. Moving to a different level of analysis, previous research by the author has shown how the Commission has attempted to render itself the locus of policy for the information society and the subsequent calls for ICT investments (Chini 2009). It was further argued that the European policies projected specific discourses and visions of the legitimate types of actions to be taken in the pursuit of the creation of an information society, which were reproduced by the Greek policy makers in their attempts to create their credible visions and action plans for the information society. Building on this research, I argue that Greek ICT programmes, such as the Information Society Programme, were created and linked to two overarching regimes of truth which were shared by the Commission officials and the Greek policy makers in the central government, but which were contested by a variety of actors called to act on them during 'implementation'. It is these two regimes of truth and their contestation that I analyse below.

6.3 Technology in the service of European integration

Exploring the ways in which ICT was problematised and the context in which it was understood at the point where the Information Society Programme originated, i.e. the European Commission, becomes necessary in order to investigate the assumptions that were embedded into the creation of the Information Society Programme. ICT has often been discussed in terms of its capacity to transgress traditional structural impediments and enable development (for a review, see Madon 2000, Thompson 2008). In the context of the EU however, the argument appears to take on an added dimension, as technology (ICT in particular) is portrayed as the vehicle for closer European integration for the member-states that are lagging behind. This argument is corroborated by Barry (2001) who argues that technology in its Foucauldian sense, i.e. as the array of techniques, measurements as well as technical artifacts, were instrumental in the process of harmonization among European states for the creation of a single market. In this vein, I suggest that the information society programmes spearheaded by the Commission were used not only in their stated purpose to bring about a technologically- and knowledge- oriented society, but also as a way to foster closer integration between a range of still disparate societies.

Scrutinizing the documents that were produced as official publications by the Commission (strategies and action plans for eEurope) reveals a number of problematisations that were at the heart of the relationship that the Commission envisaged between ICT and the future of Europe. The opportunity for faster growth and development through the appropriation of ICT, and the threat of the dire consequences should member-states fail to realise the potential and allow existing inequalities to prevail are vividly expressed. Not only are the consequences of an increasing gap in productivity between Europe and the US and Japan brought forward as a major threat to the prosperity of Europe,

but the consequences of increasing social discrepancies among populations are also understood to be a menace to the mere existence of the union as such.

Behind these problematizations, a consistent regime of truth emerges that gives them remarkable coherence. ICT is tacitly put to the service of the broader goal of European integration in two specific ways. Firstly, ICT investments are constituted as necessary to create an information society, towards which all member-states are moving in a law-like manner. ICT and the information society are seen to provide another chance for all European states to form a truly cohesive union. On the other hand, ICT also constitutes the vehicle for achieving greater cohesion in the more traditional sense of faster economic growth and diminished regional disparities. This observation converges to some extent with the observation by Thompson (2004) that ICT acts both as a mediator and as the subject of developmental discourse upheld by the World Bank, but it takes on added dimensions as ICT comes to be problematized as an institutional actor in the context of a union of countries formed on more criteria than just financial dependence. For example, in one of the meetings held with a higher-level official and a middle-level Commission officer from the Information Society Directorate-General (DG) the question of the role of ICT for 'cohesion', which constitutes the facet of development emphasised within the Union was argued for passionately. Indeed, the discussants brought to the table two documents. The first one is a commentary on the process of telecommunications liberalization in Greece, a project of major concern at the time within the DG, detailing the extremely slow progress on the part of the state in bringing about the necessary reforms and in overcoming the resistance of the incumbent. The second is a league table of the fifteen European member-states regarding Internet penetration, showing Greece at the last positions of the table. They were disappointed at the slow progress and "the missed opportunities for Greece to catch up with the rest of the EU". They were dismayed that *their* continuous input and involvement had failed to bring about the desired results.

The dual vision of the information society both as the end state of societal development and the vehicle of development has created a powerful myth, to which both the European officials interviewed, and the higher-level Greek policy-makers subscribed to. There was a notable *esprit de corps* among them which originated from the conviction that a closer integration with the EU was the desired goal and that investing in ICT was not only a necessary condition in achieving it, but was often portrayed as a sufficient one too.

This regime of truth was however contested in action by a variety of actors within the administration of the Information Society Programme, by beneficiaries of the ICT investments and the IT industry, as they were called to make sense and act upon these demands embodied into the implementation of the Information Society Programme. The particular way of framing ICT in a developmental discourse in the context of European integration, which guided the actions of European and Greek policy makers and led to the constitution of the Information Society Programme, was often not shared by the ranks of employees entrusted with the implementation of the ICT projects, who reverted to practices which distorted the original meaning and purposes of the interventions.

Such practices can on the one hand be observed through their outcomes, i.e. through the information systems which, at the point of implementation, were a far cry from the ones that were originally specified and contracted (more on this in the next section). Seeking their explanation at an analytical level it can however be suggested that as the international and trans-European comparisons made less of an impact in the day to day realities of a variety of employees involved in the implementation of the Information Society Programme, the association of ICT with powerful visions of European integration eroded. The reformative and developmental capacity of ICT not only diminished, but the European origins of the vision were challenged as of limited relevance. In a revealing example, a middle-level civil servant in the Ministry of Interior in Athens, who had been involved with the implementation and monitoring of ICT investment programmes for more than two decades commented on the e-government initiatives, which promised to bring public sector reform. The eligibility criteria for projects in the e-government initiative of the Information Society Programme excluded projects of infrastructure or back office computerization, as the Commission argued that such investments had had already been

created through public funding in previous years. Further analysis shows that a heavily-promoted e-government campaign was active throughout Europe, as it offered a inconspicuous way to enable public sector reform according to certain standards without any overt direct intervention. Despite the strict rules, the Greek public authorities often manipulated the projects from front-office interventions to back office computerization or infrastructure through the funds of the Programme, contravening the Commission's regulations and straining the relationship. The participant explained: "The *koinotikoi* (officers in the Commission – a term used frequently and with rather negative connotations) aren't happy about it, but they'll go along with it. What else can they do?" he retorted defiantly. "Of course the funds are being 'misused', but so what? I think it's a good thing we did what we did!". He went on to explain how the Commission's vision and assumptions were not relevant for the conditions they faced on the ground.

On the one hand, the status and ability of the Commission to specify the appropriate directions for action on ICT was challenged, not on grounds of technical expertise, but rather on the grounds of limited validity of their globalised visions and overarching assumption. Participants claimed that their knowledge was more attune to the local circumstances, as they 'knew' better the needs of specific organizational and cultural contexts. On the basis of this knowledge, they felt it was legitimate to reshape the scope of the Programme according to their assumptions of the needs of specific, local implementation sites.

On the other hand, the participants' understanding of ways and practices to manipulate the structural arrangements around the Information Society Programme and the relationship with the Commission gave them the power to reshape elements of their environment which were meant to be accepted as given, for example by consistently flouting the rules and regulations that accompanied the Information Society Programme. The regulations attempted to govern the funding process according to principles of fair and free competition and timely and sound financial management, by carefully regulating the relations between the beneficiaries (government and public sector agencies, SMEs etc.) and the IT companies. However, the widespread suspicions of preferential allocation of contracts and illicit relationships between the IT industry and the beneficiaries suggest the limited success of the regulatory framework in shaping action. What is important is less whether the regulations were indeed breached, but rather that these practices were considered widely legitimate, even if illicit. For example, a rule that precluded IT companies from assisting beneficiaries in putting forward project proposals was flouted on the basis that the beneficiaries did not know enough about IT to put forward their own proposals unassisted, and so unless an IT company (covertly) helped them (consequently placing itself in a preferential position to win the bid), beneficiaries would by default miss out on the possibility of an ICT project. Such practices were rendered legitimate not through their association with an overarching belief in the role of ICT for European integration, but through their embeddedness in an alternative form of knowledge, remaining in the fringes of legitimate discourse, which upheld the importance of local contextual differences. This form of knowledge was often discredited at the policy level as ignorance, conservatism, resistance to change, or corruption, thus contributing to the maintenance of a fractured, contested domain, whereby the formulation of policy for the information society and its implementation appear to be made intelligible through different and to some extent clashing viewpoints and tacit assumptions about the role of ICT in bridging national differences in the midst of the EU.

6.4 The technological imperative

The second regime of truth that guided the formulation of policies about the information society in the EU, and which rendered their actions intelligible, was their belief in the course of technological progress, which was autonomously driven. Institutional interventions, in the form of government action, are understood to be a necessary response to technological progress, rather than its driver. This belief, which formed a cohesive foundation for their subsequent actions, was rarely explicitly expressed, but can be analysed through a small number of examples and secondary sources. The literature has documented the technologically deterministic way in which technological progress has often been

discussed, particularly within policy circles. For example, Mosco (2004, 1998) is highly critical of the way in which policy discourse presents technological change as not only progressing in an autonomous, self-propelling way, but also having uniform effects on disparate settings indiscriminately of contextual differences. In the context of the EU, the technological imperative as a regime of truth operated so as to make non investment in ICT appear inconceivable and illegitimate. Previous research has argued that investing effort, time and resources in ICT to create policies, action plans, and programmes by the Commission and the European member-states was rendered commonsensical (Chini 2009). Such plans and investment programmes were rendered legitimate through the reference to the powerful myth of the technological imperative. In a circular manner, however, their creation also turned them into powerful immobile objects inscribed with particular versions of the present and future.

Policy makers in the Greek government often expressed their resignation at what they perceived as the inevitability of their actions: the technology was itself demanding action to be taken. The Commission's documents, as material incarnations of the technological imperative, produced in regular time intervals, were perceived as constant reminders of this urgent call for action.

Staff in the Commission was highly involved in the preparation of the Information Society Programme of 2000-06, but also took part in its monitoring and evaluation, which produced results that were less than heartening. Two middle-level officers in the Commissions Regional Development Directorate-General, who were heavily involved in monitoring the Programme, explained their motivation for persevering with the Programme despite its slow results. They explained their continued efforts to make the Information Society Programme work in terms of the existence of a "worldwide technological momentum to keep investing in ICT, something like an imperative that does not need national justification". In effect, the question of whether the Programme was successful or not was of limited significance to them. It was not by results that continuing efforts were justified, but rather by recourse to a seemingly independent force of technological progress which demanded certain action.

Officials in the Commission ostensibly refuted the claim that they were themselves involved in sustaining a particular regime of truth which not only projected specific visions of the desired end state (an information society of a certain character) but also specific types of interventions. They did however casually comment on how their intervention shifted the role, scope and nature of national ICT programmes, such as the Information Society Programme.

The academic community has picked up on a technologically deterministic policy discourse that portrays technology as an autonomous force of social transformation (Berleur & Galand 2005). This criticism is valid, but I would also suggest that the literature has overlooked the role of policy discourse, the associated programmes of action and the truth claims embedded in them in sustaining a momentum towards particular types of technological interventions, at least to a certain extent. Evidence from the experience of the implementation of the Information Society Programme shows that such truth claims have not remained undisputed.

Indeed, the belief in the autonomous force of ICT as technological change, although spearheaded in policy discourse by national policy makers and legitimised through its European origins, was contested on the ground, for example in a meeting of an informal e-health working group held in a conference room in Athens. The meeting was attended by members of the management of the Information Society Programme, IT professionals involved in projects of e-health, as well as administrators in hospitals and health authorities and civil servants in the Ministry of Health. One IT consultant spoke of his team's efforts to implement a large patient care system in a hospital according to the specifications of their contract (the project specifications in the contract had been appropriately shaped by the management of the Information Society Programme so that the project fall within the action lines and eligibility criteria of the Programme). Summarising his experiences of the difficulties and delays his team faced in implementing the project, he expressed his dilemma as follows: should he implement according to the specifications, according to the "information society" as he described it, "knowing" that the bulk of the functionality "will not be used because it is neither desired nor needed", or should he implement the

system by 'moderating' it, shaping it to better suit what he calls "the reality", i.e. the conditions at hand, or the affordances of the particular locales. In the subsequent discussion, the audience appeared divided: a number of health administrators and health professionals similarly complained that the systems that they were implementing were not what was needed, or rather, that their health organizations didn't really need the systems that they were in the process of implementing. The counter-argument from the managers of the Information Society Programme was that the systems needed to be implemented in accordance with the specifications not only because the contractual obligations needed to be honoured, but also because this would ensure that the projects remained true to a vision of change through technology. They stated that "something need[ed] to change" in the host organisations (beneficiaries), "even if they have to be made to change".

Two important points need further discussion. Firstly, the incident highlights the actors' ambivalence and problematizations on the very reasons for doing what they had already been doing for a long time. The "information society" was not only understood as imposed from above and thus not attuned to the local needs, but was also seen as excessively technologically-deterministic and inflexible. The vision expressed by, and the assumption inscribed in, the "information society" appeared incongruent with the needs and desires of the people who were finally to benefit from it. The juxtaposition of the "information society", as expressed in this context, and the "reality" highlights not only the distance between the two, but perhaps more importantly their perceived incompatibility in the eyes of the people that were called to make them work together during implementation. The combination of a perceived top-down vision permeated by technologically-deterministic and European-centric assumptions on the one hand, the existence of a host of geographically dispersed implementation sites characterised by a non-technologically-oriented tradition (Thomadakis 1995) led local implementers to believe that their degrees of freedom in determining what the information society meant for particular contexts were significantly reduced.

Following on this, the regime of truth of the technological imperative did not manage to gain a foothold in a significant part of the population which it was supposed to affect. Despite the significance with which the Information Society Programme was invested at a policy level, the discourse of the technological imperative had limited success in capturing the attention of a wide array of beneficiaries. The continuing difficulties to relate the need and nature of the technological interventions with the nature of their work and their "art of living" (Avgerou & McGrath 2007) in a range of local implementation contexts can be said to have manifested itself in the continuing problem of which manifested itself in the slow uptake of the Programme and the continuous challenging of its vision.

7 CONCLUSIONS

The paper has attempted to extend existing literature on governmental interventions for ICT innovation, focusing in particular in the case of Greece. It attempted to debunk the often quoted problem of implementation which appears to be the point of convergence of the existing academic literature and practitioners and policy-makers alike by treating it as the external manifestation of a different kind of problem. Appropriating Foucauldian notions about the rationality of government, the construction of legitimate truth regimes and their contestation in innumerable points of resistance by subjugated knowledges and discourses, the paper provides a theoretically founded interpretation of the apparent difficulties facing the implementation of the Information Society Programme in Greece.

I argued that to be able to question the outcomes of the Information Society Programme, in its capacity as a major ICT policy and investment programme, it is necessary to open the focus of academic investigation to take account of its origin. Previous research has highlighted the important and multifaceted role of the European Commission in its creation and shaping. Taking this further, I argued that the Information Society Programme reflects two dominant regimes of truth shared by the Commission and the Greek policy makers in the central administration, what I termed as technology in the service of European integration and the technological imperative. Using rich (if short) descriptions, I

showed how these two regimes of truth guided their actions with regards to the importance of ICT investments, their targets and means.

I then went on to show how these two dominant regimes of truth came to be challenged in action by a wide range of actors in the various beneficiaries (local government and public sector agencies, SMEs) and well as the IT industry. In different points of contest, agents engaged locally relevant, subjugated knowledges to subvert, twist or shape the ends and means of the ICT investments in ways that were locally relevant, even when this meant appropriating few of the potential benefits of the ICT interventions.

In doing so, I suggested that the 'problem of implementation' can be fruitfully conceptualised as the external manifestation of a clash between the rationale and implicit knowledges in the EU-inspired discourse about the role of ICT in public life, economy and European integration, and the subjugated knowledge of the range of local actors for whom the discourse of technological imperative has not caught on, while the discourse of the need for European integration erodes the further away one gets from the sphere of European influence.

Conducting the research from a Foucauldian tradition allows us to conceive of power not in a static form of power embodied in resources, but rather in a relation form where power is intimately coupled with forms of knowledge, which can in turn have varying degrees of legitimacy and commonsensicality in different settings. As such, it brings into question the rarely challenged rationalities of government and refrains from a priori condemning all deviation or contestation as negative or unproductive. In this sense, it follows in the theoretical tradition of Bourdieu (1998) and Hirst and Thompson (1999) in providing a space for alternative readings of popular phenomena of our times.

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