

# How e-voting technology challenges traditional concepts of citizenship: an analysis of French voting rituals.

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**Abstract:** This paper describes the direct relationship between the perception of citizenship and its material expression, with emphasis on how changing expression obliges a rethink of the channels of mediation between citizens and their elected leaders. An analysis of the French voting ritual will show how our voting system is embedded in a specific cultural conception of citizenship. The emergence of new voting procedures could then be analysed on a social point of view as the will for citizens to rejuvenate some ancient conception of citizenship. I propose a table which maps out the connection between citizenship models and their new technological materialization. A two-way flow of creativity between models and tools which broadens scope for grassroots participation then explains the creation of new rituals as well as the reframing of the role of existing rituals.

## 1 Introduction

Electronic voting has been gradually establishing itself in the political landscape as voting terminals and online voting replace the traditional ballot boxes of Europe and punchcard machines of the U.S.A [Co02], [KLS04], [No04], [TM05]. Beyond the design issues, voting technology demands new legislation that requires re-examination of the fundamental principles of citizenship and representation developed and applied since the birth of our modern democracies some two centuries ago. While the debate on data security issues and costs has been running since the beginning, the fundamental question of how to adjust existing theoretical models of citizenship to cope with new forms of online democracy has been assessed more recently [CM01], [Ho01], [Sa01], [Co01], [Co05a,b], [Mo03]. As such, the virtual ballot introduces disturbing modifications to the material procedures of the voting ritual [MM02], [OV04], [KLS04]

This paper describes the direct relationship between the perception of citizenship and its material expression, with emphasis on how changing expression forces a rethink of the channels of mediation between citizens and their elected leaders. The availability of new mediation channels need not be seen as the disappearance of a time-honored ritual but as a symptom of change in how voters experience their citizenship. This allows reinstatement of procedures according to a pre-selected model of citizenship that follows

the trend and clearly identifies the risks before technology-based decisions impose restrictions with no public debate. For the purpose of this paper and as an example, I have chosen to describe how new voting technologies challenges the French ritual voting procedure.

## 2 The Rise of Online Voting

Dreams of better voting systems date back to the early 20<sup>th</sup> century, largely inspired by rising numbers of voters, multiple elections falling the same day and second-round run-offs that caused many countries to consider replacing ballot boxes with “voting machines”[No04], [Ih93]. However, mechanization was limited to putting some buttons and vote counters in a booth before interest waned fatally after the unpromising results of 1970s trials in Europe and North America.

Only in the late 1980s did the first electronic systems come online, entering use on a national scale in Belgium and Holland in the early 1990s and Brazil in 1996. For its part, France ran a few trials in Bordeaux and Brest in 1980 but the real test of the all-in-one electronic booth with a “built-in ballot box” was the 1999 European Union elections, followed by its use for the 2000 referendum asking citizens whether or not to reduce the presidential term of office from seven to five years. The success of these two experiences led the Interior Ministry to approve three different types of electronic voting systems in its Decree of 18 March 2004.<sup>1</sup> All three are compatible with the traditional voting station but eliminate the need for a ballot box. Without directly threatening the physical survival of traditional voting devices, the systems nonetheless mark a step towards fundamental subversion of the traditional voting process itself<sup>2</sup>.

Meanwhile, the Internet started fostering the first political and administrative applications of either technocratic or community-based inspiration in North America and Europe [Ts00]. Most of the first private-sector initiatives were from the U.S.A. where a handful of manufacturers, with a background in onsite/online voting and secure online transaction systems, began to market online voting systems for general meetings of corporate shareholders and of professional associations. In Europe, Germany, Switzerland and the U.K. began studying new voting technologies in the mid-1990s through a series of pilot projects involving television, SMS, postal votes, etc [Mo03]. However, the European Commission (E.C.) soon took the lead in online voting through its Fifth Framework Programme for the User-friendly Information Society [Mo04]<sup>3</sup>. By the mid-1990s, the E.C. was a very proactive backer of “digital city” projects, online voting and electronic services, thereby giving Europe a decisive lead in hands-on experience over the U.S.A. where initiatives were more limited.

The issue of remote, online voting differs radically from that of straightforward electronic voting in a polling station because it directly undermines the material basis of

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<sup>1</sup> The NEDAP 2.07, RDI-Consortium Univote iVotronic and the Indra Sistemas SA Point & Vote

<sup>2</sup> - For an exhaustive analysis of French experiments in electronic voting systems, see Ledun, 2005.

<sup>3</sup> <http://europa.eu.int/comm/research/ist/leaflets/en/whatisthe5th.html>.

the electoral process, something the 1975 French ban on voting by mail sought to protect. Thus, one major consequence of online voting is the denaturing of a voting process, even if it has existed in its present form for less than a century [Th93]. At this point, two attitudes strike me as mistaken. The first is to perceive the new technologies as a threat to a time-honored voting ritual – an opinion widely held among elected officials and researchers in France. The second is to reduce the technologies to a process of mass rationalization of government administration that transforms the citizen into a consumer, thus assimilating the political and economic systems into Niklas Luhman’s autopoietic concept of society [Le05]. They are mistaken, I find, because both disregard the social substance of the technological devices. Indeed, voting should be analyzed with all the methodological rigor due to any “total social phenomenon”, to quote Marcel Mauss. A full discussion is beyond the scope of this paper but I shall stress the complex interplay of all the dimensions proper to voting (e.g. political, social, economic, technological, legal, communicational) and the need for taking perspective in an area where, more so than elsewhere, the observer is part of the thing observed.

For these reasons, it is pointless to deny that electronic voting undermines a fundamental symbolic construct of our contemporary democracies or that online voting was developed by private enterprise in a bid for a share of e-government markets [KLS04], [OV04]. That said, in light of the above considerations, it is important to note that the introduction of online and other new voting technologies is a symbolically and politically loaded event of a magnitude equal to the introduction of the now-familiar ballot box some 150 years ago.<sup>4</sup> To ignore this is doubtless to misinterpret the call of a part of society that is becoming manifest after the emergence and local appropriation of these new technologies and, doubtless, to remain prisoner of one’s own mindset.

### **3 The Paper Ballot as a Ritualization of Citizenship**

The protocol of the voting ritual is a system of constraints, a set of procedures and a symbolic construct that incarnate a set of beliefs. The more this symbolic dimension is anchored in a country political culture, the harder it is to investigate on new voting systems. This explains why, in countries like France, a national pilot program testing alternative voting procedures, such as in the UK or Switzerland for example, could not be envisioned. It is the product of a social convention designed to balance off a conception of the republic, a construct of citizenship and a vision for social order.

As a social phenomenon, it is an original way of materializing the incarnation of a procedure whose gradual ritualization has come to mark the crossover from the secular world to the sacred one. This is quite visible in the French procedure which follows a dramatic narrative structure that elevates to the status of empowered citizen any walk-in to a polling station.

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<sup>4</sup> The ballot box was adopted in France in 1848 for mechanical reasons when universal suffrage legislation for all citizens aged 21+ upped the total number of ballots from 250,000 to over 9,000,000. The ballot box then entered a process of gradual symbolization.

Vote casting breaks down into a sequence of physical ‘rites of passage’ that involve specific positive do’s and negative don’ts. It is interesting to read Arnold Van Gennep’s diagrams of rites of passage in light of Yves Deloye (2000:10). Van Gennep associates passage from one stage to another with a material dimension that incarnates it as a recurring symbology of birth [Be86]. The voting ritual is a cultural construct that meets a need for higher meaning in a young republic eager to assert its social and political legitimacy, as was France in the 18<sup>th</sup> century. Borrowing the terms in brackets from anthropology, we can apply this observation to consider the act of voting as a mystical “transition state” [Bo79], which effects transubstantiation of the voter during a “liminal phase”.<sup>5</sup> Reinforced by the privacy of the voting booth introduced in 1913, the transition state is all the more necessary insofar as political science theory makes the Nation-State the sole source of all legitimate power instead of citizens as individuals. However, the Nation-State remains an abstract concept far removed from the people, which leaders have learned to mistrust. The voting ritual operates transmutation of the people into the Nation-State by extracting from each voter a sample of that sovereign nationhood. The preliminaries serve as a separation rite that mourn the citizen’s present social status and put it to death.<sup>6</sup> They are prerequisite to the aggregation of ballots in the urn, after voters pass through the voting booth. The purpose of the rite is to quantify the political will of the citizenry. Thus it ends with a postliminal phase consisting of a one-for-one count of all the ballots that express the opinions of socially unequal and very dissimilar individuals and add up to the Voice of the Nation-State.

It is now easier to understand how online voting can directly aggresses the traditional republican perception of citizenship in a democracy which intensifies the citizen’s moral duty to exercise his rights of citizenship; he owes society his vote in exchange for the freedom and protection it supplies. It operates by “stripping the citizen of all social, religious and cultural attributes” [Sc01:81], which involves measures to guarantee the sincerity of the vote the ritual serves to express.

From this, online voting becomes pure sacrilege because of its concern for the voter’s convenience (i.e. voting from home at any hour), for more efficient use of time (by both citizens and the government) and above all, for the faith it shows in the voter’s ability to make sincere choices in an environment he deems insecure.

#### **4 The Voter Behind the Virtual Ballot Box**

The political habits of French and European citizens today differ noticeably from those that evolved since the first ballot boxes came out. Among them, three are of major importance to the perception of citizenship in a democracy.

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<sup>5</sup> Victor Tuner (1969) prefers “liminality” (from *limen*: doorstep) to describe the stage suggestive of “limbo”. Van Gennep’s three stags of rites of passage thus become Preliminary (Separation), Liminal and Post-Liminal (Reincorporation).

<sup>6</sup> Separation rites have strong religious connotations that recall Biblical quotes about access to heaven, e.g. “...how hard it is for them that trust in riches to enter the kingdom of God. It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God.” (Mark, 10:24-25).

The first consideration is our relationship to time and space. The relentless pressure on people for ever higher productivity and efficiency comes into conflict with a demand for greater availability that government is hard-pressed to satisfy. Moreover, the greater mobility that technology affords makes it increasingly difficult for some persons to be available, given the requirement for physical presence at the polling station.<sup>7</sup>

Second, the citizen's relationship to the Nation-State has evolved greatly in the past century. Paternalism petered out after the 1968 uprising, as did condescending attitudes toward women. The proliferation of procedures for concerted action and public debate in numerous fields of civil and political activity<sup>8</sup> confirm recognition of the need for more two-way information flow between elected officials and voters as well as between experts and laymen. In line with Tom Janoski, I see the expansion of "active" political rights<sup>9</sup> as a noteworthy trend in modern democracies that perceive citizens as dialogue partners rather than just electors. By raising the French Republic to a sacred symbol of our common will to live together, the voting ritual clashes with recent developments that effectively reduce the symbolic distance between the citizens and their elected representatives.

However the most fundamental issue is what Ulrich Beck and Anthony Giddens call "reflexive modernization", which best explains the undermining of the three stages of the traditional voting ritual. It holds that the individual appropriates his social status as part of his personal identity but without perceiving that status as a determinant of his behaviour or lifestyle. Therefore, the physical isolation orchestrated for the liminal ritual to protect the citizen from indiscreet onlookers may be out of step with the perceived experience of voting. Many voters find that ritual isolation feels unnatural, especially in deliberative situations where individuals are valued for the unique worldviews endowed by their social positions [Yo99]<sup>10</sup>. From this standpoint, reflexive modernity explains the trend whereby the individual who is accustomed to the rules of modern democracy becomes an agent for social change and appropriates the determinants bearing down upon him. The condescension and guilting (i.e. the citizen needs protection against himself and might be wanting to influencing others) of the liminal ritual seem out of step with the political practices of today's modern democracies.

The citizen of the digital era no longer fits the image foisted upon him by the traditional voting procedure. From this standpoint, the gradual erosion of the ritual induced by recourse to voting machines and online elections in Switzerland and elsewhere, ties in with a will to redefine citizenship, which needs new forms of materialization and post-modern rituals. It is therefore important to consider as a whole all the technological

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<sup>7</sup> - In many countries, proxy voting is subject to strict requirements. Applicants must present at the defense ministry police (Gendarmerie), justify their absence on election day and the proxy must be a resident of the same voting district as the applicant, a condition harder to meet in larger urban agglomerations.

<sup>8</sup> - The theory of deliberative democracy which refers to a specific form of participation through discussion has played a determinant role in the development of such procedures. Among a huge academic literature, see Barber, 2003.

<sup>9</sup> - "Political rights refer to the right of participation in the public arena and are largely procedural, but the content of legislation is not usually part of political rights themselves" (1998:30).

<sup>10</sup> - Yves Deloye (1993) thus outlines various personal strategies to avoid the isolation of the voting booth by voters who feel they can make their choice discreetly without it.

constraints and models of citizenship in a debate that includes all players in the public arena. Some scholars have mapped out new definitions of citizenship in a digital era ([Cm01], [Ho99]) and have tried to link them with new ICT tools offered by local or national authorities. These models nevertheless tend to be driven by a deterministic approach to technology: they either associate new categories of citizenship with specific type of e-tools [Cm01], or build up a new citizenship : the digital one [Ho99]. Inspired by Janoski (1998) and Benjamin Barber (2003), I suggest in the table below to link the evolution of the conception of citizenship (from passive to more “active” and participative rights, [Ja98]) with their actual usage in modern democracies. This table suggests relationships to primary type of decision-making involved with a selection of their new materializations<sup>11</sup>.

<b>Model</b>	<b>Administrative</b>	<b>Referendum</b>	<b>Republican</b>	<b>Deliberative</b>
<b>Citizenship Concept</b>	Systemic: citizens are numbers protected by a legal arsenal	Liberal: citizens are autonomous and wary of government	Republican: citizens are bound by a system of shared values. Strong integration: citizens are deferential towards government	Neo-Social: <sup>12</sup> Various corporate bodies involved in the government decision-making process
<b>Relationship to Decision-Making</b>	Action taken on applications with or without input from ad hoc commission(s)	Action taken after national referendum	Action taken after broad, legally non-binding consultation(s) with citizens	Action taken after due, legally-binding deliberations
<b>Technology</b>	E-government, Internet protocols, up/downloads and secure online payment	E-voting, E-referendums and Fishkin-type polling	Forums, gateway websites, public debates, conferences	Dedicated websites, online debates, etc.

Figure 1: Categories of Citizenship and their actual usage in modern democracies

Of course, these are weberian ideal-type models of citizenship and could not be found in their “purenness” form in modern states. One could nevertheless acknowledge trends in European or Northern American politics toward specific forms of citizenship by concentrating a national public effort on some of these technologies.

In most European countries for example, important public funds have been dedicated to on-line administrative services to the detriment of e-democracy procedures such as on-line consultations or public forums.

<sup>11</sup>- For an earlier version of this table, see [Mo03].

<sup>12</sup>- Janoski terms this “social or expansive democracy” while Barber calls it “strong democracy”, see [Ja98].

This reveals the tendency of our political systems to reduce effectively the conception of citizenship to its administrative dimension rather than its participative one, even if the political discourse often underlines the need for more citizen's involvement in politics [Co01], [Co05a].

As such, electronic voting procedures correlate with conflicting perceptions of citizenship ranging from right-wing to neo-left-wing. However, the hybrid procedures for public debate sooner match a communitarian/republican or embryonic deliberative model. Thus, the new materializations offer a range of competing models of citizenship that combine to favour new ways of exploiting existing technologies. This two-way flow of creativity that broadens scope for grassroots participation assumes the creation of new rituals as well as a reframing of the role of existing rituals. The actual scholar discussion about the concept of "direct representation" [Co05b] correspond to this phase of conceptualisation which follows grassroots participative systems locally developed.

## 5 Conclusion

The introduction of new voting procedures requires a rethink of the relevance of the symbolism of the pre-existing procedures. To reduce consideration to purely technological, ergonomic or political issues will hardly map out the creative trends now witnessed in the ways in which citizens participate in the political decision-making processes, whether we are speaking of online voting or deliberative procedures. I also feel it is as important to maximize the social dimension of the new technologies used in the political process in order to take account of the major changes they impose on the materialization of our practices.

Our political systems and theoretical models are contingent upon the social practices that ritualize, symbolize and give meaning to them. To map out their development, researchers must set aside any norms about the "best system", which would skew observation of change in political practices. Recent field research and observation of new deliberative practices now yields a hypothesis for a trend into a new model of more deliberative citizenship [Ba03], [Co01], [Co05b]. Public confrontation between two opposing models with radically different consequences provides an opportunity to debate openly the role and future of the citizen in a modern democracy. Such debate would attest to the vitality of the social fabric and should not ignore the materialization of the citizen's voice, failing which discussion would focus only on technical issues. If so, we risk suffering the consequences, especially the symbolic ones.

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