

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/249828784>

A Cultural Battle: French Minitel, the Internet and the Superhighway

Article in *Convergence* · September 1997

DOI: 10.1177/135485659700300306

CITATIONS

5

READS

69

1 author:



[Hugh Derek Dauncey](#)

Newcastle University

43 PUBLICATIONS 206 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Canal Plus and French Society, Politics and Culture [View project](#)



Comparative histories of the Tour de France, Giro d'Italia and Vuelta a España professional cycle races [View project](#)

This is a pre-publication draft of the article that appeared in *Convergence: The International Journal of Research into New Media Technologies* 1997, 3(3), 72-89.

French Minitel, Internet and the Superhighway: A Cultural Battle

Hugh DAUNCEY

Abstract

French experience of the Minitel videotex system introduced in the 1980s created a culture of awareness in French society of new information technologies. The internet and soon the Information superhighway in France build on established practices, but challenge French society and the French state because of their US/Anglophone origins and because of the demand-led anarchy of the proliferation of services in the highly-regulated French audiovisual sector. At the same time, the egalitarianism of the internet can be useful to the French state in improving access to information in a society theoretically based on meritocracy but where knowledge and Culture are highly centralised. This article looks firstly at the history and use of the Minitel (a now ageing national technology developed by the French state), and secondly, examines the growth in use and problems of the internet in France. Thirdly, the issues of culture and public policy challenging French 'exceptionalism' raised by the internet are analysed, leading to an assessment of how France's plans for the Information superhighway reveal how she hopes to defend her cultural identity.

Keywords

France, internet, minitel, modernisation, multimedia, regulation, superhighway, videotex

French Minitel, Internet and the Superhighway: A Cultural Battle

Introduction

Current interest and concern in France over the internet, multimedia and the Information superhighway represent government and industry's awareness of the need to accomplish a 'third phase' in France's gradual modernisation of her telecommunications, thus accomplishing the convergence of communication-information activities and technologies. However, as the globalisation and Europeanisation of telecommunications technologies and services induce France to consider opening her national telecommunications activities to the European and world markets, France fears the social and cultural consequences of such a change in her traditionally national, state-led approach to the development of high technology. French 'exceptionalism' in culture and language and in technology and public policy is challenged by the Internet as American websites written in English become accessible to French citizens, and as American companies, technologies and software compete with the protected French telecommunications industry.

Three issues stand out as key features in France's concern over the rise of the internet: firstly, the the future of the Minitel, an ageing national videotex technology developed by the French state; secondly, how the internet is being used in France and how it is seen as a threat to French technology (Minitel) and culture (language and Americanisation); and thirdly, the challenges to French public policy and law posed by the new technologies. Against the background of these issues, the planning of France's Information superhighway attempts to reconcile the new forms of communication of the 21st century with the republican values of the French state (liberty, equality and fraternity).

Use of the Internet in what the French persist in calling the 'Anglo-Saxon' world of the US and the UK is more developed than in France, and thus in two senses, the French internet is a subsidiary feature of France's overall movement towards a multimedia society. Looking at the development of French telecommunications and information sectors in a historical perspective identifies the internet phenomenon as a link between the Minitel/Teletel and Cable programmes of the 1980s and the Information superhighway planned for the mid-2010s. Debate has raged in France over choosing the best route towards the superhighway, and in the process, over the French use and development of internet services, and the creation of a multimedia industry. The main issues in this debate have concerned recurrent Gallic preoccupations about French 'exceptionalism' (in technology, culture and public policy) and about the social and political principles of provision of new services in the information society.

The French state has long been concerned to foster the modernisation of French society, for the greater grandeur of France and in fulfilment of 'Republican' ideals such as liberty, equality and fraternity. In the context of the telecommunications and information sectors the most relevant of these fundamental values is probably equality, expressed in the principles of public provision ('service public') and universal access ('service universel') through which citizens are treated equally by the state. Past development of

communications in France has been led by the state, which has encouraged 'national' solutions in technology and services wherever possible, to such an extent that the Minitel itself has been described by techno-sceptics as a 'solution without a problem'.¹

The technical characteristics of the internet and the superhighway are unlikely to perpetuate specifically 'French' features, avoiding the creation of the French superhighway as another example of French technological 'exception'.² However, perceived American dominance of the internet and of superhighway initiatives is seen to threaten French language, culture and industry. Linguistically and culturally, the internet threatens France through the dominance of English and the difficulties of regulating web services and other activities. In industry and technology policy, the French state is being induced to transform its traditionally 'dirigiste' approach to high-technology in an environment where the state is to play a more modest role. Moreover, France needs to modify its traditionally nationalist approach to policy (which prioritised French needs, national industries and national technologies) to fit a context more and more determined by external influences on policy, like that of the Bangemann Report originating in the European Commission, which suggests an overall European strategy rather than competition between national telecoms giants such as British Telecom and France Telecom.³

The discussion below looks at how the Minitel has helped and hindered the development of the internet in France.

Minitel: French Videotex as national technology and cultural practice

During the Fourth Republic of the 1940s and 1950s, and then subsequently during the early years of the Fifth Republic, French telecommunications, radio and television (and to an extent computing) remained relatively backwards, and only in the 1970's did government realise the necessity of bringing France's infrastructures up to date, initiating the first phase of France's movement towards the 'information society'. During the presidency of Giscard d'Estaing in the 1970s the French telephone system underwent expansion and modernisation, laying the bases for a second phase of development. In the 1980s, the enthusiasm to embrace new technologies fostered by the famous Nora-Minc report (1978) on The Computerisation of Society indeed led to continued modernisation. The recommendations of the report that France's future would rely on merging telecoms and computing technologies caused government to develop the Minitel videotex system and initiate a large-scale Cable programme.⁴

The Computerisation of Society has its counterparts in the mid-1990s, in the form of two government reports on France's participation in the revolution of the Information Superhighway. Under the influence of these reports, what should be the third phase of technological development of French telecommunications is currently taking off, as France addresses the technological, industrial, commercial, political and legal implications of what

have inevitably become known as 'les autoroutes de l'information' or 'les inforoutes'. Currently, the 'new' telecommunications technologies are still dominated by the now ageing Minitel videotex system, but are being increasingly challenged by emerging Internet activity.

Developing Minitel: ageing French technology

The Minitel is the terminal which gives French homes and businesses access to France's videotex network. Since July 1980, when it was introduced to 55 inhabitants of St.-Malo as an experimental technology, it has grown steadily in popularity and in use, now connecting 20 million users with approximately 25,000 on-line services of all kinds. In 1982, only about 10,000 Minitels were in use, but by 1994, this number had risen to six and a half million, as the Teletel services provided were diversified and made increasingly more sophisticated.

The Minitel/Teletel phenomenon has been a major element of the modernising of the French public's attitudes towards telecommunications and information technologies; during the 1980s it was the symbol of France's industrial and social vision, maintaining a national capability in the techniques necessary for preparing the wired society and familiarising sometimes reluctant users with the use of machines more complicated than the telephone for communication and transactions. The most famous of the Minitel services remains the 'annuaire électronique', or the 'electronic phone book' first introduced in May 1985, but the range of the other 25,000 services is enormous, stretching from information on the weather and train timetables, through distance banking and mail order, to the sending of telexes and the exchanging of messages (sometimes pornographic or erotic, in the infamous 'Minitel rose').⁵

In 1990, it was generally accepted that the Minitel sector had reached maturity at a level of 1.5 billion connections and 100 million hours of communication.⁶ During the 1990s the turnover of the industry has risen to some 6.7 billion francs, and although the total numbers of calls have continued to rise, the greater rapidity of data transfer and the increasing familiarity of the users with the technology has led to shorter connections and a consequent lull in sector growth. Between a quarter and a third of French household regularly consult the Minitel, representing a remarkable cultural practice of some 14 million individual users.⁷

The Minitel is now threatened by competition from newer, faster systems, typified by the Internet and the services it can provide. Although it was the symbol of France's technological expertise and social modernity in the 1980s, it is now feared that the challenged Minitel/Teletel will soon represent France's declining independence vis-à-vis encroaching US colonialism, on the technological and cultural levels. Minitel has always been an intensely French technology, even to the extent that attempts to export the technology and the concept abroad have always met with little success, and

its replacement with US technologies and the threatened invasion of the English language via the internet undermines both France's technological base and its cultural homogeneity. There is little doubt that using the Minitel during the 1980s has educated the French in the use of new technologies, and that industry has been encouraged, via state initiatives and the leadership of France Telecom to develop a flourishing videotex sector.

The very success of the Minitel is now complicating the transition to internet since the telematics/videotex industry is loathe to see its investment and achievements swept away by what is seen as a US-dominated fad, and there have been repeated calls from telematics industry organisations for measures safeguarding the achievements of the Minitel. Moreover, information providers (or 'prestataires de services') are confused by the ambiguity of a situation in which two fora for their services exist in competition.

Modernising Minitel - what role for French technology ?

In the early years, Minitel was often perceived by the French public to be precisely what it was - a supply-led, top-down-imposed technology which took little account of social demand.⁸ In the mid 1990s, just as the Minitel was being fully accepted by users, it has been challenged by rising home ownership of PCs and the attractions of the internet. In the context of the new media and communications technologies, France is forced to consider whether the continued presence of the Minitel is a strength or a weakness. The arguments for and against Minitel reveal the contradictions in which France Telecom find itself embroiled.

For the first time since the introduction of Minitel services, in 1994, the annual number of connections failed to rise. During 1994 and 1995 efforts were made to find a way of integrating the Minitel into France's move towards the superhighway, led by a telematics industry anxious to see emphasis placed on continuity rather than a jettisoning of the achievements of the previous fifteen years. Criticisms of the Minitel focused primarily on the defects of the technology as perceived by PC users - black and white inverted screens, slowness of connections, no sound or images - and the case for the defence stressed the volume of transactions, number of services available and wide distribution of the terminals as concrete justifications for the preservation of a national technological and social asset.

Having invested massively in the development of Minitel, France Telecom was naturally disinclined to see French videotex swamped by the US-dominated internet, and in late 1994 - early 1995 the national operator attempted to 'relaunch' Minitel through the marketing of 'Télével vitesse rapide' for business clients and the improved 'Magis' and 'Sillage' terminals for the general public.⁹ In parallel with this technical up-rating of Minitel, France Telecom also attempted to maintain demand for videotex services through a 'Kiosque Micro' which allows PC users to access Minitel facilities.

France Telecom's embarrassment confronted by the internet phenomenon is all the greater since France has also invested heavily in its integrated digital network 'Numéris' (RNIS). RNIS is theoretically capable of allowing data transfer four to twelve times more rapidly than a PC and conventional phone-line modem, and should have been the next step in a home-grown technological fix for the information society.

France's reluctance to abandon Minitel videotex has been a clear example of a persisting mistrust of what is often referred to as the 'réseau américain' (American network), as part of French governments general waryness (since de Gaulle) of American domination. Only in 1996 has France Telecom finally resolved to enter into the internet as a provider of services.¹⁰ This decision has at last established a positive strategy towards internet activities alongside the videotex industry's defence of the Minitel. The following sections examine the scale of the internet phenomenon in France, indicating how the Web raises problems for French culture.

Internet: the rising American challenge

Internet use in France is somewhat behind that in Britain and the US, principally because the Minitel/Teletel services already provide, albeit through a somewhat simple interface, and at a reasonable cost per minute of connection, most of the facilities French users feel they require. Despite the head start enjoyed by Teletel, greater access is being made to the internet as the French public equips itself with personal computers, although the Minitel is protecting itself by making emulation software for PCs and Macs downloadable free of charge.

In 1995 there were three main internet networks in France, accounting together for 96% of use: EUNET (53%), Renater (37%), and Oléane (4%). The oldest was the university network Renater (Réseau national de transmission pour l'enseignement et la recherche), and the newest EUNET. EUNET was set up in 1988 as a result of public sector research project managed by the National Conservatory of Arts and Crafts (CNAM) and the National Institute of Computing and Automated Systems (INRIA). When the CNAM withdrew in 1992, the INRIA created an organisation entrusted with developing its internet activities, which became a private company in 1994 in the form of EUNET. Renater is the public sector network created in 1992 by the Higher Education ministry, the National Centre for Scientific Research (CNRS), INRIA, Electricité de France (EDF) and the national Space and Atomic energy centres (CNES and CEA). Renater federates university and research centre networks on campus and local levels, interconnecting with national and international networks. Oléane is a private sector company which, like EUNET and Renater (and France Telecom's Transpac subsidiary) provides connections for internet users.

Since the early-mid 1990s there have also existed in France a variety of on-line services such as the US CompuServe (launched in France in October

1993), France Telecom's Teletel Vitesse Rapide (September 1994), Kiosque Micro (France Telecom, February 1995), Apple EWorld, Microsoft Network, Europe Online and Infonie (all launched in France in Summer-Autumn 1995). Since 1995, EWorld and Europe Online have been withdrawn in the face of increasing competition from Transpac (France Telecom), America on Line (AOL) and France Explorer. By mid 1996 there were four major internet operators: EUNET, Oléane, Internet-Way and Transpac, but overall, French internet users could choose between some 90-100 companies offering internet connections.¹¹

In June 1995, PCs connected to the internet in France (not counting university or business users) numbered some 110,000, compared with 340,000 in Germany and 390,000 in the UK. Late in 1995, surveys suggested 300,000 internet users, and forecasts of purchases of multimedia equipment suggest that by 1998 France will possess some 4.1 million modems (US = 39.1 m, EU = 23.4 m) and 4.8 million CD-ROM readers (US = 36.4 m, EU = 26.9 m). The latest estimate of the numbers of French net-surfers suggests 420,000 regular users and 60,000 occasional users. Such overall figures hide the fact that only 1% of French people over 15 use the internet and only 0.4% of households are linked to the WWW, compared with 15% for the Minitel. The handicap of the extension of internet use in France is (as elsewhere) the cost of the equipment and the subsequent connections to email, news group, FTP or other services, and the simplicity and convenience of using the Minitel has also slowed growth of the internet.¹² However, in July 1996, estimates put the number of PCs significantly higher at 247,000, and the volume of websites was judged to have increased by 230% over the same period in 1995.¹³

In France the 'internet phenomenon' tends to be very much subsumed within the debate over the immediate future of the Minitel (France's 'internet' of ten years ago) and overshadowed by the planning of the Information superhighway. The ways in which Minitel/Teletel is challenged by the internet reveal characteristic concerns of the French state, as we shall see in later sections, as does the preparation of France's entry onto the autoroutes de l'information. However, below we look at the ways in which the internet provides a new kind of communication for the French which is more varied and empowering than the Minitel.

Internet: interactivity and empowerment for France ?

One recent French analyst of the Minitel phenomenon has asserted that its technology has assumed a life of its own, becoming a symbolic medium and cultural resource.¹⁴ Even though internet traffic in France is below that in the US and the UK, services and uses of all kinds have been developing rapidly, contributing indeed to the impression that the internet in turn is becoming just such a 'symbolic medium and cultural resource'. The relative ease with which web sites can be created compared with developing Minitel services has

shown the advantages of the Internet for interactivity, empowerment and creativity.

During the considerable 'mouvement social' of November-December 1995, which saw French public transport and other areas of the state sector paralysed by strikes against the governments projected reforms of social security and retirement regimes, the internet became a tool of communication and debate and of social networking between individuals whose everyday lives were disrupted. Echoing the role of the transistor radio in spreading information during the events of May 1968 (to which the strikes of 1995 were much compared), numerous web sites sprang up providing news, debate, sound and pictures of demonstrations, notice boards for hitch-hiking and other self-help services.¹⁵

Given traditional French concerns over the problems of communication in French society between citizens and representatives of the state identified by Michel Crozier and others, and difficulties of obtaining quick and reliable information from government departments, it might have been expected that Ministries and government would have been amongst the first to develop communication between the 'administration' and the 'administrés'.¹⁶ However, this was not the case, and one of the most discussed early French web sites (AdmiNet) was precisely a non-official source of information on government, created by a civil service employee but removed from the net because it had infringed the legal rights of the monopoly diffuser of official information, the Journal Officiel. (The site was later re-instated at <<http://www.ensmp.fr/~scherer/adminet/>>). Only in late 1996 did the Prime minister's office develop its own web site (<<http://www.premier-ministre.gouv.fr/>>), following that of the Telecoms ministry inaugurated earlier in the year (<<http://www.telecom.gouv.fr/>>). The government has declared that all ministries should be on the web by the end of 1997, and progress is being made rapidly.¹⁷ Political parties have been keen to create a new form of political communication via the WWW, perhaps in the hope of bypassing the problems of more traditional forms of dialogue between politicians and voters (see for example: the Green party at <http://www.verts.imagnet.fr/>>; the Communist party at <<http://www.pcf.fr/>>; the Rassemblement pour la République at <<http://www.rpr.org/>>).

Less 'politically' and in a more cultural vein, the French web has also produced sites which contribute directly towards the development of the internet as a 'cultural resource', whether these be of a literary-poetic orientation (a handful of sites dealing with the populariser of 'potential literature', Raymond Queneau) or literary-critical/cultural studies inspired (for example the Journal virtuel des Humains associés).¹⁸ Perhaps predictably (for France), sites on wine and gastronomy have also appeared, catering for techno-citizens who combine an interest in internet technologies and services with more traditional French pastimes. In the domain of religion, French Catholicism and Protestantism are already represented on the web, as is at least one variant of Hassidic Judaism, but no Muslim site. In perhaps a less

mainstream field, the internet has provided a context for information exchange in the gay and lesbian communities which continues the increasing use of the Minitel since the early 1990s as a forum for debate and contacts.¹⁹

Internet and standards

One of the major problems faced by the Minitel was its use as a contact service or as an exchange of erotic/pornographic communications. The infamous 'messageries roses' (or 'Pink Minitel') created a furore of debate over standards and morals in the 1980s and early 1990s, and one of the concerns evident in the French debate over the internet is the way its freedom may be exploited for - however they are to be defined - nefarious purposes. Particularly influential in 1996 and 1997 in creating public and government concern in France over the exchange of pornographic and paedophilic material via the internet was the disquieting child-abuse Dutroux scandal in Belgium.²⁰ In this context, the very freedom of the Web, so conducive to empowerment and creativity, was seen by the French as a potential danger.

Further risks of the Internet were revealed during 1996. Shortly after the death of François Mitterrand in January 1996 a web site appeared where visitors could, by clicking the appropriate button, lay a virtual rose in his memory (<<http://www.imagnet.fr/tonton>>). For a president intensely interested in literature and in writing, and whose life was intimately rooted in what the mediologist Régis Debray would call the 'logosphere', a virtual rose, and even more, the scandal that followed the on-line publication of a revelatory book written by his private doctor seems a fine irony. The book itself, *Le Grand secret*, was withdrawn shortly after publication after pressure from Mitterrand's family and a court order banning its sale. Soon, however, access to the book in scanned form on a Besançon web site intensified ongoing debate over the legal framework of the new multimedia technologies.²¹ In April 1996, another scandal erupted over the leakage of confidential prosecution documents from a controversial court case which immediately became available on the Web, underlining in spectacular fashion the concerns of government and legal authorities over the regulation of internet activities.²² Later still in 1996, the use of the Internet to spread antisemitic abuse led to court action to punish right-wing extremists who had sent hate email to a Jewish artist and messages of encouragement to the extreme-right Front national website (<<http://www.front-nat.fr/>>).

Culture: language and regulation

For many French commentators on the internet, the Web is considered to be a Trojan horse of US cultural imperialism, whose direct appeal to individuals via as yet uncontrolled and unregulated channels is duping honest French

citizens into capitulation to the hegemony of 'Anglo-Saxon' language and culture. Unlike in cinema, television and radio, where the French state has erected defences against the flood of Hollywood films and English language pop-songs, no quotas exist as yet to stem the tide of American influences. It is worth recalling that Jean Baudrillard himself has suggested that EuroDisneyland (now Disneyland-Paris) is an example of France 'dreaming herself American'; if such is indeed the case how will a France whose homes and families are wired to US and world-wide English language web sites protect its cultural and linguistic sovereignty? In early 1996, the French minister of Culture expressed the view that the challenges posed by the internet to France called for firm action by the French state: the defence of France's 'exception' would rely firstly on defence of French culture ('Seule la présence de notre culture garantira celle de notre langue'), and secondly on legal and regulatory controls to limit the pernicious effects of free enterprise new technologies.²³ As president of the French National Assembly, the Gaullist politician Philippe Séguin declared that France must be wary of the creation of a 'false world culture' of homogenising commercialism which would destroy national identities.²⁴

The French audiovisual sector is highly regulated by the Conseil supérieur de l'audiovisuel - CSA (<<http://www.ina.fr/csa/>>), and periodically during the 1990s concern has been expressed over a claimed 'vacuum' of legislation covering the internet and the superhighway. Debate has crystallised essentially over two issues. Firstly, there is debate over whether new regulation is necessary, and by whom the inforoutes should indeed be regulated; secondly, there is concern that like the Minitel, internet will be used for unacceptable communication. Since early 1995 at least, the CSA has been suggesting that it is best placed to provide supervision of new media technologies, even though a similar organisation, the Conseil supérieur de la télématique already exists to oversee the Minitel industry. In early 1996, the CSA seemed to be making progress with its argument that the legal vacuum ('vide juridique') around the internet could only be filled with its own expertise, but by the end of the year the complexities of regulating the internet in France led to the abandonment of the idea that any national body could provide such oversight of Web activities.²⁵

The first case study of France's willingness to fight the invasion of English was afforded by the legal proceedings brought in early 1997 against the American university institution Georgia Tech Lorraine (<<http://gtl.georgiatech-metz.fr/>>), located in Metz in north-eastern France. The website of Georgia Tech. Lorraine provided information, in English only, on various aspects of its study programmes. This was deemed by two French-language pressure groups to contravene the Toubon law on the use of French introduced in 1994 to protect French against English and Anglicising neologisms.²⁶

As well as for linguistic imperialism, the French are concerned that the internet may be exploited for unacceptable purposes under cover of the

anonymity that the technology provides. Much of the discussion on what might be termed the risk of the 'Black Internet' has focused around the 'privacy' of internet communication and the possibilities of encryption, which although safeguarding the confidentiality of messages, also protect them from surveillance for criminal activity by the authorities. French legislation on cryptography is deemed to be amongst the most restrictive in the world, since traditionally, only codes known to the government security services are authorised, and thus internet encoding techniques are obliging France to review its practices.²⁷ Pornography (or the 'Pink Internet') has fuelled debate over the preparedness of French law to deal with new media vice issues. Opinions still seem divided between 'liberal' interpretations that the internet's convergence of technologies places it disadvantageously at the centre of all existing regulatory attentions, and the view expressed by the CSA that a centralised regulatory body with overall competence would best guarantee the harmonious development of the industry.²⁸ In the widest perspective, the issue of 'who should control the internet in France and how?' reflects usual French divisions over regulation and censorship, freedom of speech and individual liberties.²⁹

The following sections consider how France's planning for the Information superhighway intends to reconcile the difference cultural, industrial and political pressures in a strategy which will ultimately strengthen French society.

Multimedia policy: Exception challenged and 'neo-Colbertism' reconsidered

As technologies whose development was initiated in the 1960s mature towards commercial applications in the 1990s, and as European integration increasingly calls France's exception in public policy into question, French high-tech and telecommunications policies have come under scrutiny.³⁰ The contemporary relevance of the French state's traditional *modus operandi* in high-tech industry - the 'grand programme technologique' is increasingly questioned along with the suitability of the information superhighway for this strategy of technological development.³¹

First illustrated by the nuclear and space industries in the 1960s and 1970s, which successfully combined Gaullist political will and industrial-technological dynamism to provide France with a credible nuclear deterrent, the grand programme has had a chequered history. In the 1980s the grand programme was applied with unequal results to two innovations now at the heart of preparing the superhighway: with the Minitel, a technology and an industry were created, but with the 'Plan Câble', billions of francs were squandered.³² The traditional grand programme approach requires close interaction between the state and a sectoral leader - the national Space centre for the space industry, the Commissariat à l'énergie atomique for the nuclear programme, and France Télécom for the information

superhighway.³³ The Théry report on France's strategy for the Information superhighway avoided detail on the status of France Télécom and on the feeling widespread in government that the role of the 'national operator' needed to be redefined. Such a reform would imply automatically some departure from the traditional format of a grand programme in the direction of the 'liberalisation' of the sector wished for by the European Commission. Diplomatically, Théry suggested that whilst France Télécom's involvement in the superhighway was a necessary condition for success, the national operator's monopoly needed to be reviewed.³⁴

France Telecom's status was the subject of substantial discussion in 1993 and 1994 and during the autumn 1995 - January 1996 within the context of a 'consultation publique' organised by the Post and Telecoms ministry. In March 1996 the government decided to open the provision of telephone services to competition from 1 January 1998. At the same time, it was announced that France Télécom was to be partially privatised, leaving the state with a majority holding and maintaining the civil-servant status of its employees. This compromise has created considerable unease amongst the telecoms trades unions, fiercely attached to traditional notions of 'service public'.³⁵ The privatisation of France Télécom and the liberalisation of the sector are seen by some to represent the abandonment of France's will to defend her individuality in the international system. However, the French state's strategy for the information superhighway hopes to use the new technologies to re-inforce French society and culture.

New media technologies as a social and cultural battle: responses

The transition to the information superhighway is crucial for France both socially in terms of employment and modernisation, and more complicatedly, in terms of the cultural leeway which France will be able to negotiate for herself in face of US technologies and services and the English language. France feels that she is fighting, in the long term, for her social and cultural identity.

Two important official reports on the commercial, political and industrial implications of the superhighway were published in late-1994, and the then Balladur government undertook to conduct first tests of the technologies involved in 1995, before initiating a longer-term plan to connect all French households to the information superhighway by 2015.³⁶ These Théry and Breton reports on 'téléservices' in general and on 'les autoroutes de l'information' themselves are informing government planning of the wired France of 2015 in much the same way as the Nora-Minc report created the context for the development of French telecommunications in the 1980s.³⁷ The Balladur government which commissioned these first studies stressed the crucial importance to France of the development of the information superhighway.

Les autoroutes de l'information: protecting French culture ?

The government's ambition is to cable every household in France by 2015, providing crucial 'universal access' to the new services. The Théry and Breton reports promptly gave rise to a second phase of planning in which the government appealed for proposals for experimental projects. This call for projects culminated in the eventual selection by the government, in late February 1995, of only 49 schemes. France is confident that she has the technological and commercial wherewithal to deliver a wired society, but the initial dream of the Balladur government of a vast technological programme creating employment, commercial activities, greater equality of access to education and knowledge and contributing to regional development is not without complications. Most generally, despite the globally encouraging Minitel programme, the disastrous Plan Câble remained an unhappy reminder to the French state that 'grands projets politico-industriels' can be highly problematic.

More specifically, both before the presidential elections of 1995 and after, two doubts remained concerning France's push towards the information society. Firstly, who was to provide the development of infrastructures? - whereas Théry implied that France Télécom would be responsible, the national telecoms company was involved in difficult reforms of its status as state operator in anticipation of the 1998 liberalisation of the sector and would need costly support from government if it was to invest heavily in new technology. Secondly, an essentially nationalistic approach to a technological project such as the information superhighway seemed to need reconsideration in the light of the European Commission's commitment to delivering a coherent European strategy, or at the least, a strategy based on free competition and the demise of national champion telecoms operators with monopoly privileges.

The Théry report emphasised predicted employment effects of the superhighway in response to Balladur's concern to understand the 'general interest' of the new technologies to society. Théry concluded that since the infrastructures of both Minitel and the telephone system are simultaneously approaching obsolescence, the conversion of French society to the information superhighway represents a welcome stimulus to skilled and well-paid employment. It is still possible that Théry's claim that employment in the French telecoms sector could double to 600,000 by 2005 may prove accurate, and that the future commercial importance of the sector may increase from the 1993 turnover of 33 billion F to the report's estimation of somewhere between 86 and 195 billion F. However, more than simply providing a stimulus to employment and the economy, the autoroutes de l'information also provide an opportunity for France to use the multimedia revolution to protect traditional French values.

Universal provision, civil liberties and standards

Telematics, increasing use of the internet and the move towards multimedia superhighway services pose challenges to French culture and society on the domestic level, as well as potentially threatening the place of French culture and language in the world. The French state intends to use the new technologies to defend traditional Republican principles of liberty, equality and fraternity for the ordering of society. The modernisation of telecommunications has been used in the past as a means of modernising French society, and one of the major implications of the information superhighway for the French state is its promise to contribute to a more harmonious France, through improved access to knowledge for all. As well as this 'civic' function, many analysts see the new media technologies as instruments of empowerment and self-expression representative of a post-industrial, post-modern age in which liberty and equality are synonymous with access to information, and where fraternity is fostered by the empowering of individual citizens to express their difference and tolerate difference in others. At the same time, however, predictably French concerns over standards, taste and the legality of new technologies have also arisen.

The Théry report addresses the general economic motives for France's involvement in the superhighway. In addition, *Les autoroutes de l'information* investigates a particular concern expressed by Edouard Balladur in defining Théry's brief, namely the ways in which the information superhighway could contribute to a variety of 'general' policy areas ('missions d'intérêt général') such as regional planning, education and vocational training, research, culture, health and urban planning.

'Service universel' and 'Missions d'intérêt général'

Les autoroutes de l'information stresses the extent to which the technologies raise important social questions ('enjeux de société') such as the rather nebulous 'advancement of knowledge to the benefit of post-industrial society' (p. 47), the revolutionary-sounding 'equality of access for all to knowledge, culture and education' (p. 47), and the hopeful 'appreciable contribution to improving the quality of life' (p. 49). As well as improved economic performance and falling unemployment, in the analysis of the Théry report, France's reasons for backing the information superhighway include other more numerous and more subtle motivations deriving essentially from traditional Republican values of equality and 'service public'.

Universal access to the new technologies is seen as the solution to France's considerable current concerns over 'la fracture sociale' between the 'have's' and 'have not's' of French society. Théry states that 'It will be imperative, in a context of competition, to guarantee that Universal service - currently limited to the right of each and every citizen to possess simply a telephone - will be extended to include multimedia facilities, which will allow, clearly, the access of all to information and knowledge'.³⁸ 'Equality of access' to knowledge, culture and education brings its own benefits in France's

theoretically highly meritocratic system of schooling, and the 'quality of life' will be improved by a new organisation of work patterns allowing more efficient and flexible distribution of employment across the country. An early example of the use of new technologies has been the initiative taken by villages in the rural Lot et Garonne department in South West France to share teaching by multimedia links, thereby maintaining class places for children in a number of small schools, and other projects, such as videoconferencing of lessons in Alsace using France Télécom's Numéris (ISDN) network have illustrated the potential of the new technologies.³⁹

'Aménagement du territoire' (regional planning and development) and equal chances for all in the best traditions of the Republican state will thus be guaranteed by the new technologies, as will the renewal of the grand tradition of public provision. Thus a new freedom of access to information will come to the rescue of the old value of equality, increasingly considered threatened by the disfunctionings of the modern economy. The new media technologies bring with them of course precisely the risk of creating a dual society of information rich and information poor, both in terms of areas devoid of cultural activities ('déserts culturels' in the vocabulary of M. Toubon) and in terms of inequalities between citizens of different social class, level of income and education, and it is for this reason that such stress is laid in the planning of the inforoutes on the fundamental importance of universal provision and access. A perhaps more concrete example of the French state's awareness of the problems of inequality inherent in differential access is the recent decision to equalise the cost of telephone communications for users of the internet by enforcing local charge rates for internet services.⁴⁰

Conclusion: towards a new French cultural resource ?

France's traditional suspicion of the culturally hegemonic tendencies of American industry and finance and French sensitivity to the linguistic encroachment of English coalesce in the reaction to the Internet and the Information superhighway. Perceived by many as another Trojan Horse of US cultural/technological imperialism, the Internet is stimulating France to develop her own approaches to providing and regulating services. It is unfortunate for France that such a challenge to remaining French 'exceptionalism' is occurring precisely in a political and economic context unfavourable to France's usual mechanisms of defence - the nationally-led technological grand programme and strict legal regulation of the provision of services. The current international triumph of economic liberalism and France's leading role in the drive to European union are leaving the French state bereft of its traditional weapons of economic, technological and cultural nationalism.

Despite the internationalism of the Internet and the perceived inexorable Americanisation/Anglicisation of language and culture, the French state and society are negotiating a development of the (regulated) Web and

the Superhighway which nevertheless responds to typically French concerns of cultural, technological and industrial protectionism. It is possible that this reaction represents a crucial phase in the gradual opening and modernisation of French society, since in contrast to the 'aventure du Minitel' in the 1980s, when the French people acquiesced in a state supply-led, top-down, national technology information service typical of post-war industrial policy, in the 1990s a maturer French society is mediating its own acceptance of the 'foreign', demand-led, bottom-up revolution in freeing communication which is the Internet.

In terms of public policy, 'what to do about the Internet' challenges French traditions of dirigist industrial policy as well as offering a heaven-sent opportunity for reinforcing the claimed equality and meritocracy of French society through the equalisation of access to knowledge for all. Culturally and politically, these are important issues, since the high 'visibility' of the Internet in public opinion focuses attention on France's changing practices in industry and business (privatising France Télécom, following EU strictures on competition), and the 'democratic' profile of internet services magnifies existing inequalities of access to knowledge between France's information-rich and information-poor. The usefulness of the Internet in equalising disparities of information in France's still highly centralised society (where cultural and educational facilities are heavily concentrated in Paris) has been seized upon by successive governments anxious to include the instrument of 'electronic aménagement du territoire' in the republican tool-box used in maintaining liberty, equality and fraternity.⁴¹

As usual in many issues in France, the question of 'rights' is fundamental in the technical and cultural evolution of the Internet. Perhaps more in France than in other societies less prone to obsessive constitutional definition of liberties and rights and the complex legal regulation of audiovisual activities, the 'freedom', 'individualism' and 'anarchy' of the Net pose problems for the state. The intensity of debate over the claimed 'legal vacuum' in which the internet has developed in France has revealed the state's anxiety over the autonomy of electronic information, echoing both traditional fears of US cultural/linguistic imperialism and of the disquiet of regulators at the anarchic proliferation of web sites and services. The furore over the web site of the banned book on president Mitterrand was a reminder of the peculiarities of the public/private divide in French society, which while asserting the importance of solidarity, equality and fraternity, simultaneously defends the individual's right to privacy in domestic life and the duty of the state to regulate activities in the best interests of society.⁴² The French internet is indeed fast becoming a symbolic medium and cultural resource of resistance both to the US and to blockages in French society itself.

Notes and references

- 1 Jean-Jacques Salomon, 'Le Minitel ou la carte forcée du besoin', chapter V (3), pp.129-139 in *Le gaulois, le cow-boy et le samouraï*, (CPE-Economica, 1986).
- 2 The days when French television (for example) could be developed to work on technical principles (SECAM) which made it incompatible with US and British systems (PAL) have long been replaced by a greater concern to conform with international norms.
- 3 Martin Bangemann, *Europe and the Global Information Society: Recommendations to the European Council*, (Bruxelles: European Commission, 1994).
- 4 Simon Nora and Alain Minc, *L'informatisation de la société*, (Paris: La documentation française, 1978), published in English as *The Computerisation of Society*, (Cambridge, MA: MIT Press, 1980). The Nora-Minc report's principal concern was with the ways in which the technological modernisation of France's media, telecommunications and computing infrastructures could both accelerate the continuing modernisation of French society, and foster technological, industrial and commercial advantage.
- 5 The 'Minitel rose' (or 'Pink Minitel') was the term coined to describe the use of Minitel message and chat services for prostitution and sex contacts.
- 6 Michel Colonna d'Istria, 'La télématique à l'âge de la maturité et de la croissance ralentie', *Le Monde*, 6 December 1990, p. 38.
- 7 Jean-Michel Normand, 'France Télécom cherche à relancer l'utilisation du Minitel', *Le Monde*, 21 January 1995, p. 9.
- 8 See Jean-Jacques Salomon, 'Le Minitel ou la carte forcée du besoin', chapter V(3), pp.129-139 in *Le gaulois, le cow-boy et le samouraï*, (CPE-Economica, 1986). The Minitel service invented to attract users to telematics was first and foremost the 'annuaire électronique', (or electronic phone book), which in many cases forced French people to use Minitel, since traditional phone books were sometimes not available. As was intended however, Minitel services increased in popularity as they became more diverse and terminals became more numerous and faster.
- 9 Michel Alberganti, 'Les services Minitel seront accessibles par micro-ordinateur', *Le Monde*, 17 February 1995, p. 19.
- 10 Edouard Launet, 'Les géants des télécoms échafaudent des stratégies sur la mine d'or d'internet', *Libération*, 13-14 January 1996, pp. 4-6.
- 11 Annie Kahn, 'Mille et une portes donnent accès à l'internet', *Le Monde*, 8 April 1996, p.27.
- 12 Anon, 'Les utilisateurs français attendent une baisse des prix et une simplification du réseau', *Le Monde*, 13 June 1995, p. 13.
- 13 Michel Alberganti, 'Un rapport minimise le retard français dans les connexions internet', *Le Monde*, 8 November 1996, p. 25.
- 14 André Lemos, 'The Labyrinth of Minitel', pp.33-48 in R. Shields (Ed.) *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, (London: Sage, 1996).

15 See Libération Multimédia, 8 December 1995, pp. i-ii.. Many of the sites were set up by university students, others were created on commercial servers such as Imaginet, but with the intention of 'giving everyone the possibility of accessing information', perhaps the most celebrated of which was 'Situation de crise'.

16 Michel Crozier, *La société bloquée*, (Seuil, 1970).

17 See Annette Lévy-Willard, 'Juppé ouvre son "Café du commerce"', Libération, 26 October 1996, p.9. and Annie Kahn, 'Marianne flirte avec Internet', Le Monde Télévision-Radio-Multimédia, 19 May 1996, pp.26-27.

18 See Francis Mizio, 'Zazie dans la navigation poétique totale', Libération Multimédia, 10 November 1995, p.iv., and also David Dufresne, 'Electrons de presse alternative', Libération Multimédia, 17 November 1995, p. iv.

19 See Erik Rémès, 'Un "Gai Pied" électronique', Libération Multimédia, 8 March 1996, p. iv., and Yves Eudes, 'Internet, carrefour de toutes les religions' Le Monde, TV-Radio-Multimédia, 25-26 February 1996, pp .26-27.

20 Marc Dutroux was found guilty of kidnapping, abusing and murdering young children. Enquiries revealed the extent of paedophile activities in Belgium and the protection from investigation which had been afforded to the perpetrators of the crimes by police and politicians.

21 Michel Alberganti and Hervé Morin, 'Internet contourne la censure du livre du docteur Gubler', Le Monde, 25 January 1996, p.28.

22 See David Dufresne and Catherine Maussion 'Ton juge à poil sur internet', Libération, 18 April 1996, pp.1-2.

23 'la face obscure de ces lieux de liberté d'expression existe aussi . . . il nous faut trouver les moyens de garantir, sur notre sol, nos lois républicaines'. Ph. Douste-Blazy, 'Défis sur Internet', Le Monde, 9 February 1996, p. 13.

24 See Le Monde, 5 June 1996, p. 8.

25 Martine Esquirou, 'Le CSA demande un élargissement de ses compétences', Libération, 13 January 1995, p.51., Philippe-Olivier Rousseau (1995) 'Trois défis pour la régulation audiovisuelle de demain', Libération, 25 January 1995, p. 5., and Catherine Erhel and Luc Vachez 'Juristes à la recherche d'un précis d'internet' Libération Multimédia, 2 February 1996, p. iv., Laurent Mauriac, 'Fillon renonce à légiférer sur l'Internet, Libération multimédia, 25 October 1996, p. v.

26 Michel Arsenault, 'Les militants de la Francophonie s'attaquent à internet', Le Monde, 2 December 1996, p.35.

27 Hervé Morin, 'Nous sommes dans une phase d'observation des nouvelles technologies numériques', Le Monde, 26 January 1995, p.24., and Jean Guisnel, 'L'Etat pourrait assouplir le cryptage', Libération Multimédia, 1 December 1995, p. vi.

28 See Nicholas Ros de Lochounoff, 'Internet, vers un goulag juridique ?' Le Monde, 1 February 1996, p.15.

- 29 In an innovative gesture, the French telecoms minister François Fillon has set up a web site to attract views on the ethics to be applied to French internet activities (<http://www.planete.net/code-internet/>).
- 30 Elie Cohen, *Le Colbertisme high-tech: économie des Télécom et du grand projet*, Paris: Hachette/Pluriel, 1992); Jean-Baptiste de Boissière and Bernard Warusfel, *La nouvelle frontière de la technologie européenne*, Paris: Calmann-Lévy, 1991).
- 31 Jean-Guy Lacroix, Bernard Miège and Gaëtan Tremblay, *De la télématique aux autoroutes électroniques: le grand projet reconduit*, (Grenoble: Presses universitaires de Grenoble, 1994).
- 32 Jean-Jacques Salomon, *Le gaulois, le cow-boy et le samouraï: la politique française de la technologie*, (Paris: CPE/Economica, 1986); *Cour des comptes, Rapport annuel au Président de la République*, (Paris: Journal Officiel, 1989); Jean-Pierre Brulé, *L'informatique malade de l'Etat - Du Plan calcul à Bull nationalisée: un fiasco de 40 milliards*, (Paris: Les Belles lettres, 1993).
- 33 For a treatment of the the development of the space sector as an example of the grand programme, see H. Dauncey, *The Making of French Space Policy 1979-1992*, unpublished doctoral thesis, University of Bath, UK, 1994.
- 34 The Théry report is discussed in detail in a following section.
- 35 The bill detailing the new status of France Telecom has been accused of a demagogic ambiguity which attempts to camouflage the introduction of competition in the telecoms sector behind a fig leaf of references to France Telecom's continued pre-eminence as a telecoms-operator. J. Lemercier, 'A qui profite la loi ?', *Le Monde*, 19 March 1996, p. 15.
- 36 As something of a cultural and political symbol, it is also interesting to note that France's new National Library (the Très Grande Bibliothèque / Bibliothèque de France) put its catalogues onto the Internet during 1995.
- 37 Gérard Théry, *Rapport au Premier ministre: les autoroutes de l'information*, (Paris: La Documentation française, 1994), and Thierry Breton, *Les téléservices en France - quels marchés pour les autoroutes de l'information ?*, (Paris: La Documentation française, 1994).
- 38 Théry, p. 48.
- 39 Francis Mizio, 'Quatre villages du Lot sauvés par le Net', *Libération Multimédia*, 12 January 1996, p. iv., Nicole Penicaut, 'L'école cathodique', *Libération Multimédia*, 7 June 1996, pp. i-ii.
- 40 See François Fillon, *Communiqué du ministre délégué à la Poste, aux Télécommunications et à l'Espace*, (Ministère de la Poste, des Télécommunications et de l'Espace, 12 January 1996).
- 41 In an initiative derided by some, in 1994 Culture minister Jacques Toubon proposed a scheme by which Parisian culture and cultural events (art galleries, museums, concerts, plays) could be transmitted through the superhighway to 'virtual' sites in the regions. See Emmanuel de Roux,

'Aménagement du territoire: l'espace virtuel de M. Toubon', Le Monde Radio-Télévision, 2 October 1994, p.vii.

42 Distinctions between public and private in France are arguably becoming more blurred under the influence of waning respect for figures in public authority and trends in the media such as Reality Programming, but the the internet will tend to reinforce French tendencies towards an unsteady balance between individualism and regulation.