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From *far away* to *a click away*: The French state and public services in the 1990s

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[...] The first scandal to spark controversy [...] came about right after the first TV show mentioning the Net. *Le Grand Secret*, the notorious book by François Mitterrand's personal physician, had just been published; in it, the doctor revealed how he had lied for years about the president's disease. (Chemla,¹ 2002: 172)

All the ingredients for a political and media scandal were present in this Gubler affair: a well-known public figure (the deceased former French President), a secret (finally revealed by the doctor Gubler), a court ruling (stopping book sales) and a private entrepreneur operating an internet café who decided to provide online access to the book in 1996. Immediately relayed through a British website, the book's contents soon found their way on to dozens of servers, in what became a textbook case for the debates on rights and freedoms on the internet (Eko, 2013: 100–1).

Indeed, by the mid-1990s, the legal and political aspects of the internet became apparent with the attempted censoring of newsgroups and of the web. Attempts to establish a legal framework did little to invalidate the notion that politicians fail to understand information and communication technologies – and since the very early days of the web, the involvement of the French state has been highly controversial. The debates hinted at the inability of politicians to grasp the ins and outs of information and communication technologies, being rapidly left behind by the fast pace of innovation, left outside of the global scale of regulations and unaware of the ingenuity of entrepreneurs and users.

In 1994, as the European Bangemann report was promoting the topic of the information society (Bangemann et al., 1994), the French government was nevertheless aware of the promises of the 'New Economy' (Cohen and Debonneuil, 1998) and the issues linked to an 'information society'. In the second half of the decade, the government took a proactive stance, as evident in the 1998 Government Action Plan for the Information Society (or PAGSI for *Plan d'Action Gouvernemental pour la Société de l'Information*). In his address at the summer conference on communication held in Hourtin the previous year, Prime Minister Lionel Jospin claimed that the state should present itself as a driving force and a role model for its citizens. Although the word 'web' was never pronounced (there is only one mention of 'Internet sites', at a time when the vocabulary was not entirely stabilized), the state took part in the development of the web, promoting and encouraging access to state services.

By 2000, the plan was fully implemented, with 600 websites accumulating 5 million hits per month. While some of them provided state-of-the art interactivity and interaction with users, others experienced difficulty in identifying their audience and, as noted in a 2001 report, 'appear(ed) to target everyone – and in the worst cases, no one at all' (DIRE, 2001). For today's historians, this reality is not easily retraced in web archives.² Some websites are readily identifiable through their domain names (gouv.fr) or the visual identity of the government, but others prove harder to unearth. A search limited to the domain name is tempting, but yields poor results, as the 34 websites ending in .gouv.fr indexed by the Network Information Center (NIC France) for February 1998 (Internet Archive, 1998) hardly match the figure of 600 websites given by the DIRE report. A number of addresses do not include the .gouv subdomain name (legislative and educational websites, for example).³

However, making use of resources such as web archives recovered through the Wayback Machine, newsgroups, oral interviews, state reports, press and audio-visual archives, this chapter describes the relationship between the French state and the web in the second half of the 1990s at different levels, highlighting cultural impediments and state impetus towards the web, legal issues and the heritage of the Minitel. It finally analyses government involvement, at the end of the decade, in the development of a 'French webosphere', how its designers perceived the role of a website, and how users and their needs were understood.

The web loathes a vacuum

When I first arrived to Matignon,⁴ one of my first decisions has been to distribute the *Official Journal* on the Internet for free, which was a great surprise at the time, as the dedicated services were about to launch a paying service. Once the decision was taken, it only took a few months. Why? Because all databases were digitized and we just needed to put them on the web. (Tronc, 2011)

Jean-Noël Tronc, a key actor of the digital-based policy initiated by Prime Minister Lionel Jospin starting in 1997, here provides an explanation to an apparent paradox. With Minitel in the 1980s and the early 1990s, France has been an exception in terms of the wide distribution and appropriation of a culture of online services by the general public. However, France has been slower in its appropriation of the web's potential; early and pioneer content providers, such as administrative services, were reluctant to engage fully in the process. The main reason is that Minitel, and its business model based on the 'Kiosque' system, that relied on the duration of connections rather than on distance, was at the time clearly profitable, while the web struggled to find an economic model. Moreover, faced with the immobility of public and state services, a number of external and peripheral initiatives emerged.

Exogenous and peripheral initiatives

In 1995, Christian Scherer, senior civil servant at the Ministry of Industry, launched Adminet, the first French website focusing on public administration. The reaction of the government was very negative:

'In 1995, a number of French embassies had decided to create Internet sites to promote France: tourism, culture, administrative procedures, lyrics for *La Marseillaise* ...,' he remembers. 'The Ministry of Interior plainly had the sites shut down. Their motivation: the United States have the Internet, France has the Minitel.' (Desautez, 2000)

Christian Scherer had to shut down a number of pages, even as he was sharing information that was already in the public domain. In particular, he was blamed for publishing samples of the *Official Journal* as a private company, OR Télématic, had had a concession since 1992

from the French state to reproduce the *Official Journal* on CD-ROMs and telematics services and was about to initiate a fee-based Minitel service for retrieving the same material.

After this very predictable episode, the only legal source on the Internet for a year was the website of Jérôme Rabenou, a Master's degree law student, who had himself taken care of uploading the content of the main legal instruments of our good republic, so as not to infringe any copyright. (Chemla, 2002)

The second case is that of Nicolas Pioch and Weblouvre. What makes the history of this website so strikingly unique is that after its creation by a student in 1994, it gained international fame with a Best of the Web Award (Cern, 1994) in the Best Use of Multiple Media category, alongside Xerox, MIT and the National Center for Supercomputing Applications. The reaction of the Louvre was strongly negative:

The domain name is owned by us again, recovered from a 'cyber-squatting' engineering student who had taken hold of it for a personal website. Recovering the domain name naturally meant creating a website. (Prot, 2003)

The reaction of the Louvre, forced to hasten its arrival on the web, stirred an outcry in the community of internet users, inside and outside of France (Ponterio, 1995). As for Nicolas Pioch, he had elected to transfer his entire document base during the previous month, from his original server (mistral.enst.fr⁵) to the University of North Carolina and the Tokyo University of Science (Pioch, 1995).

The third case involved the *Société Nationale des Chemins de Fer Français* (the French National Railways), which was confronted with an external initiative from a CNRS (National Center for Scientific Research) researcher who noticed that the SNCF did not offer train schedules online.

This researcher, acting for the greater good, endeavoured to write the few lines of codes allowing SNCF schedules to be posted online. This he achieved all the more easily as the software used for scheduling [...] was perfectly adapted to web development and, by a happy coincidence, available to him.

Unfortunately, the SNCF pressured the CNRS into shutting down the website hosted on its server. Profits from the very

expensive 3615 SNCF Minitel service all but trumped the satisfaction of travellers, and the competition of a free website giving away information that the Minitel was offering for a price, was entirely unacceptable. (Chemla, 2002: 61–3)

These initiatives, appearing in the period 1995–1996, were blocked in the first and third cases by a particular culture of telematics, but were also more broadly blocked by a political and administrative culture that failed to embrace the internet – yet in fact indistinguishable from the web.

From newsgroups to websites: political and legal issues

The Gubler affair, in early 1996, was only the first of a series of trials marking the entrance of the French internet and web into years of legal and political wrangles. In March of the same year, the Union of Jewish Students of France (UEJF for *Union des Étudiants Juifs de France*) engaged in a legal action against nine internet service providers (ISPs). All ISPs claimed their neutrality and lack of responsibility, while they argued for specificities – Compuserve, for example, clarified that it was not an internet provider,⁶ but rather a ‘competitor to the Internet’ (Bortzmeyer, 1996). ISPs formed a united front against the prospect of a filtering system: ‘In terms of filtering Internet content, it’s all or nothing. It is impossible to filter selectively (Axone/IBM).’ ‘It as well considers that a service provider is only a conduit, neutral to the information conveyed (Oléane)’ (Bortzmeyer, 1996).

That same year, the managers of Francenet and Worldnet were indicted for circulation of child pornography through their newsgroups and servers (INA, 1996a).

The government reacted to these affairs with a bill proposed by the Minister of Post and Telecommunication, François Fillon, protecting intermediaries from legal action in cases of acts and content that do not fall within their responsibility. However, the Minister also proposed the creation of a public law entity with the power to censor content deemed illegal.

The law never came to fruition, much to the relief of the Association of Internet Users (AUI), formed in 1996 and opposed to the creation of an administration tasked with deciding, in lieu of the legal system, which websites should be censored. However, not even a year later, it was the turn of hosting service providers to be put under scrutiny with the Costes affair.

Valentin Lacambre, one of the first free hosting providers for personal websites, including controversial and provocative performance

artist Jean-Louis Costes, stated that within just a few years, he and his company AlternB had been the target of over fifteen lawsuits (resulting in only two convictions) (Lacambre, 2012).

In the context of a standoff between innovative regulations and the implementation of older measures, and faced with new online expressions of illegal and criminal activities, such as the glorification of terrorism (INA, 1995a), unchecked sales of prescription drugs (INA, 1996b), fraud and scams, child pornography and the like, the state was tempted to search for a stricter legal framework – especially as the issues highlighted by the legal cases of the end of the decade (sales of Nazi memorabilia on Yahoo!, incrimination of the website Front14 which hosted over 300 websites advocating Nazism) were a matter of ethics as much as they were political affairs. Although the legal issues were the main highlights of the reports that the state commissioned at the time, the government simultaneously tried to address other issues such as the impact of networks on the French economy, on small- and medium-sized enterprises or on public administration.

A reluctant administrative culture

When tasked in 1998 to report on the impact of the internet on the modernization of state administration (Baquast, 1998), Jean-Paul Baquast had an opportunity to assess how obstacles and constraints could be overcome, and he was quickly faced with scepticism:

Your report will join the pile of reports on the Internet in France drafted over the past three years, barely read and forgotten as soon as published. [...] To start with, the necessary funds will never be made available – and in any case the mindset of the civil servant within the administration, and that of citizens themselves, are at the polar opposite of the Internet mindset. (Baquast, 1998)

Baquast was aware that there was some truth to these arguments, as the number and quality of the personal computers used by the French administration were clearly insufficient, and the ‘administrative culture’ was not yet ready to adapt to networks:

In many domains, people avoid initiative when it comes to public authorities, deemed too distant or too stiff. [...] These tools are

not designed for the application of orders and instructions, like a computer charging a taxpayer. These are tools of questioning and invention. (Baquast, 1998)

How could this new mindset be translated into administrative practices, within the administration and in its relation with citizens? For Jean-Noël Tronc, the answer lay in the engagement of the French state:

The first thing that strikes me when I arrive in the Prime Minister's offices in Matignon is that there is barely any computer equipment. There is no network. Back then secretaries would show up in hallways with 3.5" floppy disks with the contents of the files.

I ask for a computer, which I'm given without too much complication. I ask for a printer, and they tell me I have a secretary and don't need a printer.

For me the first role of the state is to send a message. And especially in a country like France, where everyone is a critic when it comes to political power, a lot is expected from the state in terms of showing the way. (Tronc in Hallier and Rassat, 2007)

1997-1998: The impetus

An entire generation of TV viewers remembers the episode of the *Guignols de l'Info* (the French spitting image, a satirical TV programme) in 1997 on Canal+ lampooning the disarray of President Jacques Chirac when faced with a computer mouse trying to surf the web (Les guignols de l'info, 1997). The satire helped solidify the notion, still prevalent today, that politicians are incompetent in technological matters.

Entering the information society

However, at the highest level, 1997 was the year when the intention to move toward the internet and the web was first explicitly stated. Even before that, the state had engaged in an analysis of what was then called the 'information highway', following the language coined in the USA. Yet, in accordance with French habits, the analysis was to be undertaken by the former Director of Telecommunications, Gérard Théry, who had supported the development of the Minitel system. While it established a basis for an understanding of the issues to come, the Théry report (1994)

remained highly critical of the internet, and lacked any insight into how quickly it was developing (in addition to failing to mention the web):

It does not include any security system. [...] The delivery of messages is not guaranteed. High traffic may jam the system for minutes or even hours, and lead to the loss of messages. Lastly, there exists no directory of users or services. Word of mouth appears to be the most common mode of operation of this network.

Additionally, no billing systems exist on the Internet, outside of subscription to services, which are then accessed through a password. This makes the network poorly adapted to commercial services. The global revenue for its services amounts to only a twelfth of Minitel's.

The limits of the Internet show that it may not, in the long term, constitute in and by itself the global network of highways. (Théry, 1994: 17)

The arguments made here are fairly common in the rhetoric of French telecoms since the very beginnings of the internet, especially concerning the quality of services and the poor reliability of data transfer (Russell and Schafer, 2014). Nevertheless, the Théry report was followed in 1994 by a call for proposals for experiments relating to new services on information highways (Curtil, 1996: 41). However, 1996 and 1997 were also the years when a 'bouquet of reports', as Adminet dubbed their abundance (Adminet, n.d.), would fully blossom. Although Jean-Noël Tronc confirms that elected officials struggled in their approach to the internet and the web, he describes the indifference of politicians toward digital affairs as follows:

The state is composed of three tiers: the major players, the decision-makers, where no one really sees the issue. The second tier is the Minister's offices, where people like Sorbier, Baquast, Scherrer, myself, Isabelle,⁷ strongly feel that something must be done. And there is a third tier made up of lesser known individuals keeping to themselves, who are moving forward. [...] There are folks who created dre.org without the knowledge of their central administration, and who exchange information by email while diplomats keep using the diplomatic cable, a clunky thing where everything is typed in upper case, there are no accents, everything passes through a cipher [...]. In large administrations, you could find people who started to move forward. Similarly, within local

administrations, there are a number of pioneering elected officials [...]. (Tronc, 2011)

Even before the 1998 mission report from Henri d'Attilio and its emphasis on how 'local administrations have a decisive role to play in accelerating the advent of the information society' (d'Attilio, 1998); before these parts of the administration started to take advantage of the opportunities afforded by the PAGSI (the Government Action Plan for the Information Society, see below), they benefited from the support of the state, for example within the 'projects of national interest' in 1995 and 1996.

Some of them developed pioneering website experiences, for instance the city of Issy-Les-Moulineaux next to Paris, or the rural township of Parthenay, that wished to offer the image of a 'digitized city' (Eveno, 1998), aiming to build an identity that was damaged in the 1970s (Vidal, 2007: 139). In 1996, the city of Parthenay stands out as particularly innovative in the domain of 'digital citizenship'. After opening one of the first French digital spaces within the town hall, with 20 internet-connected computers freely accessible to all residents, the town became its own ISP in 1996 and took part in the '*1000 micro*' (1000 PCs) operation, giving access, for 300 francs (45 euros per month), to a computer and 200 hours of free access to the local server. Its local intranet, 'In-Town-Net', offered free website hosting. In 1998, over 200 individuals shared content online, leading some to note that 'residents spend more time on In-Town-Net than they do on the Internet. In-Town-Net is a sharing community' (d'Attilio, 1998). The people of Parthenay 'went on In-Town-Net' before they even 'went on the Internet and the web'.

Issy-Les-Moulineaux, mindful of its image as a city invested in digital media (which had brought it a number of awards and labels), launched into battle to protect the 'trademark' Issy registered on 28 February 1996 and its own domain name,⁸ and placed itself at the vanguard of personal page hosting with Cyberi, while innovating with an interactive city council (Internet Archive, 1999) (Figure 6.1). However, like Parthenay it was a 'social laboratory for the experimentation of new information technologies' (L'Atelier, 1999) and the two cities were not representative of the general situation.

The Hourtin address and the PAGSI

While some governmental reports showed a growing awareness of what was at stake with the internet and the web, a decisive signal from the



Figure 6.1 Internet Archive. (1999). Cyberi Homepage. Issy-les-Moulineaux. Archived on 29 January 1999 <http://web.archive.org/web/19990129025023/http://www.issy.com/club-int/cyberi.html>
Last accessed on 2 December 2015

government was still needed: Lionel Jospin's speech in Hourtin offered that cue.

Delivered in August 1997 during the annual 'Université d'été de la communication' [Summer University about Communication], the address argued that entry into the information society would be made through the internet and the web (while the latter was not named, it was present in the speech through use of the term 'sites'). Jospin mentioned the internet twice in the first seconds of his speech. The role of telecommunications, of the Minitel and the motive behind French lateness were explicitly underlined, as the Prime Minister wished

that France Télécom offer incentives for the progressive migration of the very large number of Minitel services toward the Internet, a migration where the government shall be leading by example. (Jospin, 1997)

The main traits that would define the PAGSI (the Government Action Plan for the Information Society) the following year were hinted at in the address (administrative services on the web, development of ICT training in schools and the like), which was a founding act with immediate political effect as well as an undeniable legacy.

Just one (but most likely more) clicks away

Two years after the PAGSI, the first assessment from the Interministerial Delegation for the Reform of the State (or DIRE for *Délégation interministérielle à la réforme de l'État*), tasked with a yearly review of the state internet services, offered an interesting perspective on the presence of the state on the web.

As Michel Sapin (then Minister of Public Service and State Reform) noted in his foreword, while online services offered a heterogeneous rather than a unified front,⁹ 'the public Internet is a reality today, with 600 websites of state services' (DIRE, 2001).

These websites referenced by the DIRE in 2001 boasted an accumulated 5 million visits per month, and were ranked first in Europe for their range and the quality of their information by Andersen Consulting in 2000 and the Maastricht-Amsterdam summer summit of 1999, thus qualifying the idea of a 'French delay'. But, individually, they offered highly contrasting profiles: some were rudimentary, others undecipherable due to the wealth of information; some were regularly updated and maintained, others left unattended.

The web: learning years and childhood illnesses

The methodological approach chosen by the DIRE for its 2001 evaluation deserves some attention: the reviewers assumed the viewpoint of citizens – 'will the user find on the website the information, the service, the resources they are looking for? A website can be a perfectly clear window into an administration, or a satisfying technological effort, and yet fail to meet the needs of users' (DIRE, 2001: 4). Technical and social interactivity was clearly a more important criterion than any quantitative measure, although the synthesis for the study of 142 sites (about a quarter of the existing websites) stressed that they

remain 'institutional' in the sense that their primary function is the presentation of the administration responsible for their creation. Very few of them (10%) are portals offering first level information and user orientation' (DIRE, 2001: 4)

Far from a negative assessment, the report highlighted the steep rise in the numbers of views of these websites – from 6 million hits in 1998 to 27 million in 1999. This progress may be linked to the growing number of websites, their improving quality and access to services, as much as

it may be related to the general growth of the number of internet users in France (the latter still slower than the fourfold acceleration of site views).

The report was resolutely optimistic despite the nuanced data, as shown for example in the evaluation of user interfaces and navigation (Table 6.1).

However, the report noted a number of 'childhood diseases' (which were not specific to state-managed websites), such as the lack of user orientation or a poor distribution of information among separate websites. The profusion of administrative desks had its online counterpart, and the lack of administrative continuity was visible in the state's completed online projects.

Another shortcoming noted by the review was the lack of basic information, such as a website summary or the opening hours of a service. The report also warned against over-informative pages and counter-productive information, such as hit counters:

The presence of view counters on the first page is in general a rather bad idea (one prefecture proudly states upon loading the page that 'You are our 167th visitor,' which is not a lot, and not very significant). (DIRE, 2001)

Some sites were left in an abandoned state. This issue may be correlated with the small size of web teams – usually one to three people – where the scope of the work includes development, content writing and site administration. In addition to their employees, many administrations turned to subcontractors for website management. About 40% of the

Table 6.1 Evaluation of the navigation and user interface of state websites

Navigation and User-friendliness (qualitative analysis)	Poor	Insufficient	Satisfying	Good/Very good
	*	**	***	****
Visuals	12%	47%	32%	9%
User interface	16%	37%	42%	6%
Ease of use	14%	38%	43%	4%
Speed	13%	42%	42%	3%

Source: DIRE (2001: 18).

websites for the central administration were hosted internally, but outside contractors were often used for technical, design and development aspects.

At times they reveal a significant discrepancy between decisions and their execution, primarily on account of the absolutely strict deadlines of government contracts, with time frames seldom under six months. (DIRE, 2001)

A last finger-wagging went out to the bad taste of third-person praises, ‘the narcissism of iconography (focused only, for example, on “the superb building” of the service or the promotion of the office director) and of ‘pretentious home pages or irritating Flash animations’ (DIRE, 2001). Flash animations had already lost their appeal too; Megan S. Ankerson shows well how they belong to a bustling, pre-internet-bubble age only to be considered, in the early 2000s, ostentatious (Ankerson, 2009). Through its critical reviews, the report also hinted at what a good website should be, singling out a number of noteworthy sites.

Exemplary websites

The authors of the report, unfazed by the impressive quantity alone,¹⁰ placed value on the targeting and positioning of the websites, as well as on the credibility of the data presented and the ease of access to information. The DIRE valued theme-based information across administrations rather than an institutional approach:

The ‘online pamphlet’ aspect is often necessary, so far as it provides information about the identity and mission of a service. Still, this is not the priority for users, and can be cumbersome. (DIRE, 2001)

While it may still appear relevant today, the vision expressed in the report was far from obvious for members of the various administrations. The collected statements of 40 agents from all administrative categories in 1999 showed that the use of ICTs was still perceived as an ‘image’ factor making administrations seem advanced:

The administration is seen as old-fashioned, outdated and closed to the outside world, it’s time for a more modern image, and that’s what ICTs are for [...]. Still, everyone assumes that Internet users, now a small minority, will never be the majority of users of

administrative services, and that the necessary work of uploading content and services is an additional workload, as current forms of services should persist and improve. (Marchandise et al., 1999)

In that context, the educational goals that the DIRE set for itself seemed far from unnecessary. The ten 'exemplary websites' presented in the report were selected for their qualities: proper understanding of their target audience and of users' profiles, clever segmentation of services, clear organization of information, easy follow-up on ongoing requests as well as the efficiency of the search engine on the website. Not all were novice websites, and they did seem to benefit from a solid amount of experience: throughout the 1990s, the Strasbourg Board of Education committed itself to videotext and later online services. Its website underwent at least two overhauls before presenting the design applauded by the 2000 DIRE report: in 1997, the homepage displayed a 'Cyber School' theme (Figure 6.2), before turning to a richer content page showing real attention to user orientation, as exemplified by its top menu where teachers and staff, students, school parents and visitors each had their own access.

In December of 1997, another version appeared. Only partially archived (part of the images are lost), it showed a new format, still simple and uncluttered, but where the homepage had obtained a menu (Figure 6.3). In the interval, the Board had put aside the Cyber School theme.

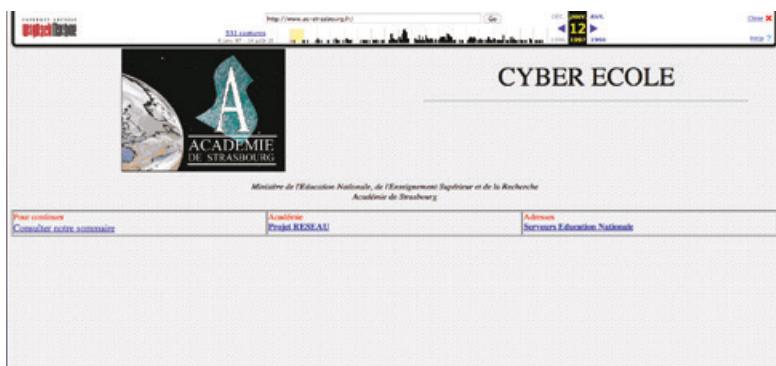


Figure 6.2 Homepage from the Strasbourg Board of Education website, archived by Internet Archive on 12 January 1997 <http://web.archive.org/web/19970112024736/> <http://www.ac-strasbourg.fr/> Last accessed on 24 July 2015



Figure 6.3 Homepage from the Strasbourg Board of Education website, archived by Internet Archive on 10 December 1997 <http://web.archive.org/web/19971210212812/> <http://www.ac-strasbourg.fr/> Last accessed on 24 July 2015



Figure 6.4 Homepage for the Strasbourg Board of Education, displaying links to one access page for each category of visitor (DIRE, 2001)

Access to the 2000 website, successor to the two previous versions, is not possible any more through the Wayback Machine; fortunately the DIRE report gives us an idea of its design (Figures 6.4 and 6.5) – while giving additional confirmation that it is necessary for historians to cross-reference web archives with other sources.



Figure 6.5 Page from the Strasbourg Board of Education website, archived by Internet Archive on 17 August 2000 <http://web.archive.org/web/20000817041856/http://www.ac-strasbourg.fr/> Last accessed on 24 July 2015

Conclusion

A few years later, Bouquillion and Pailliart still remarked that

Online democracy firmly remains conventional since, for all the talk on the interactivity of Internet sites, the medium is predominantly used to reproduce information available on other media, primarily the municipal journal. The diffusion of information remains one essential aspect of democratic activities and, in this case, the difference between print media and new technologies is small. [...] It allows for the development of the political in its most institutional dimension. (Bouquillion and Pailliart, 2006: 24).

However, within a few years, during the second part of the 1990s, the state was able to take full measure of the challenge, which was still understood as a matter of information more than communication, but stopped being perceived as an outside constraint.

The French approach was clearly one of adaptation and appropriation – one might say of creolization – more than a transposition of US methods and influences. In order to seduce the general public, some ISPs providing web content were indeed betting on the ‘French spirit’;

this was the case of Club Internet and of Infonie, aware of users' need to have content in their own language at their disposal. The 8pm France 2 televised newscast dedicated a report to these two services, titled 'The Internet, the French way'. In it, Fabrice Sergent underlined that 'Club Internet was in the first place Internet in French, made by the French, for the French', highlighting the role of curation and selection of online content that his service was proposing.

The development of the web in France was the creation of a digital culture inventing itself within national spaces, dealing with the Minitel heritage and the administrative culture, social initiatives and political agendas, in a manner very much related to that Patrice Flichy noted in 1996:

Unlike Christian Huitema, we do not think that *God created the Internet*, nor that the development of the network of networks is determined by its technical essence. As a matter of fact, the Internet finds itself in the same situation the radio was in the 1910s, or personal computing in the 1970s. It is not a medium yet, but more of a portmanteau-object: the juxtaposition of a number of technical devices and social projects. (Flichy, 1996: 5–6).