

Sociological Reflections on E-government

Maria João Simões
Department of Sociology
University of Beira Interior, Covilhã
Researcher at Research Centre of Social Sciences (CICS), University of Minho, Braga
Portugal
e-mail: mariajoaosimoes@sapo.pt

Abstract — The objective of this paper is to present dimensions of sociological analysis that allow a more comprehensive and interpretative analysis of e-government. This effort will contribute to a more critical analysis of its implementation, chosen devices and assessment. The analytical dimensions presented are: (i) citizenship models; (ii) metatheoretical frameworks on society and technology; (iii) the concept of e-government and its articulated domains. It intends to demonstrate that the choice between options of each dimension contributes for different kinds of e-government and results. The e-government is not a neutral issue. The citizenship model adopted, in a very incisive way, makes all the difference in the conception, design, working and results of e-government. The theoretical framework that is underlying to e-government shapes also its design, working and results. But the devices chosen per se are insufficient to characterize an e-government, as their potentialities can be used in a completely different way by people and rulers. Research and projects on e-government are principally focused in e-administration, underestimate e-democracy and e-society that have been analysed in a separate way, which makes difficult a more comprehensive and all-encompassing analysis and assessment of e-government.

Keywords – e-government; participation; technology; society.

I. INTRODUCTION

Most research projects have a strong descriptive approach, probably because, on the one hand, they have, to a large extent, a practically oriented approach focusing in development projects, applications or case studies. On the other hand, most researches come from the information systems field where the major focus is the conception, design and application of devices. So, it can be said that e-government is still an under-analysed area, from a theoretical and conceptual point of view, as referred by Simões [1], Heeks and Bailur [2], and Lindblad-Gidlund and Axelsson [3].

E-government lacks deepening of theoretical and conceptual frameworks from the social sciences, particularly sociology, which can better explain, in a more comprehensive, interpretative and all-encompassing way, what e-government is, why, what for and how it is implemented. Such frameworks would allow a critical analysis of different visions on e-government, the purposes

of its creation in each social context, the interests that underlie its creation, the adopted models of e-government and applications, and also to better understand why different social and technological results are achieved.

What we say above allows us to state that e-government is clearly an interdisciplinary area; more intensive interdisciplinary research is crucial especially between researchers both from information systems and social sciences, particularly sociology of science and technology, political sociology and sociology of organizations. Surprisingly, although political sociology is a widespread field, sociologists have underestimated research on e-government.

This presentation shares, thus, the challenge of Lindblad-Gidlund and Axelsson [4] that argues to be necessary to establish vessels among different scientific areas for rigorous and relevant e-government research.

In this way, based on literature review regarding different theories on the relationship between society and technology, a critical reading of crucial literature on the subject, namely Oliver and Sanders [5], Mayer-Schönberger and Lazer [6], Cunningham and Cunningham [7], based on our experience in projects on local e-government [8] and even on e-participation [9][10], our purpose in this paper is to present critical dimensions, within a sociological point of view, that can allow a more comprehensive and critical approach on e-government research, implementation and assessment.

The dimensions of the critical analysis focused from a sociological perspective are stated in a triptych presentation. Firstly, introducing two ideal types of citizenship models. Secondly, debating different metatheoretical frameworks on society and technology. Thirdly, discussing the concept of e-government and its articulated domains: e-administration, e-democracy and e-society. As a conclusion, final considerations will be presented.

II. E-GOVERNMENT IS NOT A SEPARATE ISSUE OF CITIZENSHIP

First of all, government is one of the most important components of a state: it is the way how it was organized and how rulers establish its interaction with people that we can say if we are dealing, for example, with a dictatorial or democratic state. In this sense, as government is a polysemic term, thus e-government is also polysemic.

But the same happens with a democratic government which is not also a neutral term. The history of democracy was undergone by maximalist and minimalist versions of citizenship. When we talk on e-government, what citizenship version are we talking about? So, we affirm that in any research project, either more theoretical or more empirical, or even in any project of implementation, we have to explain which conception of citizenship is used.

A more active or passive concept of citizenship will induce significant variations on the type of services, its contents, on quantity, quality and kind of available information, and on communication patterns, that is, on the kind of adopted e-government and its working. In that sense it is important to reflect on the different impacts that these different conceptions of citizenship have in e-government and also on chosen applications, as we will discuss further on.

Taking in account the weberian methodology of ideal type, two opposite kinds of political participation are presented [11], constructed for clarification purposes, knowing that there are other models between two ideal types where it can be found different combinations of both.

The passive citizenship is embedded into a liberal perspective, which inspires western democracies and where the citizen role has an individualist and instrumentalist approach, the citizen being granted full rights. The individual has, as Oldfield [12] sustains, not only epistemological priority, but also an ontological and moral one.

For the author, citizenship is seen as a legal status which must be sought, and sustained when accomplished. The state and other institutions are looked in an utilitarian way. It is only expected that they allow the conditions for individuals to maximize their own benefits and reach their goals, without any notion of common welfare present. Though, citizens are demanded to follow a certain set of civic obligations towards the state, namely, to vote, to pay taxes and to defend the country, in the case of external menace.

To liberals, politics is a realm of the government, considered only as what politicians, specialists, political parties and bureaucrats do [13][14].

Although political communication consists of emission and reception, verbalization and listening, liberal theory values the speech and neglects the listening part. It is easier for those in charge to speak rather than to listen.

Participation is largely reduced to choose between several options, thus giving the winner the power to establish the direction of the world we live in. Vote is included in a negotiation model within which choices are predetermined, thus limiting not only the choices opportunities but also the imagination. As Barber [15] says, there are few other possibilities that allow the voters to express their opinions, leaving the citizen as a simple spectator.

In an active participation model, the citizen is a member of a political community, in which he/she assumes a central position. Citizenship is not just a *status*; participation is an objective by itself. In this political *praxis*, being a non participant means, in many ways, that he or she can be an individual but not a citizen [16][17].

For the last author, in order to people being engaged in citizenship practice three conditions are requested all of them necessary but none alone sufficient: resources, participation opportunities and motivation. In the resources domain, beyond the assurance of civil, political and social rights, the economic and social resources (a reasonable living income, education, health, among others) as well as competences regarding the political activity are also crucial.

On the other hand, the participation opportunities have to be assured, which implies the creation and widening of an appropriate institutional setting at several levels (local, national, global and also at horizontal and specialized level) that stimulate the civic participation in general and, in a particular way, a rational understanding and better information of public issues, the participation in agenda setting, deliberation and decision making, among other activities.

Individuals also have to be encouraged to participate, to execute their political rights and duties, that is to say, to be citizens. One cannot expect, as Oldfield [18] writes, that citizenship *praxis* and civic conscience to appear spontaneously. As Steinko [19] states, mobilization implies that people feel there is a link between their daily life, in all spheres, being them local (namely the education, employment, environment issues), national or global.

Actually, considering the growing distance between rulers and people, with the option of these procedures, (e-) government, especially at local or regional context, can become a setting not only to a closer interaction between both but also to reduce the citizens' scepticism concerning politics.

In this model, there is a broader conception of politics, involving all public issues in which the citizens have the right to be involved; «politics describes the realm of *we*» [20].

The access to information is indispensable for the practice of citizenship, but it is only a sufficient condition. Equally important is the kind of information that is delivered. Information has to focus on problems faced by citizens, it has to be contextualized, justified and it should explain the consequences of the political choices that can be made. But the removal of information barriers is not enough [21][22][23].

Speech is equally valued as listening, a recurring and permanent interaction, established upwardly and downwardly, between rulers and citizens.

In this sense, Hacker's [24] political interactivity model has heuristic value. As daily interaction can be simplified, just including a message and its answer, and even get another message from the first user, political interaction requires two additional interactions, as seen in the Figure 1.

The first message (m1) comes from the citizen towards the politician, who, in return, sends his/her feedback to the citizen (m2). The content of this message will determine what happens after the established interaction. In order to reply (or not) to the requested information or the citizens' expectations, citizens can answer back (m3), and the government can answer through political action (m4) or an

explanation (m5) explaining why such course of action can not be fulfilled.

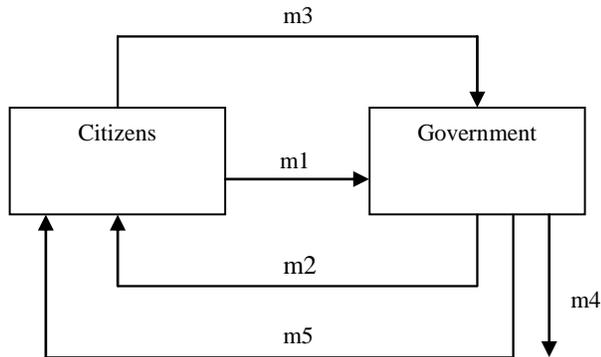


Figure 1 – A basic model of political interactivity [25]

More messages can be exchanged, but this five step flux of interaction model is the basic political interactivity model from which more complex models can be built, emphasizing upward and downward communication between rulers and citizens.

Besides vertical communication, the horizontal kind is also considered to be crucial. On the one hand, the political choice includes deliberation, because individuals, when involved in collective participation, do not always agree on their civic and political concerns. On the other hand, the deliberation help them to overtake their narrow interests; it is through the debate that individuals frequently rejoin themselves, re-evaluate and can reformulate values, beliefs and opinions based upon which they engage in their political participation (Barber [26]; Yankelovich [27]; Oldfield [28]).

According the citizenship model adopted the e-government conception, the design, the implementation and the results and yet the assessment process will be different. Consequently, the services, the kind of information delivered, the communication patterns and the applications will be different. So, the choice of one of these citizenship models makes all the difference from the analytical and empirical point of view and for the achieved results.

III. THEORETICAL FRAMEWORKS ON TECHNOLOGY AND SOCIETY

Chosen the citizenship model to use, we are facing with different theoretical frameworks whenever we engage in further research or when we intend to present and to implement an e-government project. The metatheoretical framework selected has to be clarified because it has consequences on the chosen e-government models, on its implementation and also on achieved results and their assessment.

Many e-government projects and its implementation are based on technological determinism, where the underlying idea is that the properties of technology, namely those used by e-governments, are transposed and absorbed by societies, producing the same effects upon them. This notion forgets

that the technological devices are not neutral, since the results will depend on: the specific social and organizational context in which e-government will be implemented; the values and the interests of promoters that influence the choice of e-government models; leadership; the degree of commitment of the staff and the strategy followed; the resistance or involvement on its implementation and yet the way how people and rulers appropriate and shape the devices for their use.

The fact that technological determinism has been dominating this discussion is one of several reasons for the deficit on a more comprehensive and interpretative analysis of e-government.

The option for that metatheoretical framework implies that the e-government projects and their implementation, as well as another projects focused on infra-structures, hardware and software and the assessment indicators are to a large extent, including in European Union (EU), predominantly technological [29].

As an alternative to technological determinism, a sophisticated model of analysis on the relation between society and technology can be used, in which technology and society are mutually related, that Simões [30] nominate reciprocal conditioning. This metatheoretical framework has more heuristic potential because it takes in account crucial social aspects (as power, interest groups, conflict, values and so on) that are present in the conception, implementation and execution phases, and therefore in the outputs reached by e-government. It is into this framework that it can be said “e-government is more about government than about ‘e’” [31]. On the other hand, it does not underestimate the fact that each technological device can condition our action in a specific direction and not in any other.

In this sense, in such metatheoretical framework, the conception of e-government projects, its implementation and the back office, process, output and demand indicators embraces social and technological aspects.

Contradicting the technological deterministic authors and several designers, the applications choice is not sufficient to characterize an e-government.

Firstly, they can think or install, for example, applications to a horizontal communication (from the more “traditional” as *fora* to the more recent as web 2.0: facebook, twitter and so on), but the rulers or the people, depending of their interests and goals, can make a unexpected use of them. As an example, political parties and rulers in several countries use facebook to communicate with people being interdict the possibility of reply [32]. So, applications designed to a horizontal communication can be used to a vertical and downward one.

Secondly, when a communication device is available, communication might not be started, whether because rulers consider themselves the legitimate representatives of the citizens, whereas these should confine themselves to the episodic election of those, or because citizens are in apathy or do not believe that it is worthwhile, that is, that nothing will come out of their participation. During the timeframe of the Digital Cities Program, the Portuguese Operational

Program for Information Society (POSI) and the Operational Program for Knowledge Society, programs which endured from 1998 to 2006, cities and administrative regions submitted projects to turn themselves into digital cities and territories, e-government being one of the major focus. The great concern with technological modernization and the prevailing technological deterministic perspective lead the promoters to focus mainly on technological infrastructures and software. Most projects encompass devices, although different from one another, allowing horizontal and vertical communication.

We did not find differences neither in the chosen devices in municipalities ruled by either leftist or right parties, nor in the concerns about the actual use of these devices. We present only an exception: in one municipality, where the mayor invested in a more active citizen participation, facing the apathy of people, the mayor said he would focus mainly in face to face participation modalities; only later would he take into consideration information and communication technologies [33]. Nowadays, in some Portuguese cities, new experiences on e-government based in higher citizen participation have to be researched.

Thirdly, there can be some stimulus for citizens to participate, even if there is not any concern from the government with its citizens' worries and anxieties. This is just an illusion of participation, which can be amplified by an automatic answer by e-mail where the citizen participation is thanked, even if there is not a real intention of actually answering and there is a vague promise of taking the citizen participation into account.

Some researchers have yet «observed that the same information system in different organizational contexts leads to different results. Indeed, the same system might produce beneficial effects in one setting and negative effects in a different setting» [34]. Once again, we can point out that technological deterministic authors underestimate several social factors that make the difference in the results of e-government.

IV. E-GOVERNMENT: CONCEPT AND ITS DOMAINS

In the concept of e-government underlies a normative and evaluative component. From a sociological point of view, it is important to understand if there is a political or normative position or rather a scientific one. For example, it is often said that “e-government is better government” [35]. From a scientific point of view, only through empirical evidence can we verify if the e-government can or cannot foster a greater engagement with citizens and enables or not better quality services and policy results.

Several authors, as St-Amant [36], referred three inter-related domains of e-government: e-administration, e-democracy and e-society. The first stands on the administrative modernization issue, on efficiency and efficacy of services and whether electronic services do or do not improve services to citizens, being these principally seen as customers.

In the domain of e-democracy it is debated to which extent ICT can enhance or not the citizen participation and the relationship between rulers and ruled ones. The debate on e-democracy is wide but has been, by large extent, carried out disconnected from e-government. On the other hand, we can face more pessimistic points of view, as Sunstein's [37], or very optimistic ones, as Rheingold's [38], or even more realistic perspectives, stated namely by Simões [39], that identify new opportunities but also new constraints on e-democracy. Either way, this discussion is not the focus of this paper. Regardless of these perspectives having different empirical implications and results, we have different models of political participation in real or virtual context. The chosen model of participation within e-government implies different devices, different uses, different ways of implementation and different achieved results. This is one of the central issues of this paper.

In the domain of e-society it is attempted to verify if the ICT contributes or not to the strengthening of relations between government and civil society organizations, namely NGO, trade unions, universities, I&D institutions, cultural associations, sport clubs and also corporations.

These domains have been frequently studied separately as they were completely different issues. We state that although a research or a project can focus more in one of e-government domains, it has to take into account all them, because they are all closely interconnected as we have emphasized along the paper.

V. FINAL REFLECTIONS

The objective of this paper was to present sociological dimensions of analysis that allow a more comprehensive and interpretative analysis of e-government, its implementation, chosen applications and its assessment.

The dimensions analysed allow a more critical and deeper debate about the interconnection between social and technological factors concerning e-government. Thus, we point out to a more intensive interdisciplinary among different scientific areas for a relevant and rigorous e-government research.

E-government is not a neutral issue. A more active or passive conception of citizenship have significant implications on e-government conception, design, implementation and results.

According to the chosen participation model we will find differences regarding the kind of information and services delivered, the patterns of communication, the intensity and frequency of the interaction between rulers and people.

The adoption of a technological deterministic or a reciprocal conditioning perspective between technology and society have also different implications in e-government, leading to different kinds of e-governments and necessarily different applications. As users can shape applications according to their interests and necessities, the chosen applications *per se* are insufficient to denominate the kind of e-government. Such is only possible with an on-going assessment and with indicators embracing technological and social aspects.

E-government research is, in a large extent, centred in e-administration, it underestimates the e-democracy and e-society, domains largely analysed apart. Although efficiency and efficacy of services are crucial for e-government working, e-government is not a corporation. E-government is more related with people government, with e-democracy and e-society. So, even if a research or a project focuses more on a unique e-government domain, it has to take all of them into account, as they are all closely interconnected. If we do not head towards this path we are drifting apart of the essence of the e-government concept.

Further researches could point to deepen this theoretical reflection on e-government connecting it to more extended empirical research and identifying assessment indicators of e-government that encompass social and technological aspects.

REFERENCES

- [11] M. J. Simões, *Política e Tecnologia – Tecnologias da Informação e da Comunicação e Participação Política em Portugal*, Oeiras: Celta, 2005.
- [12] R. Heeks and S. B. Bailur, “Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice”, *Government Information Quarterly*, vol. 24, 2007, pp. 243-265.
- [13] K. Lindblad-Gidlund and K. Axelsson, “Communicating Vessels for Relevant and Rigorous eGovernment Research”, P. Cunningham and M. Cunningham (Eds.), *Collaboration and the Knowledge Economy – Issues, Applications, Case Studies*, vol.5, Part 1, 2008, pp. 255-261.
- [14] K. Lindblad-Gidlund and K. Axelsson, “Communicating Vessels for Relevant and Rigorous eGovernment Research”, P. Cunningham and M. Cunningham (Eds.), *Collaboration and the Knowledge Economy – Issues, Applications, Case Studies*, vol.5, Part 1, 2008, pp. 255-261.
- [15] L. Oliver and L. Sanders, (Eds.), *E-Government Reconsidered: Renewal of Governance for the Knowledge Age*, Regina: University of Regina, 2004.
- [16] V. Mayer-Schönberger and D. Lazer, (Eds.), *From Electronic Government to Information Government*, Cambridge: The MIT Press, 2007.
- [17] P. Cunningham, and M. Cunningham, (Eds.), *Collaboration and the Knowledge Economy – Issues, Applications, Case Studies*, Amsterdam: IOS Press, vol. 5, part 1, 2008.
- [18] M. J. Simões (coord.), *Dos Projectos às Regiões Digitais - Que Desafios?*, Lisbon: Celta, 2008.
- [19] M. J. Simões, *Política e Tecnologia – Tecnologias da Informação e da Comunicação e Participação Política em Portugal*, Oeiras: Celta, 2005.
- [10] M. J. Simões, A. Barriga and N. A. Jerónimo, *Brave New World? Political participation and new media, SOTICS 2011: The First International Conference on Social Eco-Informatics*, pp. 55-60, Copyright (c) IARIA, ISBN: 978-1-61208-163-2, available at http://www.thinkmind.org/index.php?view=article&articleid=sotics_2011_3_10_30040.
- [11] Barber (1984), Oldfield (1998) and Held (1996) are crucial authors for our elaboration of citizenship typology; this typology is further discussed in Simões (2005) and in M. J. Simões and E. Araújo (2009).
- [12] A. Oldfield, *Citizenship and Community: Civil Republicanism and the Modern World*, London: Routledge, 1998, (2^a Ed.).
- [13] B. Barber, *Strong Democracy: Participatory Politics for a New Age*, Berkeley, University of California Press, 1984.
- [14] D. Held, *Models of Democracy*, Cambridge: Polity Press, 1996, (2^a Ed.).
- [15] B. Barber, *Strong Democracy: Participatory Politics for a New Age*, Berkeley, University of California Press, 1984.
- [16] B. Barber, *Strong Democracy: Participatory Politics for a New Age*, Berkeley, University of California Press, 1984.
- [17] A. Oldfield, *Citizenship and Community: Civil Republicanism and the Modern World*, London: Routledge, 1998, (2^a Ed.).
- [18] A. Oldfield, *Citizenship and Community: Civil Republicanism and the Modern World*, London: Routledge, 1998, (2^a Ed.).
- [19] A. Steinko, “Herramientas para un chequeo de la dinámica democrática”, *REIS*, 1, 1994, pp. 9-35.
- [20] B. Barber, *Strong Democracy: Participatory Politics for a New Age*, Berkeley, University of California Press, 1984.
- [21] B. Barber, *Strong Democracy: Participatory Politics for a New Age*, Berkeley, University of California Press, 1984.
- [22] D. Yankelovich, *Coming to Public Judgement – Making Democracy Work in a Complex World*, Syracuse: Syracuse University Press, 1991.
- [23] M. Hale, J. Musso and C. Weare, “Developing digital democracy: evidence from Californian municipal web pages” in Barry Hague and Brian Loader (Eds.), *Digital Democracy: Discourse and Decision Making in the Information Age*, London, Routledge, 1999, pp. 96-115.
- [24] K. Hacker, “The White House Computer-mediated Communication (CMC) System and Political Interactivity” in K. Hacker and J. Dijk (Eds.), *Digital Democracy*, London : Sage, 2000, pp. 105-129.
- [25] K. Hacker, “The White House Computer-mediated Communication (CMC) System and Political Interactivity” in K. Hacker and J. Dijk (Eds.), *Digital Democracy*, London : Sage, 2000, pp. 105-129, p. 123.
- [26] B. Barber, *Strong Democracy: Participatory Politics for a New Age*, Berkeley, University of California Press, 1984, p.123.
- [27] D. Yankelovich, *Coming to Public Judgement – Making Democracy Work in a Complex World*, Syracuse: Syracuse University Press, 1991.
- [28] A. Oldfield, *Citizenship and Community: Civil Republicanism and the Modern World*, London: Routledge, 1998, (2^a Ed.).
- [29] M. J. Simões and E. Araújo, “A sociological look at e-Democracy”, in Patrizia Bitonti and Vanessa Carrieri (Eds.) *e-Gov 2.0: pave the way for e-participation*, Roma: EuroSpace S.r.l., 2009, pp. 155-161.
- [30] M. J. Simões, *Política e Tecnologia – Tecnologias da Informação e da Comunicação e Participação Política em Portugal*, Oeiras: Celta, 2005.
- [31] OECD, *The e-government imperative: main findings*, www.oecd.org/publications/POL_brief, 07-09-2007, 2003, pp.1-7, p.1.
- [32] M. J. Simões, A. Barriga, N. A. Jerónimo, *Brave New World? Political participation and new media, SOTICS 2011: The First International Conference on Social Eco-Informatics*, pp. 55-60, Copyright (c) IARIA, ISBN: 978-1-61208-163-2, available at http://www.thinkmind.org/index.php?view=article&articleid=sotics_2011_3_10_30040.
- [33] M. J. Simões (coord.), *Dos Projectos às Regiões Digitais - Que Desafios?*, Lisbon: Celta, 2008.
- [34] J. Fountain, “Central Issues in the Political Development of the Virtual State”, *The Network Society and the Knowledge Economy: Portugal in the Global Context Conference*, March 4-5, http://www.umass.edu/digitalcenter/research/pdfs/jf_portugal2005_centralissues.pdf, 26-09-2007, 2005, pp.1-29, pp. 4-5.
- [35] OECD, *The e-government imperative: main findings*, www.oecd.org/publications/POL_brief, 07- 09 -2007, 2003, pp. 1-7, p.1.
- [36] G. St-Amant, “E-gouvernement: cadre d’évolution de l’administration électronique”, *Revue Management et Système d’Information*, vol. 10, n°1, ABI/INFORM Global, 2005, pp. 15-39.
- [37] C. Sunstein, *Republic.com*, Princeton: Princeton University Press, 2001.

^[38] H. Rheingold, *Electronic Democracy Toolkit*, available at www.well.com/user/hlr/electrodemoc.html, 06-09-2000, 1996.

^[39] M. J. Simões, *Política e Tecnologia – Tecnologias da Informação e da Comunicação e Participação Política em Portugal*, Oeiras: Celta, 2005.