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policy and experience**

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State and information society development: a strategic-relational approach to the Greek information society policy

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Abstract: The paper looks into the dynamics of information society policy and its implementation in the Greek context. It argues that information society development is a contested process, influenced by pre-existing state, economy and society relations. Based on this, it looks into the different aspects of the idiosyncratic path which the evolution of the Greek information society has followed, particularly after 2000, informed by state actions within a specific set of social and economic arrangements. Using Bob Jessop's strategic-relational approach (SRA) to the state as an analytical framework and drawing on a number of in-depth interviews with relevant political actors, it provides insights into policy implementation by examining: the public management of information technology projects, how such projects were received in bureaucratic structures and practices, as well as the relationship between the state and the information and communication technology (ICT) sector in public procurement processes. The emphasis is on the period 2000–2008, during which a major operational programme on the information society in Greece was put into effect. The paper also touches upon the post-2008 experience, suggesting that information society developments might include dynamics operating independently and even contradictory to the state agenda.

Keywords: information society, information and communication technology, state, policy, strategic-relational approach, Greece

Introduction: The state and the information society

State power, and indeed the state as an entity, has come under a series of specific challenges. These include the consolidation of financial markets and trade, the evolution of supra-national arrangements which bear the seeds of global governance regimes, the rise of wide-ranging social movements, as well digital economy features underpinned by information and communication technologies (ICTs). These challenges to the public sector have given rise to theorisations about, the ‘end of the state’ (Ohmae 1990; Strange 1996). Other, more critical stances have argued for the persistence of the state as structural entity, albeit transformed with its functions redefined in accordance with changes in the global economic, political and social system (Smith, Solinger and Topik 1999; Mittelman 2000; Sorensen 2004). For them, the national state retains considerable capacities: in strategic terms as a mechanism for integrating the economy into global processes, in political terms as guarantor and defendant of the rights of its citizens, and in socio-cultural terms as intermediary between global processes and national or local social and cultural particularities.

Alongside processes of state transformation, the search for and formulation of international and national ‘information society’ (IS) policies has been a significant development in the last thirty or so years. The concept of ‘information society’ is rather older and has evolved through different discourses from cybernetics and control in the late 1940s, to economic and occupational definitions in the 1960s and 1970s, spatial and cultural approaches in the 1980s, or technological perspectives in the 1980s (Webster 2006). Godin links the consolidation of

‘information economy’ discourses to the use of statistics and quantification, notably by OECD (Godin 2008).¹

At the European Union level there has been since the beginning of the 1990s the vision of such a new society built on ICTs. This has been presented as a unique historical opportunity and has directed policy towards the promotion of ICT infrastructures at the national level; in parallel, the necessary measures for the deregulation of telecommunications and media sectors have been adopted so as to conform to the requirements of flexibility ‘built’ into the new technologies (European Commission 1994; Garnham 2000).

Bringing together the idea of the continuing importance of the state and the prerogative of the IS specific theorizations have emerged, projecting the role of the state onto the realisation of an IS-based capitalist system in the twenty-first century. In these approaches state policy continues to be important as far as the provision of investment and resources for technological innovation is concerned, while it also acts as a rectifier of market failures (May 2002). Generally speaking, the state retains overall responsibility for developmental policies, which cannot be reduced to technological solutions, but rather depend on the complex interplay of economic, social and cultural forces. It is in this vein that some or all of the following functions of the state can be understood: development of infrastructures (including broadband telecommunications); information content and services; regulation of activity in cyberspace; transformation of national utility structures to more flexible and competitive arrangements; links between university research and business needs; provision of platforms for education, lifelong learning and knowledge skills (Jessop 2005). Moreover, states assume discursive

functions (including advertising campaigns, pilot projects etc.) for the promotion of the information society.

None the less, these activities do not happen in a deterministic way. Our premise is that the information society does not involve merely the diffusion of ICT innovations and the replication of practices adopted in other national contexts; rather, it is a process of translation into behaviours and practices according to pre-existing national arrangements, including structural and institutional characteristics, technological, innovative and economic capacities, aspirations of the actors and social coalitions involved. The physiognomy of state activities and functions in this process will ultimately depend on the kind of embeddedness of the state in broader social, economic and political forces. The state, economy and society relationship, as historically developed at the national level, is expected to have bearings on the actual role of the particular state in the information society.

National IS cases have to some extent been studied in the European context, but such studies have limited themselves to focusing on the degree of advancement of the national information society through particular ICT indicators (e.g. Dutta et al. 2006); indeed, only a handful of national studies have considered the complexities and contested character of ICT adoption and the ways in which national social, economic, or political characteristics have been manifest in the implementation of ICT policy (Falch and Henten 2000; Castells and Himanen 2002; Castells 2005; Ignatow 2011). This paper seeks to fill some of these gaps by examining the dynamics of IS policy implementation in the Greek context and the role of the state in this contested process. As policy implementation takes place at the national and local levels and therefore bears particular groundings of society, politics and culture, the paper addresses the

research question: in what ways has the unfolding of the Greek IS been informed by state institutions/procedures, as well as social relations among the state, the economy and the civil society?

Greece constitutes an interesting case, owing to the fact that it presents a number of particularities as a socio-historical formation and is characterized by deep and idiosyncratic articulations between the state, the economy and society (Mouzelis 1995; Tsoukalas 1987; Voulgaris 2006; Featherstone 2005). It is important to examine how idiosyncrasies related to the nature of bureaucracy, the practices of public procurement, the management of public projects, the relations between state mechanisms and economic investment, and the profile of civil society, have played out in the unfolding of the Greek information society. The analysis focuses on IS policies in Greece between 2000 and 2008, a period which includes the introduction of the first comprehensive IS strategy, as well as enabling a critical examination of its effects. After 2008, Greece entered a prolonged fiscal crisis which makes the study of IS policies problematic, as both the level of policy design and that of implementation has suffered from stifled growth, reduced demand and economic recession. Nevertheless, as Greece has turned to austerity measures, with social suffering and a clash between top-down state policy and bottom-up social resistance, it provides an appropriate case for examining the extent to which changing social circumstances have fed a different information society landscape after 2008.

In our analysis of the IS policy of the Greek state and its implementation we use a specific conceptualization of the state, namely Bob Jessop's 'strategic-relational approach of the state', which is described in the next section.

The strategic-relational approach to the state

Drawing on the ideas of Poulantzas and Gramsci, Jessop's rich account of the capitalist state approaches it as a social relation and interprets state strategy accordingly. This so-called 'strategic-relational' approach (SRA) provides a good balance between structure and agency in trying to examine both what the state is and what the state does (Jessop 2007).

The SRA comprises the following premises:

- The state contains both institutional structures and procedures
- The state is a social relation, as it is embedded in the wider political and social system
- Structures and strategies follow an evolutionary logic; reorganisation of structures and reorientation of strategies are subject to structurally-inscribed strategic selectivities and have path-dependent (but can also have path-shaping) aspects
- The effectiveness of state power is a contingent product of a changing balance of social and political forces located both within and beyond the state

The SRA approach, though generally applicable in state policy, is particularly suitable for understanding the challenges that the state faces in the information society, whilst accepting that the state plays an active role in the emerging IS arrangements. Jessop (2005, 2007) resembles other thinkers emphasizing the importance of the state in generating new knowledge through the education system (Carnoy and Castells 2001), providing investment and infrastructural resources (May 2002; Cammaerts 2005), or diffusing and deploying technology in the public sector (as seen in the eGovernment literature, e.g. Heeks 1999). Additionally, Jessop's approach captures two key conceptual dimensions: the *strategic role* of the state alongside its *embeddedness* in a wider socio-economic, political and cultural framework. Jessop's SRA provides thus an analytical device for investigating the deeper

articulation of state functions with wider social, economic and political arrangements. His approach is compatible with our premise of the information society emerging out of pre-existing societal arrangements. As such, it strikes a balance between continuity and change and is well positioned to capture the contested character of the *process* through which the information society emerges.

Last, Jessop's approach provides us with useful analytical tools to judge the efficacy of policies and their implementation, through its examination of state institutions and procedures, structurally-inscribed strategic selectivities, path-dependent and path-shaping aspects and the contingency of state policy outcomes.

For these reasons we find the SRA apposite for examination of the dynamics of the information society unfolding in a national context, if the role of the state and its relations with the economy and society, as well as the historical particularities of the (national) context, are to be taken into consideration. The paper indeed provides an account of the information society evolution in Greece, particularly over the period 2000–2008, through relevant state policies. It demonstrates how historical articulations between state, economy and civil society have informed information society developments and the ways in which old dynamics of social, political and economic relations and practices of the industrial era have been reproduced in the process of IS policy implementation.

In the following sections we present: a historical account of the particularities of the Greek socio-economic formation; an overview of the Greek IS policy; an analytical account of IS policy implementation in the period 2000–2008 using the pillars of bureaucratic structures/procedures, as well as the public procurement/ICT sector relations; and a description of the differences experienced in the austerity period after 2008.²

State/society/economy in Greece

A number of well-established historical sociological accounts have conceptualized the state/economy/civil society relationship in Greece. For many thinkers, the key historical point was the late industrialisation of the country (beginning only in the 1930s), which is claimed to have been associated with the increased role of the state in the economy; this, coupled with the great centralization of state power has been theorized as the ‘heaviness’ of the southern European state overall (Gunther, Diamandouros and Sotiropoulos 2006). An implication of late (and incomplete) industrialization was a quite limited domestic market, which eventually led to rising unemployment for large segments of population drawn in urban centres. As those were absorbed in the tertiary sector, particularly public bureaucracies, public administration grew enormously and soon became very fragmented and inefficient, while clientelism and patronage became the mode of operation in the allocation of posts (Mouzelis 1995). Factors such as the south-European importance of familism (with its emphasis on maximization of welfare of family members), the history of the Civil War (1945–49) and subsequent Left-Right social divisions, as well as the prevalence of clientelism through the party-dominated character of politics gradually determined the entire functioning of the public sector (Voulgaris 2008; Tsoukalas 1987).

The late industrialization of Greece, as well as the role of the state in economic development, has shaped both the character of economic activity and the nature of civil society in Greece. The private sector has developed a historical tendency to operate under the protective mechanisms of the state (e.g. seeking increased subsidies, enjoying protection through high tariffs or other kinds of favourable treatment), rather than building its own independent capabilities (Lyberaki and Tsakalotos 2002). Such practices have often been applied in

asymmetrical ways between industries or within an industry, with certain economic groups enjoying privileged access to public resources. The interventionist role of the state in the economy, an expression of this 'heaviness', was very prominent in the 1960s and 1970s across the industrial and service sectors, and included tariff protection, preferential treatment, and overall protectionist practices to defend the interests of economic elites. At the same time, the 'weakness' of the state was manifested in its ineffectiveness in promoting economic development, until at least the 1980s or 1990s, as well as the model of public bureaucracy, mentioned above and further described later on (Gunther, Diamandouros and Sotiropoulos 2006). Overall, it has been claimed that the state/business/labour industrial relations can be characterized by a 'disjointed corporatism', whereby labour unions tend to be patronized by the state and the political parties, while the policy capacities of the state regarding business are weak (Lavdas 2005;298).

State paternalism has been attributed to insufficient industrialization, which prevented the development of traditional industrial unions, with much lower rates of unionization than Western Europe. It has been exemplified in the General Confederation of Greek Workers (GSEE), created in 1918, which obstructed the development of other civil society associations. In parallel, social movements and other entities (e.g. the Church) have historically had limited independence from state mechanisms. Though informal civil society mechanisms have indeed been significant, formal civil society (measured in terms of organizations and participation rates) has been overall limited and organizations have often been dependent on state mechanisms. Still, there exist some very potent formal civil associations, such as the associations of professionals (lawyers, doctors, engineers), which have systematically resisted any political reforms affecting their interests (Sotiropoulos 2004; Voulgaris 2006).

In effect, a set of dominant dimensions of Greek politics, economy and society crystallized in the period from the 1970s and were still present in the beginning of the twenty-first century: the nature and culture of Greek bureaucracy and its tight relationship with government and politics; the over-regulation and mutual dependence characterizing state/economy relations; the over-politicization and complexities of policy processes; the determining role of political parties in politics with highly conflictual inter-party relations; the unbalanced civil society, comprising strong professional associations, significant informal but weak formal mechanisms, as well as peculiar corporatist industrial relations; a political culture that shows mistrust and opportunistic behaviour against the state. These traits indicate a very specific set of relations of embeddedness of the state in the wider political and social system, which are amenable to analysis using Jessop's SRA.

State policy for the information society in the Greek context

During the 1990s the 'modernization' project of Prime Minister Simitis (1996–2004) sought to overcome some of these 'anomalies' of the Greek economy, society and politics. This ambitious socio-economic project was centred on the mission of securing the position of Greece at the core of EU both in economic and in political terms (including incorporation in the core of the Eurozone). It is during the Simitis period that a first systematic political attempt to promote and implement an IS in Greece took place.

This attempt also needs to be seen in the context of the EU rhetoric and policy regarding the IS, introduced around 1993–1994 and characterized by a quasi-deterministic tone treating the new ICTs as transformative and calling for social and regulatory adjustments to accommodate

their over-determining effects and to exploit their competitive potential in a global environment. Thus, the famous Bangemann report (European Commission 1994) introduced the idea of buying into the EU vision and building national societies according to it. The liberalization of the telecommunication sector in Europe was presented as the first major step towards this direction. New regulatory models developed by the Commission, policy transfer between EU states, and ideas brought from the US telecommunications transformation were transmitted at the national level so as to shape the telecommunications market (Sancho 2002).

The first IS policy document in Greece was a 1995 White Paper, which served as a means of setting the IS agenda in the Greek context. It echoed the discourse of opportunity associated with ICTs, as well as the dangers of being left behind, and presented the whole issue as a great challenge for Greece. It was mainly concerned with the inadequate national infrastructure, which limited electronic transactions and access to new products and services both for firms and for households in comparison with the other EU countries (Constantelou 2001). The operational programme 'Cleisthenes' (1994–2000), run by the Ministry of Interiors, Public Administration and Decentralisation with a total budget of 100 billion drachmas, was the main IS initiative of that period, aiming at the modernisation of public administration. The programme adopted an integrated approach to IT, including development of infrastructures, applications and training in the design and implementation of each separate project. Information systems for municipalities, fiscal administration, the stock market, customs, as well as training of public administrators were some of the basic initiatives. In parallel, the digitization of the public telecommunication operator network, the development of certain fibre optic rings, and the creation of the national network for research and technology (EDET) were important initiatives at the level of telecommunications infrastructure (Boucas 2008a).

The liberalization of the telecommunication sector had been completed in more or less all EU countries during the late-1990s and Greece followed suit to intervene in the state monopoly in the provision of telephone and telecommunication services provided by the incumbent Greek Telecommunications Organisation (OTE). A series of laws carried forward the liberalization of telecommunications, beginning with value-added services and mobile telephony services (Law 1892/90 and 2075/92); after 31 December 2000 all restrictions including those on the provision of voice telephony and the network infrastructure were removed and full competition was officially established (although OTE kept a de facto dominant position in fixed telephony), under the supervision of a new, independent regulatory authority, the National Telecommunications and Post Commission (EETT) (OECD 2001).

Following a series of consultations, the post-Bangemann EU agenda slightly shifted to the introduction of social aspects to make the IS project more acceptable and to invite co-opting at the national level, as well as ensuring that the tangible aspects of the relevant budgets play out. The emphasis on liberalisation of telecommunications was replaced by the rhetoric to make Europe an 'information society for all' and the most advanced knowledge-based society with social cohesion and cultural diversity in the Lisbon strategy of 2000. These aims were subsequently expressed in the ensuing eEurope 2002, eEurope 2005 and i2010 plans.

The Lisbon agenda established closer cooperation and commitment from numerous EU authorities, member states, civil society and non-governmental organizations in a number of policy areas, using the open method of coordination to transfer best practice and international policy experience while giving to states room to adapt policy to their national specificities. These developments led to considerable policy convergence as to the general directions of all national information societies, determined at the EU level.

In Greece, a more comprehensive White Paper was prepared in 1999, based on international experience and feedback from relevant ministries regarding the actions and steps that had been taken vis-à-vis the IS. It emphasized the potential of ICTs for competitiveness and better public services, present in the early EU documents, together with the requirement of building human skills to take advantage of these opportunities. The imperative of universal access and the prevention of new types of social exclusion, reminiscent of similar concerns in EU documents, were also highlighted: ‘Information and telecommunication technologies change rapidly the way we work, play, communicate, and transform the bases of economic competition...The government’s concern is to ensure that the emerging Information Society will be a society for all’ (Hellenic Republic 1999:5).

Based on the White Paper, the eEurope initiative and the June 2000 Feira Summit, the Greek government proposed a systematic Operational Programme for the Information Society (OPIS), an innovative horizontal programme, with a budget of 2.8 billion Euros; 2.27 billion was public funds (about 25 per cent national and 75 per cent from the European Regional Development Fund and the European Social Fund) and the rest came from private funding. The OPIS was approved and launched in spring 2001 with an implementation time-frame lasting to 2008 (Caloghirou and Constantelou 2006). It operated across ministries, involving a number of government departments, but also educational institutes, firms and other actors, and aimed at implementing the essential features of the White Paper.

Reflecting the EU rhetoric, as expressed in the Lisbon agenda and the eEurope initiatives, the OPIS set as objectives over the period 2000–2006: a) to provide better services to the citizen and improve the quality of life through the deployment of ICTs in public administration, health and welfare, transport and the environment, b) to promote development and build

human potential through actions to increase competitiveness and employment and to put into place a suitable educational system (Ministry of National Economy 2000; Constantelou 2001). In July 2005 a new plan, the so-called 'Digital Strategy', was introduced for the period 2006–2013, which purported in rhetoric to push the information society agenda more, but seemed just to have rephrased the orientation of the IS in Greece (Boucas 2008b).

The Greek IS strategy presented overall, in SRA terms, specific structurally-inscribed strategic selectivities that were informed by the evolving EU agenda. Greece followed closely the tone of early EU reports in the formulation of an initial information society vision. Initial preoccupations had to do with the relative underdevelopment of the infrastructures of the country and the positioning in the development opportunities presented by ICTs. The liberalization of telecommunications in the 1990s can be seen in the light of this initial disposition, as being in line with the international atmosphere. Subsequently, and in parallel with the development of the eEurope initiatives, the country prepared more detailed and strategic plans with increased awareness both of the competitive potential and of the quality of life opportunities brought about by ICTs. The 1999 White Paper emerged from the political will to follow IS developments that were taking place elsewhere in the EU at the time. At the same time, a number of socio-economic and cultural parameters historically endemic in the Greek reality were also taken into consideration in the IS rhetoric, reflecting the modernisation project and relevant discourses of the 1990s. The 1999 White Paper placed notable emphasis on the role of the state: contrary to other European cases, characterised by an indirect mode of state intervention, it claimed that the Greek state should assume a more direct role, partly due to the extensive reforms required in the state/economy relationship, as well as at the level of public bureaucracy and services (Leandros and Iosifidis 2003). On the

whole, the IS strategy leading to the OPIS showed an evolutionary logic but contained also path-shaping aspects.

In the next section we examine the implementation of the OPIS, which involved institutional structures, processes and procedures, as prescribed by the SRA framework. In doing so we focus on certain dimensions of implementation and draw on a set of elite interviews conducted in the period 2005–2008.³

IS policy implementation

According to legislation passed in 2000 (Law 2860/2000), several institutional actors were set up to manage and implement the OPIS. The *Managing Authority*, operating under the *Special Secretariat for the Information Society* established within the Ministry of National Economy, dealt with the design of action lines and control of their implementation. The *Monitoring Committee* comprising representatives of ministries, public organizations, economic and social partners and non-governmental organizations was given both a supervisory and an advisory role. The *Information Society S.A. (IS SA)*, a public not-for-profit organization operating under the supervision of the Ministry of Interior, Public Administration and Decentralization, was charged with the administration of public calls for tender, as well as with implementation assistance to public and private institutions. The *Observatory for the Greek IS* was intended to transfer expertise and best practice relevant with information society issues (Leandros and Iosifidis 2003).

Despite a comprehensive strategy, initial results indicated that the OPIS was slow in its implementation. In 2008, Greece continued to lag behind and occupied the last position in the

EU-25 in terms of all indicators of information society development, with the exception of telephone lines and mobile phones.⁴ Private consumption, rather than production, was driving the IS, resulting in the diffusion of simple infrastructures (mobile telephony), while advanced infrastructures (e.g. broadband) were less spread. Digital divides were observed, as ICTs were much more diffused in firms, than in households. ICTs were also disproportionately diffused in large and medium enterprises in relation to small and very small enterprises, which constitute the bulk of the Greek economy. Digital divides were also observed among individuals, in terms of sex, age, education and geographical location. Apart from specific success stories, there was limited incorporation of ICTs in government and public authorities overall, as well as in daily life and practice. As the IS Secretary of 2002–2004, a very passionate and enthusiastic driving force behind the implementation of the OPIS, remarked:

One segment of the Greek society has progressed, but the rest does not follow. It is evident that the information society has not advanced as much as it could have done (*Yannis Caloghirou* 2008).¹

In what follows, we present in more detail our empirical evidence based on elite interviews and show the link with the particular dimensions of state structures and state/economy/society relations shaped historically. We do so by approaching information society implementation through a) the bureaucratic modes implicated in IS projects; b) the nature of public procurement and the operations and logic of the ICT sector. In this, we use the SRA approach as an analytical device highlighting the relevant processes and structures.

Bureaucratic legacies and project implementation

¹ Interview with the author.

Bureaucratic institutional structures and procedures (as accounted for by SRA) were significant as receivers and reactors to information society policy and for implementation of the OPIS projects.

Bureaucracy in Greece has historically been quite fragmented, with lack of expertise and coherence within public authorities and wide divisions across agencies. Public administration has been systematically subject to abusive interventions by successive governments for purposes of clientelism, something which has prevented the development of a Weberian bureaucratic culture based on rational/legal expertise (Lyberaki and Tsakalotos 2002). The Greek administration system is often taken to belong to the southern European model of bureaucracy, characterized by pervasive clientelism, corruption at lower levels, uneven development of institutions, with some departments overstaffed and others underdeveloped, as well as rigidities and over-legalistic frameworks (Sotiropoulos 2004; 2006). To examine the role of these features in the implementation of the OPIS programme, we differentiate between two levels of administrative context: firstly, that of the design and management of public sector projects, which involves project managers, ICT experts within public agencies and some high-level bureaucrats; secondly, that of middle-level and lower level civil servants, which can be seen as the users of ICTs in the public sector.

Management and implementation of ICT projects

Despite the broad OPIS vision, the public authorities involved in the implementation lacked central and comprehensive planning processes and mechanisms: their suggestions took the form of fulfilling ad hoc demands and deficiencies, rather than becoming part of an overall strategy. In any case, a systematic attempt to collect appropriate data and identify problems

had been missing, as an ICT executive remarked (*Lambros Tsitilas 2005*).² This initial fragmentation was accompanied by a secondary level fragmentation emanating from middle cadres (e.g. advisors or consultants operating across ministries and other public agencies and having a coordinating role in the implementation of the OPIS). These had often been politically appointed and therefore changeable in line with government alternations; moreover, they aligned with various interests (including political and professional) adding to the unpredictability, asymmetry and uncertainty in the direction of the overall programme (*Theodoros Karounos 2005*).³ In SRA terms, the practices of these cadres are indicative of the ways in which state mechanisms have been historically embedded in the broader socio-political system.

Fragmentation was coupled with problems of cooperation, including a notable reluctance from ministries to delegate responsibilities to the OPIS bodies for project implementation:

What we underestimated and should have intervened more drastically with was the weakness of authorities (ministries, municipalities, local authorities, NGOs) to implement projects, as well as their frequent resistance to allocate the implementation control to the IS SA, which had been set up for this purpose, and was more suitable than the specific authorities for designing, allocating and implementing ICT projects for the public sector (*George Papakonstantinou 2007*).⁴

In addition, the requirements for concurrent technical, as well as organizational interoperability, institutional change, transformation of practices, educational programmes, culture and attitudes, necessary for any successful information system set up, frequently escaped the implementation bodies (public authorities). Technological fragmentation within

² Interview with the author.

³ Interview with the author.

⁴ Interview with the author.

public organizations and perpetuation of quite obsolete structures (e.g. different departments for telephony, IT and Internet, and for procurement for those technologies) and the absence of ICT strategic units in ministries, constituted legacies reproducing the logic of 'automation of existing processes and day-to-day operations', rather than re-designing the state-citizen relationship (*Yannis Larios 2005*)⁵.

Structural features, then, formulated over time, persisted and most ministries displayed strong path dependent behaviour, as suggested by the SRA. Indeed, the observed persistence in traditional ways of approaching ICTs as large automation projects in the public sector, rather than thinking of them in new innovative ways was a very important aspect. Although the central mechanisms (the Ministry of Economy and Finance and the bodies established by the OPIS) were espousing the logic of innovative approaches, the implementation mechanisms were stuck in the old, traditional ways of thinking. In the period 2002–2004, certain senior actors (e.g. in the Managing Authority and the IS Secretariat) were pushing towards smaller and flexible projects alongside open source software; it seems that subsequently these ideas were more or less abandoned, and the post–2004 (conservative) government retreated to the traditional ways of thinking, as is perhaps evident in the 2006 agreement with Microsoft for software procurement for the totality of the public sector, though there were arguably cheaper and more effective alternatives (*Yannis Caloghirou 2006*).⁶ Lack of expertise and conflictual relations between parties had informed state structures historically and were replicated in IS projects, as anticipated by the SRA analytical framework, while there was a clash between path dependent and path-shaping behaviour among state mechanisms.

⁵ Interview with the author.

⁶ Interview with the author.

A further degree of complexity had to do with the legal, regulatory and institutional frameworks of ICT project implementation and of public procurement mechanisms on the whole. Such frameworks had been informed by the tradition of large public projects in Greece. In addition, administrative procedures continued to be quite complicated, reflecting the fragmentation of public administration that had been historically formed:

The regulatory framework is one important reason why significant delays occur. It is 'sick' and the procedures need to be followed to implement a project are extremely complicated. It is a very old framework, made up of literally volumes of legislation, some of which dates back to the 19th century'. (*Yannis Larios* 2005)⁷

Many interviewees from the ICT sector complained that this quite stiff framework made tendering processes extremely cumbersome and time-consuming (*Thanassis Zafeiropoulos* 2006; *George Karanikolos* 2006; *Takis Antonopoulos* 2006; *Yiota Paparidou* 2007).⁸ The nature of institutional procedures, included in the SRA toolkit, played a part in the way the information society project unfolded.

Reception of ICTs in bureaucratic practices

The political deployment of the public sector as a mechanism for absorbing excess labour force and for exchange of political favours through the operation of the forces of clientelism had also attributed to the Greek bureaucracy cultural characteristics and modes of behaviour informing the reception of ICTs in public organisation and practices.

⁷ Interview with the author.

⁸ Interviewed by the author.

At the level of rhetoric and expectations ’

there was the illusion that through computerisation the public sector would become organised, while in fact organization is a prerequisite for automation in most cases. (*Theodoros Karounos 2005*)⁹

At the level of practice, however, reorganisation happened to a limited extent, e.g. through the introduction of dedicated ‘Citizen Service Centres’ providing administrative information and documentation and the TAXIS project of the Ministry of Economy and Finance, whereby computerization brought some order to the fiscal system. Overall,

the administrative mechanisms and civil servants had not understood the meaning of interoperability, at the technical, organisational and functional levels. (*Thanassis Priftis 2006*)¹⁰

Additionally, fear was expressed that, ‘if the new ICT projects were introduced staff would be made redundant or would not have any reason to exist any longer’. (*Stefanos Karapetsis 2009*)¹¹ at the same time, resistance was due to ‘inability to change one’s practices’ (*Yannis Caloghirou 2008*),¹² a clear indication, in SRA terms, of the path dependence of micro-practices and their significance.

Resistance was linked with the fear of releasing power when procedures become codified and automated; this has particular resonance in the ‘flexible and untidy reality’ of the Greek public administration, involving the ‘absence of systematic codification of law that creates areas of legal uncertainty’ and ‘informal practices’ (Spanou 2008:153), through which power is exercised and benefit is extracted by large segments of civil servants in their daily working

⁹ Interview with the author.

¹⁰ Interview with the author.

¹¹ Interview with the author.

¹² Interview with the author.

practices. The introduction of ICTs in the Ministry of Economy, for instance, meant that the employees involved would no longer be able to negotiate with firms and citizens regarding their taxation and get commissions for providing favourable tax bills, as everything would be automated and codified. Likewise, in the health sector, despite efforts over a number of years, information systems did not progress at all, as circuits of black economy and informal practices in health were resistant to any introduction of new technologies. In quite a few public agencies dealing directly with citizens ‘petty corruption’ (e.g. providing a favour in return of a small amount of money, or getting a small tip out of a transaction) was generating resistance to the introduction of ICTs. For some IT firm executives, these practices were perpetuated ‘because of the party-centric character of the public mechanisms and the accompanying clientelistic relations of recruitment.’ (*Stefanos Karapetsis* 2009)¹³

Administrative and professional practices, informed by traits of the wider political system, were in certain contexts (e.g. civil service, health) resistant to the introduction of new ICTs. Such practices were the outcome of particular kinds of embeddedness (including clientelism, party-centrism and familism in recruitment of personnel) of state administration and civil service in the wider socio-political system, as captured by the SRA language.

Public procurement and the ICT sector

State/economy relations in Greece have been historically characterized by over-regulation and strict legal frameworks, in parallel with relationships of mutual dependence, involving corruption and patronage in the allocation of favours and contracts (Kazakos 2001). Public procurement, in particular, has not functioned as a developmental mechanism for the supplier

¹³ Interview with the author.

industries due to a number of Greek particularities (small market, absence of industrial tradition, shallow technological activity with limited local research and development, small knowledge content, as well as insufficient production capacity) plus a protective attitude from the state, which has often contributed to complacent behaviour on the part of the suppliers (Caloghirou 1993). These characteristics of Greek capitalism and its relationship with the state were reflected in the state/ICT sector relations in Greece. Incomplete industrialization and the resulting small market left their imprint on the Greek private sector and economic activity. As an advisor to a former Special Secretary put it:

Investment is very limited; the private sector in Greece is mainly retail, with very low value-added, waiting mainly from the public sector to implement projects... Likewise, the ICT sector does not generate demand on its own, but awaits the generation of demand from the public sector, which it subsequently tries to satisfy. (*Thanassis Priftis* 2006)¹⁴

Through IS policy and the OPIS, in particular, the Greek state demonstrated considerable eagerness to help enterprises enter the digital era. Initiatives such as the ‘Go-Online’ and ‘eBusiness’, provided subsidisation for firms (including small and very small enterprises) for purchase of equipment and skills training. But overall it was through its own public procurement processes that the state sought to stimulate demand in the private sector; however, this objective came up against various structural problems.

ICT firms: grandiose expectations, myopic behaviour, clientelistic practices

The large budgets involved made the OPIS from the onset very attractive to most ICT firms. Their expectation was that the OPIS would enable them to build expertise in various

¹⁴ Interview with the author

applications and services which could then be adjusted to be sold on the broader regional market:

With this in mind, there were examples of firms which used to employ 200–300 individuals that through mergers were turned into groups with 1500 or more employees and that were transformed from distributors of IT products to firms with heterogeneous and ill-defined business objects (*Yannis Syrros 2006*)¹⁵

Many ICT firms over-invested in anticipation of the OPIS projects and employment in the sector augmented substantially between 2000 and 2003. (*Lambros Tsitilas 2005*)¹⁶

Such expectations had been cultivated by the state; for some, it was a matter of advertising the OPIS in a wrong way:

When the OPIS was designed, it was publicized as ICT projects, which was not correct, as it was also about restructuring of the public sector, soft initiatives such as entrepreneurship, education and training. It was advertised and perceived in a wrong way by the ICT sector. (*Yannis Larios 2005*)¹⁷

Many interviewees involved in state mechanisms argued that the ICT sector could not grasp the breadth and depth of the OPIS:

We wanted to show that IT was more than the ICT market and the ICT public projects, although the ICT sector was pressing us too much towards this direction. They were only interested in big public projects of ICT procurement, while we were emphasising that this was but one aspect, albeit the most tangible. We were interested in a broader perspective, i.e. imbuing to an SME the logic of doing business over the Internet, or to

¹⁵ Interview with the author.

¹⁶ Interview with the author

¹⁷ Interview with the author

an employee the desire to educate themselves in basic IT skills. (*George Papakonstantinou* 2006)¹⁸

Moreover, OPIS experts identified an outlook which was about targeting quick sales of equipment and quick profit:

The ICT sector has always looked at the OPIS as a programme out of which they would amass riches, sell products, etc. They did not have a more ambitious and constructive positioning regarding the information society in Greece. (*Yannis Caloghirou* 2008)¹⁹

And more:

The ICT sector was oriented towards the commercial part, i.e. to bring and sell computers, rather than develop and provide services; this was not a developmental logic, but rather a short-term profit one, which in combination with bureaucratic evaluation, an inflexible regulatory framework and non-transparent procedures, created certain deformities. (*Panagiotis Georgiadis* 2006)²⁰

Supply and demand were therefore at a mismatch:

While projects were orientated towards provision of services, the IT sector had been used to providing only 'boxes', hardware equipment, not services (*Jacques Koune* 2006)²¹

¹⁸ Interview with the author.

¹⁹ Interview with the author.

²⁰ Interview with the author.

²¹ Interview with the author.

Indeed, the term ‘box movers’ has also been coined to signify ICT firms which were limited to acting as distributors of hardware equipment (*Christophoros Korakas 2005*).²² For others, the ICT sector was trapped in an old, pre-Internet, logic of automation:

They do not seem to understand the modular character of ICTs, the fact that nowadays some things you can readily do through given platforms (e.g. Google) and it is a question of adding content and creating added value. They are interested in how much they can sell and to sell what they have. (*Yannis Caloghirou 2008*)²³

Interviewees pointed out that the OPIS should not have been the only target of the sector. Other historically-informed practices, such as clientelism and micro-corruption were frequently involved in project allocation and were accompanied by a defiance of rules and codes of conduct during implementation. Clientelistic relations were prominent in the processes of allocation of public projects, where a small number of hegemonic firms were able to appropriate the majority of projects due to their capacity to take advantage of their relations with the public sector (e.g. personal relations with IT managers of ministries). The practice of such firms was to establish such connections and relationships with ministry employees and cadres, thus getting early access to project specifications and comparative advantage in the preparation of their tenders. Such phenomena led one interviewee to remark:

Characteristics of the industrial era are replicated in exactly the same way today. We have state-dependent enterprises and the logic of appropriation of resources and funds by the small segment of ‘the selected’. (*Jacques Koune 2006*)²⁴ Generally speaking, companies having

²² Interview with the author

²³ Interview with the author.

²⁴ Interview with the author.

close links with ministries would rather deal with them directly rather than with the OPIS bodies:

The ICT firms in Greece have been used to the logic that every committee for allocating, or evaluating a project will have to get a bribe and it is exactly this logic that is behind the insistence of ministries to undertake the projects themselves, as expressed through immense pressures from the internal mechanisms to the minister. This is crystal clear (*George Papakonstantinou 2007*)²⁵

In SRA terms, the strategic selectivities of the central OPIS mechanisms, then, were inscribed by complex relationships of dependence between other state mechanisms and the ICT sector resulting in a mixture of path-shaping views or practices alongside a number of persisting structural and behavioural characteristics. Clientelistic practices were a clear manifestation of the embeddedness (SRA approach) of the state mechanisms running the OPIS projects (e.g. ministries) in the wider socio-economic system.

To summarize, then, while IS state policy, at the level of certain OPIS mechanisms and bodies, presented notable path-shaping trends, including different perceptions of what an ICT-enabled social transformation might entail, implementation of relevant projects seemed to be largely informed by path-dependent aspects and attitudes, while it was embedded in the wider political system of influences and relations, as anticipated by the SRA terminology. In the next section we consider the situation after 2008, with an emphasis on the role of civil society in IS developments.

After 2008: A resurgence of civil society?

²⁵ Interview with the author.

As indicated above, until 2008 Greece was behind in ICT diffusion and Internet use compared to the EU average. The public sector presented inadequacies both as provider of digital products and advanced applications, as well as consumer of digital products and services. These were reflected in the indicators of low ICT usage, which can be linked to the lack of successful applications in the public sector that could have drawn attention and users. At the same time, the ‘critical mass’ of Internet users which would create demand for certain applications, services, information content was not present. Nor had the clientelistic relationships between state and the ICT sector been conducive to the development and provision of ICT projects of practical use to the population, despite the policy rhetoric. Overall the information society project had been relevant and meaningful only to a small segment of the population, leaving the majority unengaged.

These trends by no means disappeared after 2008, when the country entered the prolonged phase of austerity. Funding, which was abundant under the OPIS, became much less, and this had a clear impact on existing public projects, where maintenance and renewal needs could not be easily met. At the same time, though, external pressures related to promoting efficiency in public spending, led to the evolution of relevant cost-saving eGovernment projects that had previously been stuck because of inflexible procedures, political motives and resistances, or other self-interests (see www.idika.gr). A prime example has been the area of health, where chronically blocked projects, such as the electronic prescriptions and electronic medical records, have found their route towards implementation (European Commission 2014). The ICT sector continued to exhibit largely path-dependent forms of behaviour and practice; however, due to technological developments (e.g. cloud computing, social media), as well as increasing social needs for employment and subsistence, a number of smaller firms emerged

that could make use of such platforms or become part of global innovation networks in mobile telephony and sell services to a domestic or international clientele.

The most dramatic change, nevertheless, was the one witnessed at the level of civil society. As repeatedly pointed out in our interviews, until 2008 there had not been a social dialogue of political authorities and implementation mechanisms with citizens, firms and social forces with regard to the identification of goals and priorities. Consequently, there had been a lack of understanding, awareness and agreement as to what the IS involved at the societal level and what its objectives were.

Greek civil society until that point in time had not contributed to the evolution of the information society project in any substantial way. Historically dependent on the state but also relying on strong professional associations with appropriating potential and lacking a collective culture it had been feeble in the promotion of universal goals (Sotiropoulos 2004; Voulgaris 2006). Notwithstanding the role of certain professional associations that had promoted IS developments in Greece (e.g. the Greek Technical Chamber TEE, or the Greek Association of Information Technology and Communications Scientists and Professionals EPY) and some enthusiastic individuals (e.g. the team behind EDET), these activities had not managed to link the vision and knowledge of certain individual or team experts with broader societal structures and mechanisms of diffusion. Early adoption of ICTs, e.g. at universities and the presence of an active network of enthusiasts was not enough, as broader social networks and local communities that could help advance the information society by increasing awareness had been limited or characterised by inertia:

Conflicts of interests and local communities did not help the promotion of ICTs, either because actors were acting out of their own interest or because local communities were not in a position to understand. (*Jacques Koune 2006*)²⁶

At the same time, the public sector had been slow in implementing projects, as mentioned above, and in providing relevant content, notably content in the Greek language that could be of use to civil society and citizen organizations. Using the SRA terminology, the strategic selectivities of the state vis-à-vis civil society had been structurally inscribed by the particular state/civil society relationship, which meant that the state adopted a paternalistic role and operated in a top-down way towards civil society while at the same time it presented weakness regarding stronger professional associations, which resisted implementation of projects that could perturb their own interests and practices.

However, there is growing evidence (e.g. Theocharis 2013) that this landscape has changed in the period after 2008 as the financial crisis has unfolded. The collapse of the political system, the dramatic detachment of state from society with the imposition of austerity measures often in undemocratic ways and using violent means, have led segments of the Greek population to engage in grassroots activism and collective action. The initial outcomes of these have been the new forms of more direct political engagement, promotion of new lifestyles, new forms of economy, new kinds of social relationships of solidarity. New social networks have emerged, often set up by informal citizen groups based in localities, neighbourhoods or municipalities, mobilizing their action and targeting their activities towards the achievement of various goals, including resistance to political rhetoric and the promotion of alternative agendas, allocation

²⁶ Interview with the author.

of basic subsistence goods to the needy, or protection of human rights against abusive state practices.

Though this change does not mean necessarily a strengthening of formal civil society, the general picture of proliferation of mainly informal and self-organized citizen networks constitutes a significant change at the societal level. A significant common denominator in these diverse goals has been the integration of new technologies in the agenda: almost all use a website, which is regularly updated; many have a Facebook page or use Twitter to make announcements or organise diaries of events (Worldwatch 2014; www.omikronproject.gr). It is reasonable to assume that the maturity of the IS project, in the sense of rolling out of infrastructures, decreasing costs, and increasing availability of content in Greek has facilitated ICT usage.

The active presence of such a great number of organizations, as well as the diversity of the ways they are responding to the crisis, together with the parallel inertia of state investment and activity in the information society area, might as well signify the passage from a state-led to a society-appropriated IS project in Greece. There is an evolving literature on social movements in the information age (Castells 2004;2012; Webster 2001), which identifies new ways of challenging power and creating public spaces through a combination of online and offline activity. Though more research is required, the austerity circumstances seem to have provided a trigger for a strengthening and mobilization of Greek society for the purposes of social sustainability, solidarity and support, enhanced by new media.

Whilst more in-depth empirical research would properly expose the articulation of practices and new media usage, the period after 2008 does present an overall new pattern of information society unfolding compared to the pre-2008 period and possibly regarding other

national contexts. This differentiated pattern shows the limits of the SRA approach as a device analysing IS developments, as it cannot possibly anticipate the complex ways in which citizen actors might be empowered to operate independently and possibly react to state mechanisms, as seems to be the case in Greece after 2008.

The 2015 general election led to a new government coalition on an anti-austerity agenda, dominated by the radical Left party SYRIZA. The new government has pledged to fight chronic problems such as tax evasion, clientelism and lack of transparency in public administration, with ICTs being part of the governance agenda. These path-shaping intentions have to be treated with reasonable but not excessive optimism as they will come up against endemic features in Southern Europe in a volatile and uncertain landscape.

Conclusions

The paper has adopted a strategic-relational approach to the state as a lens of interpretation of information society policy in Greece. The experience of the IS project in the period 2000–2008 and its analysis through the tools provided by the SRA has highlighted the following:

- a) the clash between historically established frameworks, structures, attitudes and practices and the EU-inspired intentions and strategic moves of state policy towards innovative structural elements, organizational practices and cultural attitudes
- b) the social relational character of the state, its structures and practices being embedded in the wider socio-political system
- c) the essentially evolutionary character of change, whereby strategies expressed in relevant policy documents were implemented incrementally, with resistances and contradictions

- d) the contingent character of state policy and its effectiveness, as it derives from the social relational character of the state

The embeddedness of the state in the wider political and social system, which the SRA approach caters for, is important and useful in understanding major aspects of the particular implementation path that the information society in Greece followed. A constant interplay between strategic aims and structurally inscribed reactions to them has been the leitmotif of the IS process. On one level, the Greek information society picture can be seen as a mere lack of capacity to comply with EU policies. On a different level, however, this picture follows the ambivalence of the modernisation project in Greece. Both were based on international deterministic discourses about competitiveness, efficiency and development and assumptions about ideal-typical societal models. Both were interpreted in a national context with its own institutional, socio-economic, political and cultural profile. The manifestations of change seem to have gone hand in hand with the persistence of historical legacies and characteristics: Greece followed its own distinct course vis-à-vis modernization and the information society, which involved contradictions and dualities.

The purpose of this paper is not to pass judgment on the efficacy of information society policy and its implementation, but rather to identify and demonstrate the filters through which IS policy passed and was inescapably diffracted in the Greek case. These filters were social, political, economic and cultural and can point to variable processes of IS policy implementation, as well as to differentiated outcomes of national information societies. Using the SRA approach to the state as an analytical tool has helped expose these kinds of interactions between policies and the above mentioned filters, but also promote the argument of national variations and capitalist diversity (e.g. Whitley 1999; Crouch 2005), which comes to contradiction with the EU model of a uniform information society imposed through policy

design at the high level of EU circles. Such generic models also miss on alternative social dynamics, not least those existing beyond the state and appropriate new media in alternative social projects, which might operate in parallel or in conflict with state agendas.

Appendix: List of interviewees

Romina Anastassopoulou	Legal Advisor to Ktimatologio SA 2004-2008
Takis Antonopoulos	Sales Manager, SPACE Hellas
Vassilis Assimakopoulos	Special Secretary for the Information Society 2004-2009
Yannis Caloghirou	Special Secretary for the Information Society 2002-2004
Panagiotis Georgiadis	General Secretary Of The Ministry Of Finance 1997-2000
George Karanikolos	General Manager, Public Sector, LogicDIS
Stefanos Karapetsis	President, Mellon Group
Theodoros Karounos	President of the OPIS Managing Authority 2002-2004
Jacques Koune	Member of EDET
Christophoros Korakas	Advisor to the Special Secretary for the IS 2002-2004
Nikos Kakkaris	President of the IS Observatory 2004-2009
Yannis Larios	Advisor to the Special Secretary for the IS 2004-2009
Konstantinos Loukatos	Account Executive, Public Sector, SAP Hellas
Vasilis Manglaris	Academic
Nikos Mouzelis	Academic
Stathis Panagiotopoulos	President of IS SA 2004-2005
George Papakonstantinou	Special Secretary for the Information Society 2000-2002
Yota Papparidou	Managing Director, SyNET
Dimitris Papoulias	Academic, President of OTE 1996-1998
Nikos Perros	Sales Director, PANSYSTEMS SA
Thanasis Priftis	Advisor to the Special Secretary for the IS 2000-2002
Konstantinos Rogalas	Marketing and Development Director, Ericsson Hellas
Stelios Sartzetakis	Member of EDET
Yannis Syrros	President of SEPE 2004-2009
Angelos Tsakanikas	Advisor to the Special Secretary for the IS 2002-2004
Lambros Tsitilas	Director of Business Systems, Singular SA
Aristodhmos Thomopoulos	President of Public Sector Projects, Diadikasia SA
Yannis Voulgaris	Academic
Thanassis Zafeiropoulos	Executive Consultant, Altec

Notes

1. The term ‘information society’ has been deployed to capture different kinds and scales of social (economic, political etc.) transformation, therefore definitions often differ or are ambiguous; in this paper, the term is taken to denote a form of societal and economic organization at various levels, which emerges when the diffusion of ICTs interacts with pre-existing social, economic, cultural, political arrangements, which involves new patterns of living and working, and where, in addition, information is considered a central asset for competitive advantage, profit, growth and employment. The terms ‘knowledge-society’, ‘knowledge-based’ society, and even ‘post-industrial society’ and ‘network society’ are also used to convey a similar type of transformation with ICTs at its heart, but we prefer to use ‘information society’ as more evocative. Alternatively, terms such as ‘information economy’, ‘knowledge-based economy’ or ‘knowledge economy’ are often used (e.g. Carmody 2013), but we think that the wider notion of ‘information society’ conveys more of the idea of broader societal transformation (with all its controversies in relevant theories, as indicated by Webster 2006), rather than emphasizing the relationship between production processes and knowledge in the economic realm.

2. The data on the Greek IS have been collected through a variety of data collection methods. An overview of the EU and Greek policies was obtained through the study of relevant policy documents; these were complemented by two comprehensive reports of the Greek IT sector, as well as statistics on the IS in Greece, obtained from the Greek IS site (www.infosoc.gr). The core of the research methods were twenty-nine elite interviews involving actors related to IS policies: the three Special Secretaries to the IS and their advisors, participants in the bodies set up to run the Operational Programme for the Information Society, government officials from the Ministry of National Economy and Ministry of Interiors, IT corporate executives, IT consultants, and political analysts. The interviews were semi-structured, based on a topic guide of questions to structure discussion around broadly defined areas, as well as on certain predetermined questions.

3. The findings of the interviews are presented either in direct quotation form or in a paraphrased way, always indicating in parentheses the name of the interviewee and the year of the interview.

4. In 2006 Greece presented the lowest percentages in EU-25 in the following indicators: Internet usage at least once a week by individuals (25.8 per cent compared to 47 per cent for EU-25), Internet access by households (23 per cent compared to 52 per cent for EU-25), as well as Internet usage for interaction with public authorities (9 per cent of the population over 15 in 2006, compared to 26 per cent for EU-25). It also occupied one of the last positions in PC usage among the population (37 per cent in 2006). Internet access among enterprises was about 94 per cent (93 per cent for EU-25), but broadband access was 58 per cent (74 per cent for EU-25). Perhaps the most dramatic part of the picture emerges in broadband Internet access by households (4 per cent), which was the lowest percentage even in the EU-27 (i.e. including also Romania and Bulgaria) (Eurostat 2007).

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