

A street in Tunis
January 2011

Le peuple
a libéré
la police

ENFIN
LIBRES

Societal and technological changes



KEY MESSAGES

Of the many technological, societal and cultural¹ changes imaginable over the next thirty years, the acceleration of technological and scientific innovation, the mutation of ideologies, political reconfigurations, identity-based and religious recompositions will have a decisive impact on international and strategic organisation, relations, and balances. They could also constitute factors creating tension or sources of new vulnerability.

The acceleration of the rate of technical and scientific innovation could lead to new revolutions with major strategic consequences (reduction in action capabilities, redistribution of power, transformation of the environment, etc.), some of which will be strongly disruptive when a greater number of state and non-state players have easier access to sensitive information, particularly in the field of weapons of mass destruction.

The revolution in new information and communication technologies, particularly the Internet, will strengthen the globalisation process and constitute a powerful accelerator of social and political transformations and could even set out the first markers mapping out a new structure for world society.

The ever-increasing role of technical devices in the lives of individuals and the risk of their abuse will create new weaknesses and will necessarily raise short- and medium-term questions concerning how they will be controlled, both nationally and internationally.

With the decline of the main defining ideologies of the twentieth century, struggles for influence between powers could move into the arena of soft power and smart power,² probably with one state wanting to organise the world according to their own principles, standards and values, as well as the arena of entertainment, way of life and consumption habits. This will not, however, prevent the consolidation or even the strengthening of the international influence of certain social or political movements (evangelical, Islamic, ecological movements, etc.).

Raised to the status of 'universal value', the democratic principle will assert itself erratically, with relapses. It will apply in diverse forms, and could even challenge the hegemony of the liberal democracy model. The universal nature of human rights could also be increasingly challenged by states or transnational players in the name of identity-based principles, particularly religious ones.

In a context where there will be more, and more diverse, participants in international relations, the increased number of identities, community memberships, and 'fragmentation of singular and competing memories'³ will weaken national cohesion.

The religious reference as mobilising force, protest vector, and justification for violence, will continue to occupy a growing place on the world stage and may constitute an increasing factor in tensions, or even conflicts.

1- To be taken in the broad sense here, specifically including the religious and political elements.

2- Two concepts developed by Joseph Nye and adopted by Secretary of State Hillary Clinton.

3- *Livre blanc sur la défense et la sécurité nationale*, Paris, Odile Jacob – La Documentation française, 2008.

1 Technological revolution

By definition, it is difficult to make projections and anticipate future step changes in the scientific and technological fields, as well as the applications for which the innovations could be used and the combining of technologies (quantum computing, for example).

Nevertheless, with regard to the phenomenal acceleration of the rate of innovation, it must be expected that the next thirty years will see new revolutions in these areas, whose scale and scope will be comparable to the revolutions (e.g., digital) that marked recent decades. These changes will be major strategic issues with decisive repercussions on international relations, all the while hastening the upheaval of the individual's relationship with time, space, others, and the world, a process which began half a century ago.

1.1 - Technological innovations: a factor in the redistribution of power?

A large part of the world, starting with the OECD countries, is largely dominated by technological culture. Technical and scientific innovations impress, fascinate and affect daily life in a growing number of countries, even though, today, scientific and technical progress no longer arouse unconditional enthusiasm, and can even arouse suspicion following the atrocities committed during the two world wars in the 20th century and the technological catastrophes that have occurred since then.

North America and Europe, and many Asian countries, have been the innovation engines for several decades, as shown by their research and development expenditure and the number of scientists and engineers they produce. The catch-up effect is accelerating with the sharing of knowledge and the globalisation of the economy. Given the increasingly marked connectivity between civil and military technologies, the emerging powers are – up to a certain point – destined to catch up with western countries in fields where western superiority had hitherto been unchallenged.

The USA, world leader in terms of expenditure and investment devoted to R&D and in the field of training, should maintain its technological lead in the time frame under consideration.

However, certain emerging or emerged countries, starting with China¹ and India, are redoubling their efforts (investment in R&D, training of engineers and scientists, sending students abroad) to try to achieve a leadership position in terms of scientific and technological innovation. Although the Gulf nations are not competing for first place in the harnessing and production of products using the latest techniques, their financial capacity will continue to allow them to purchase equipment made with the very latest generations of technological development, in both the civil and military sectors.

¹- China could thus shift quickly from its position as 'the workshop of the world' to that of 'the laboratory of the world'. In the next 15 to 20 years, it will likely be the leading scientific country, ahead of the United States. With a 173% increase in the number of scientific publications between 2001 and 2007, it has risen from sixth to second position worldwide in this area, with a six-fold increase in patent and utility model registrations between 2000 and 2009. (La coopération scientifique et technologique franco-chinoise: le point de vue français, Ministry of Higher Education and Research, November 2010).

STEP CHANGE

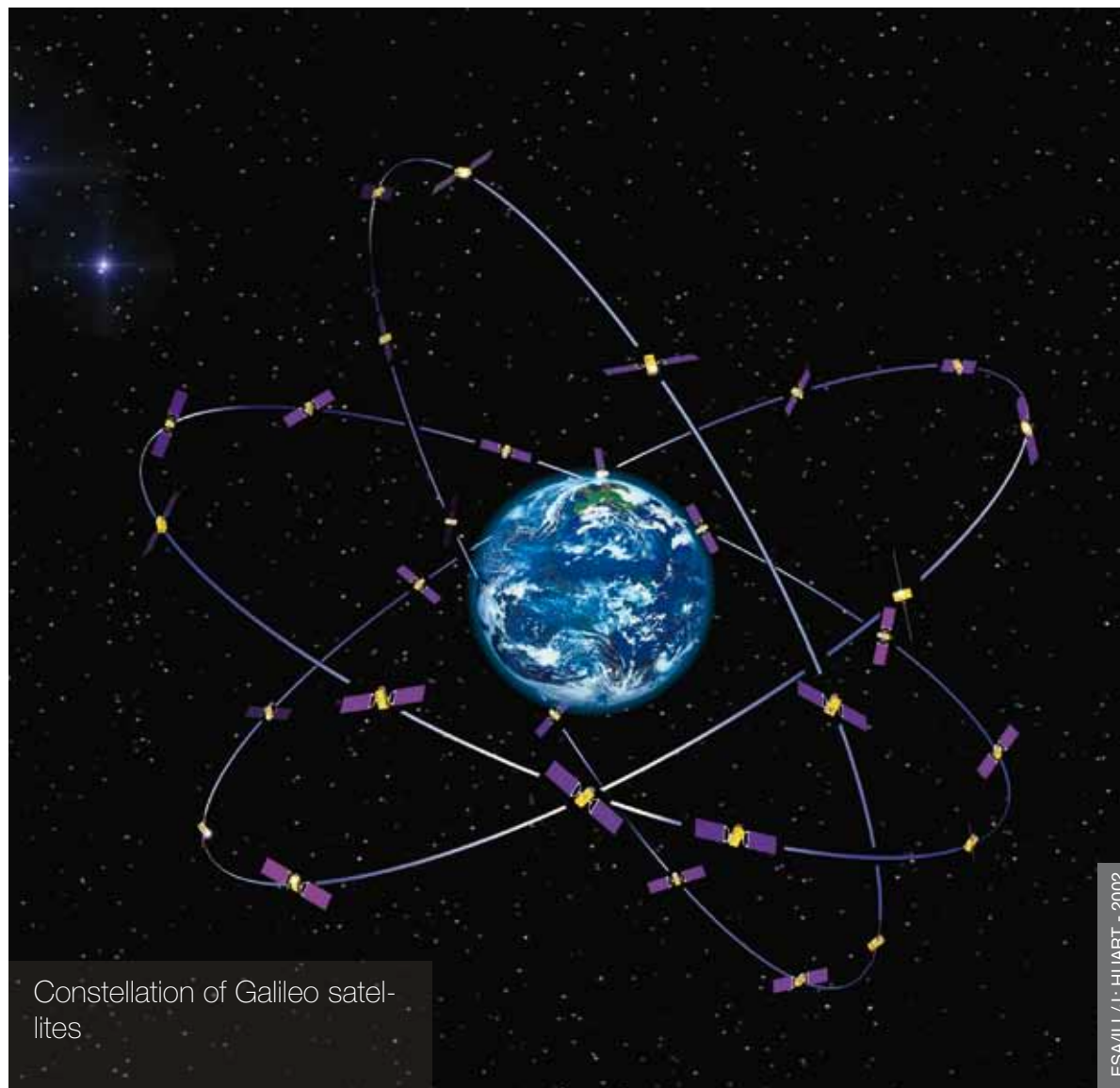
The fact of China or India catching up with the American level in the field of technological innovation would constitute a step change of considerable impact, particularly in the strategic domain.

STEP CHANGE

If the Gulf powers decided to develop technology poles on their territory (in particular by attracting foreign scientists), there would be a considerable shift in the balances that are currently forecast between the Asian pole and the Western pole.

Although Europe, as a region, is a major scientific power (and even the leader in terms of publications), the nature of its policies in this regard, which is still essentially national, makes this position very relative. It will not remain a first-rate power unless its members manage to unite their efforts in the pursuit of common goals.

In societies dominated by instrumental rationality, the practices of consuming 'everything technological', which will no doubt be amplified, will not necessarily be accompanied by cutting-edge development of the scientific spirit. There are already signs of this in Europe: the loss of social prestige accorded to scientists. One of the symptoms of this problem is the increasing difficulty in recruiting students for scientific courses in the context of the restructuring of the university system on a European and worldwide level into a genuine international market for intellectual assets. It is therefore highly probable that a broad planetary redistribution of knowledge and skills, particularly in the fields of biological sciences, technologies, and information, will take place in the coming decades.



Constellation of Galileo satellites

ESAVILLUJ, HUART - 2002

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1.2 - Mastering applications:

Many experts consider that nanotechnologies will be at the centre of the next technological revolution, with repercussions in many fields (electronics, environment, engineering, medicine, military). The innovations in the field of biotechnologies will also have repercussions on life itself (health, agriculture) and will constitute a major factor in the battle against poverty.

The application of tools developed within many scientific and technical disciplines to life sciences will probably be one of the developments generating the most changes in sociological and anthropological terms. Thus, future developments at the intersection of nanotechnologies, biotechnology, information technology, and cognitive technology will probably give rise to the problem of the constraint—or even, control—that technical devices will apply to human beings and their capacity for initiative.

In the coming decades, the risk of controversial or dangerous applications of technological innovations (nanotechnologies, biotechnologies, robotics) will raise ethical questions (cloning, eugenics, artificial intelligence, etc.) and could represent a growing threat to the security of persons, populations, and States.

As the mass of specialist knowledge keeps accumulating and the boundaries of knowledge are constantly being pushed back, the accelerated broadcasting of knowledge will continue. This trend will only be strengthened by the increasing density of the network of available terminals and by technological developments making access to modern communication resources, especially the Internet, less and less difficult. Despite this, the accessibility to information granted by these technical devices will not necessarily be accompanied by greater general knowledge concerning scientific advances or better learning of the basics in the field of culture. In the developed countries, transformations in knowledge systems combined with the difficulties associated with a certain academic and educational model could lead to a damaging drop in the level of knowledge in a majority of the population in the years to come.



STEP CHANGE

These developments could thus transform the relationship to knowledge, with the main risk being the appearance of an informed subject rather than a knowledgeable one, with all that this would imply in terms of the constitution of the person and his relationship with others and with the world.

Moreover, the importance of technical devices in the life of many individuals worldwide is certain to give rise to the question, in the short or medium term, of the control that will be applied to them. Whether with regard to the Internet or individual capability augmentation systems, the State apparatus could begin to consider the control of such activities to be strategic; control which is currently left in the hands of economic operators, particularly because of the scale of the necessary R&D investment. The area of techniques and technologies considered to be strategic could therefore constitute a significant field of reinvestment and state intervention, starting in the military sector.

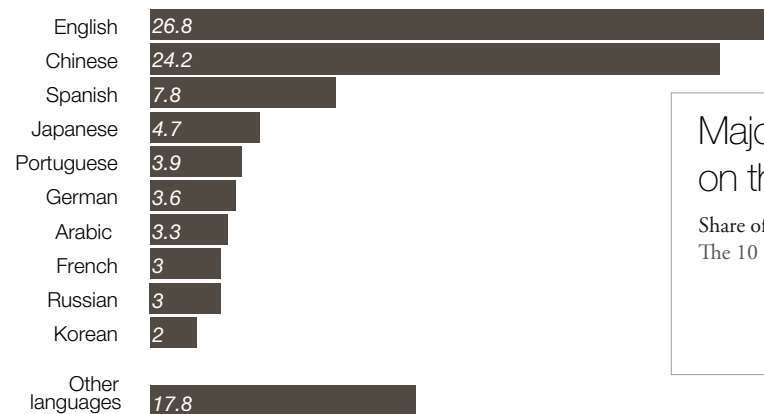
Medium-altitude
long-endurance drone:

Used for surveillance and
reconnaissance in a theatre of
operations.



2 Revolution in new information and communication technologies

Technical changes (the switch from analogue to digital, development of high-speed networks, wireless technologies, development of memories) combined with reduced cost and the convergence between computing, audiovisual, and telecommunications, have paved the way for a revolution in information and communication technologies - of which multimedia and the Internet are merely an early showcase - and have established the arrival of the information society.

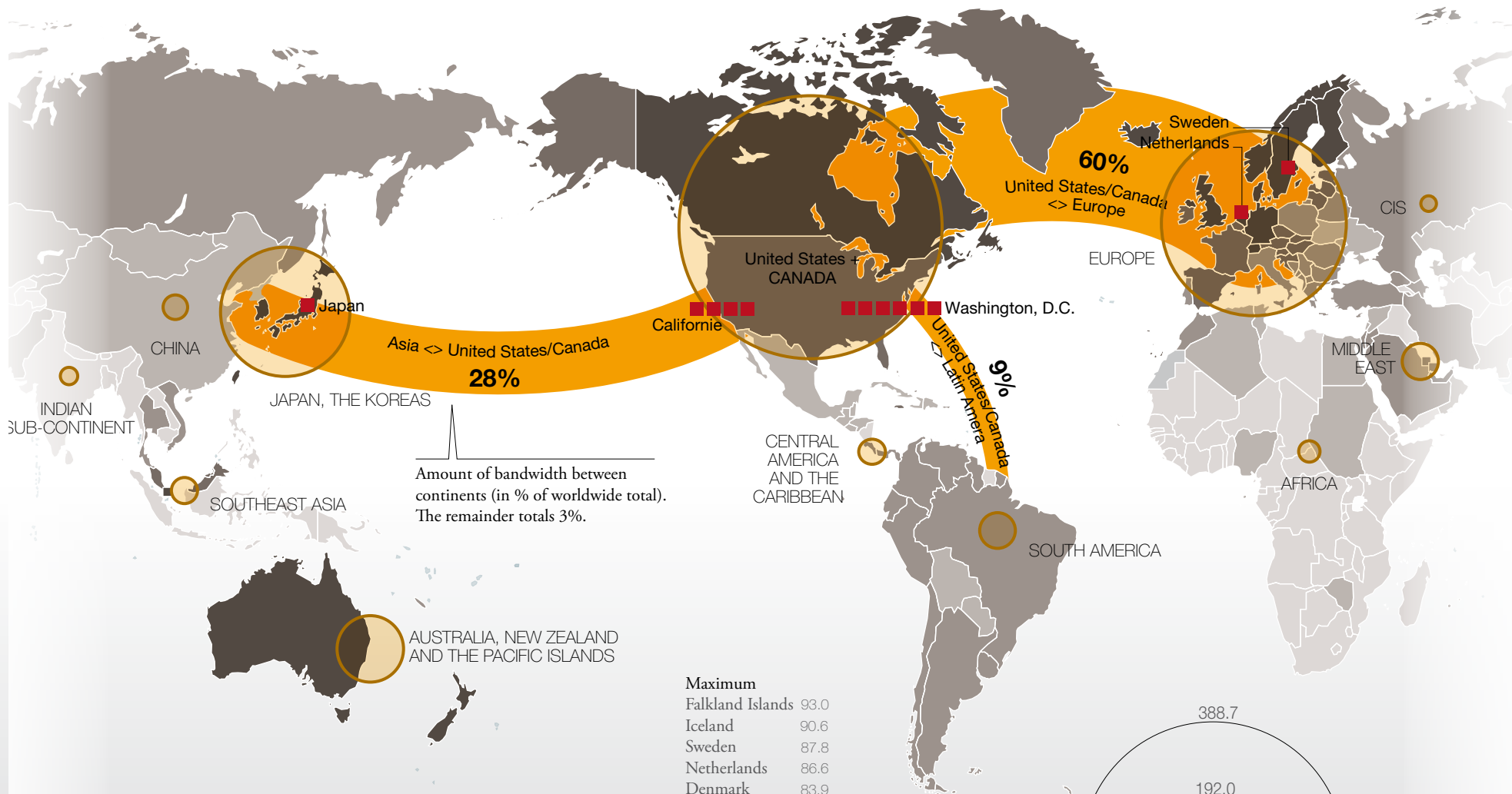


Major languages on the Internet, 2010

Share of the 10 primary languages (in %), May 2011
The 10 primary languages represent 82.2%

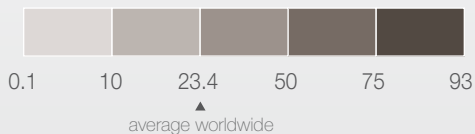
Source: Internet World Stats, www.internetworldstats.com

Map Department of Sciences Po, 2012



Internet: infrastructure and users, 2008

Internet users (in % of the population)



Lack of information

Servers (in thousands)

■ Root servers

Sources: International Telecommunication Union (ITU), www.itu.int

M.-F. Durand, Ph. Copinchi, B. Martin, P. Mitrano, D. Placidi-Frot, Atlas de la mondialisation, Presses de Sciences Po - 2010

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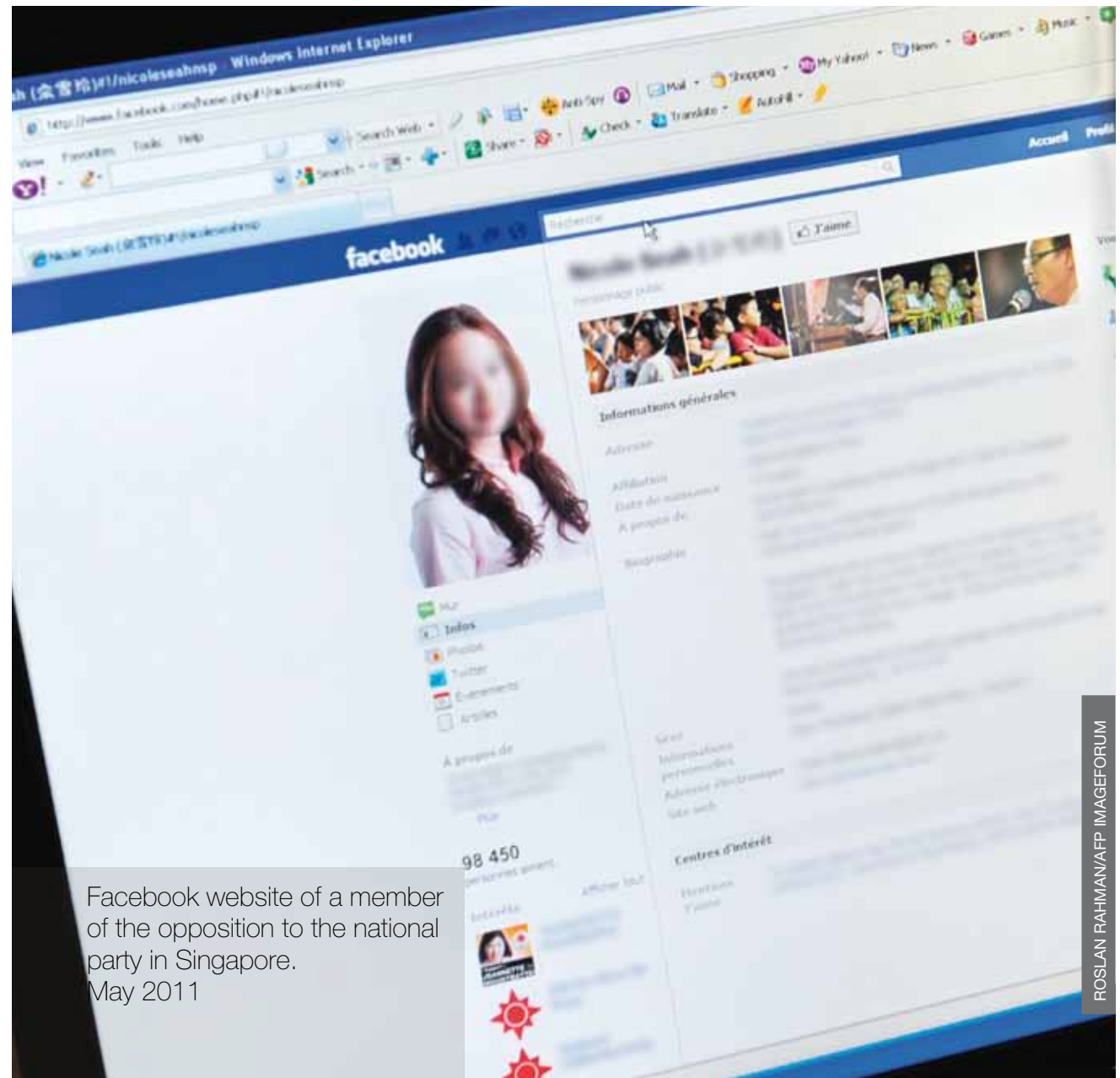
The capacity of information systems should continue its exponential growth, and memory and data storage capacities will grow alongside it. This revolution, whose scale looks likely to be equivalent to the industrial revolution (impact on how society, modes of work, and the international system are organised, and on culture and representations), can only gain in strength and constitute one of the main issues of the 21st century, with repercussions in every area (technological, political, economic, and strategic).

2.1 - Towards the emergence of a new world society?

Although the development of the Internet began in the military domain (major role of the US Army research agency), it has reached and revolutionised the civilian domain, largely free from state control. In parallel, every region of the world has entered the digital era, including the Arab societies which, except for Sub-Saharan Africa, seemed to be the least advanced. This means that by 2015, over half of the world's population will be connected¹.

The impact of the new information and communication technologies on international relations is not new, but with the arrival of the Internet, their scale has increased tenfold. The increasingly extensive level of interconnection will accelerate the globalisation process. The new information technologies (mobile telephones, satellite channels and the Internet above all) erase spatial borders and facilitate the circulation of words, images and even rumours in real time. They blur the boundaries between transmission, production, and reception of information, between the real world and the virtual world, between private space and public space, and accelerate the globalisation process and the changes in the international system: the rise of non-state and transnational players of all types (industrial action, diaspora, and extremist, criminal, or terrorist groups), creation of solidarity networks, emergence of a public space on an international level, which could be the grounds for a new organisation of world society.

¹- According to Nielsen's Law, which states that network speeds will increase by 50% per year, in 2030, users will have 100,000 times more bandwidth than today.



Facebook website of a member of the opposition to the national party in Singapore. May 2011

The rise of social networks, which appeared in the 2000s, favours the emergence of new identities, new communities, a new political culture, and new forms of socialisation that are bound to develop and spread.

The ideas and demands, as well as the representations that circulate via the Internet and the mobilisations are likely to shake up geopolitical developments and contribute to shaping the international agenda, as shown by the revolts and revolutions underway in the Arab world, which some people have referred to as the 'Twitter' or 'Facebook' revolutions.¹ Affirming civil society, training activists, broadcasting information, social and political demands, and mobilising demonstrators; through the social networks, the Internet is a powerful accelerator of the social and political transformations occurring in these societies, which are considered to be the laboratory for 21st century revolutions.

The emerging public cyber opinion and the growing demands of non-state players to participate in discussions and decision-making will increasingly influence international political choices. As an intermediary and catalyst for gagged oppositions and an unparalleled area for freedom of expression, the Internet can be a favourite instrument for the defence of fundamental rights and freedoms because it allows instantaneous knowledge of violations and atrocities.

2.2 - Abuse of the new information and communication technologies: a source of new weaknesses

Conversely, the abuse of these new media can increase the threats to populations and states.

The accessibility of information will not necessarily be accompanied by a greater political conscience. On the contrary, it could increase consumerist temptation, anaesthetise opinions, and favour a type of self-alienation, which could be exploited by authoritarian political regimes. In fact, most Internet users seem more interested in entertainment and consumer goods than in public debate, like the 450 million Chinese Internet users, who represent only 35% of the population; the most affluent, but also the most conservative segment of Chinese society. The spread to less affluent segments of the population, highlighting the growing inequalities, could however weaken the agreement drawn up by the regime, which advocates political stability over economic development and better living conditions.

Although social networks still mostly slip through the net of monitoring systems because states usually lag behind the evolving practices of Internet users and technological innovations, if the states were to catch up, they could achieve a tenfold increase in the Internet's power as a tool for propaganda, disinformation, repression, and surveillance (e.g. the dissent that has been stifled in Iran since 2009 and in Syria in the spring of 2011). Despite the recognition by the entire international community (almost 200 states) that the Universal Declaration of Human Right is fully applicable to the Internet, the number of countries that flout their commitments is increasing at an alarming rate.

If used as a vehicle for racial or religious hatred or an instrument of war and for recruitment by criminal groups, particularly terrorists, the Internet could aggravate the threats against populations and states.

The increasing interconnections will then represent a risk of vulnerability, with consequences on infrastructures and strategic systems (risk of computer piracy). The difficulty of protecting sensitive data (industrial sector, military sector, etc.) and the failure to observe confidentiality and protect privacy will also be growing challenges.

Finally, the persistent nature or even the widening of the digital divide could have serious socio-economic consequences (aggravating inequalities) and repercussions on international stability.

As the WikiLeaks affair has shown, it will be a growing challenge for states to control their image on the Internet, and they must manage this challenge in parallel with a growing involvement on the net. Membership of this new worldwide forum and the necessary anticipation to better guide technological and societal evolutions are now essential issues for states. Without these, they might have a lower capacity to influence public opinion, which for its part will continue to use this medium more and more to ensure that its voice is heard. The power of a state and its international influence will also be measured by its visibility and activity on the internet, increasingly at the core of diplomatic strategies, as witnessed in the USA and the UK.

The prevention of abuse of new technologies and the Internet will require regulations to be developed on an international level to combat cybercrime, guide habits, protect digital data, give a legal framework to the universality of the Internet, etc. Whereas the international debate concerning security in cyberspace is often led by authoritarian states, some of which are also leading hosts of hackers who perpetrate spectacular attacks, the compliance of international regulations with democratic values with therefore largely depend on regimes that respect freedoms taking charge of these matters and imposing their point of view.

1- Referring to the role played by the social networks Twitter and Facebook in mobilising public action.

3 New political configurations

3.1 - Towards a redistribution of powers?

States could be reconfigured in even larger proportions than today in their geographical and functional dimensions: transfer of certain responsibilities to regional or international organisations (e.g. taxation) delegation of certain tasks to private players (e.g. in the field of security); straightforward withdrawal from certain areas of intervention (e.g., social action). The co-ordination of policies in a complex institutional environment could intensify. However, certain states will remain on the fringes of this type of international system.

For their part, the media will no doubt consolidate their position as fully globalised players. The fourth estate, a relay and producer of emerging national and international opinion, will probably continue in its role of essential intermediary for populations.

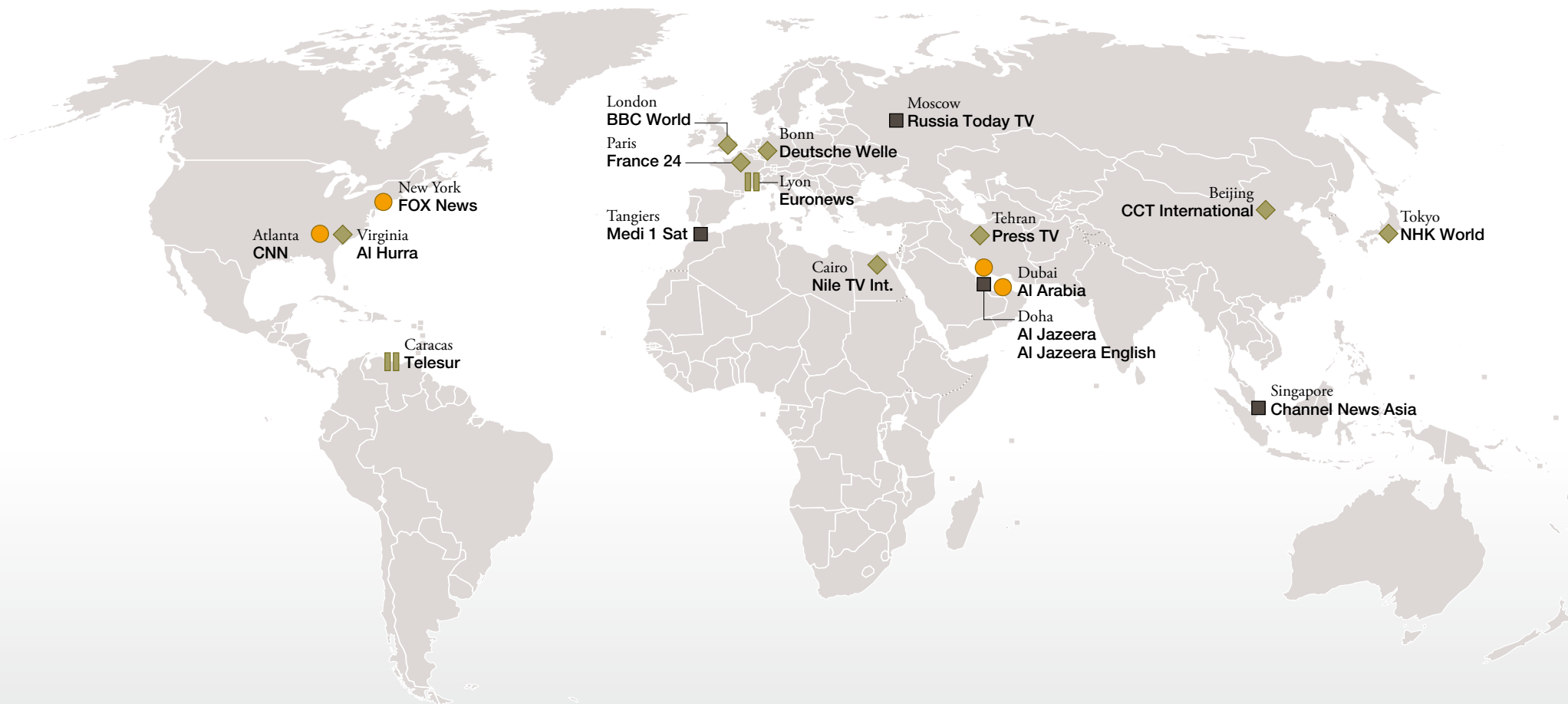
The impact of the speed of the media on political timing will no doubt continue to be felt more and more, with all the consequences (mainly negative) which that implies for public decision-making and action.

Despite the crisis that has struck the world economy since 2008 and the tremors that now shake it repeatedly, the financial world will no doubt continue to exert influence on national and international affairs. As an essential link in the life of organisations (from states to multinational corporations and SMEs) and private individuals, it seems unlikely that financial power will lose its influence in the coming years.

Establishing a form of capitalism that breaks with its industrial ancestor, characterised in particular by its disconnection from the real economy, the possibility that it might transform its structures and modes of regulation cannot be ruled out.

Finally, with regard to legal considerations, the juridification of society and social relationships seems destined to endure. This dimension, however, seems less likely to mark the coming period than the increasing corruption or circumvention of the state of law through the proliferation of security measures¹. These measures, combined with the developments mentioned above in the field of technologies, could encourage 'globalitarian' type modes of government, which would also apply to democracies.

1- In that regard, see the measures that some countries have taken in the context of the war against terrorism following 11 September, some of which clearly fall outside the rule of law.

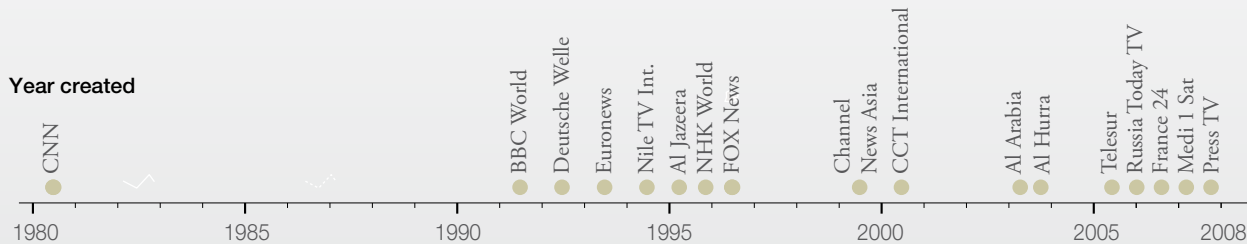


Major international news channels, 1980-2009

Channel controlled by

- Private group
- Multiple actors (public and private)
- ◆ Government (public channel)
- ▮ Several governments

Year created



Source: compiled by Mathieu Szeradzki based on the channel's websites from a graphic published in *Le Monde*, 21 November 2006

M.-F. Durand, Ph. Copinschi, B. Martin, P. Mitrano, D. Placidi-Frot, Atlas de la mondialisation, Presses de Sciences Po - 2010

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3.2 - Democratic affirmation

In international relations, matters of human rights and democracy take on an increasing importance, destined to last and possibly to be amplified in the decades to come.

The only regions of the world not to have been affected by the democratisation processes initiated by what Samuel Huntington called the 'third wave' from the mid-1970s¹, North Africa and the Middle East have extracted themselves from their 'exceptionalism', marking, whatever the outcome of the movements now in progress, a dynamic and the affirmation of the democratic principle, which should continue.



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The process of democratisation in the Arab world, combined with the death of Osama Bin Laden, could help to close the period that began on 11 September 2001 and mark the entry into a new geostrategic era where terrorism and radical Islamism would remain significant threats, but not as central as before.

Although democracy is not established everywhere, its principle is no longer disputed on an international level, and head-on protests against the democratic standard are rare, even by authoritarian regimes and perpetrators of coups d'état, who make it their own. However much debate there might be concerning F. Fukuyama's "end of history" thesis², which he intended as the completion of humanity's ideological evolution, the democratic principle has achieved the status of a universal value which, without enjoying unanimous approval, is now shared by a large majority of populations all over the world.

However, the democratisation process, fragile and reversible, even when it is responding to a local demand, remains chaotic and will not be exempt from relapses (coups d'état or authoritarian takeovers), and will not assert itself all over the world by 2040. Moreover, there is a wide variety of regimes claiming to be democratic, from formal democracies (elections) to real democracies incorporating not only civil and political rights, but also social, economic and cultural rights; there are also diverse approaches within the 'western' democracies themselves, most notably between the European and American approaches (the death sentence, the role of international justice, social and economic rights, separation of powers, etc.).

Finally, and above all, the democratic principle will not be asserted everywhere solely on the liberal democracy model, but will be applied in multiple ways. Most democracies will be poor and non-western and will adopt a concept of the state, of human rights, of democracy, of the place of religion, and of minorities according to their own models (communalism in India, confessionalism in Lebanon, etc.), which are likely to erode the liberal democracy model and possibly make it lose its predominance.

The progress of the democratisation process will not necessarily be synonymous with more stability in the short term. Certain countries, after emerging from a dictatorship but before being democratised, might remain in an unstable intermediate situation. Although democratisation is largely viewed as having a positive impact in terms of peace, prosperity and security, the transitional phase can bring instability likely to degenerate into violence, or even conflict, with some people even considering that states in transition are more prone to war, even with respect to other democracies³.

Moreover, on an international level, the spreading of the democratic principle is accompanied by a fragmentation of international society and an increased number of states (principles of rights of the people and human rights), destined to endure or even to be strengthened.

Likewise, it is not certain that democratisation facilitates multilateralism and agreements on the major international questions (climate change, crises, etc.), because the convergence of interests between democracies is not automatic. Moreover, the democratisation of the international system, particularly in terms of power distribution in international organisations and the involvement of non-state players in the decision-making, will not necessarily imply greater efficiency.

The promotion of democracy, rooted in American tradition since the Civil War, should remain an important component of American diplomacy well beyond the neo-conservative current only. The question of placing democracy as a foreign policy objective will be raised with increasing urgency in the European Union in the context of enlargement and the development of neighbourhood policies (Mediterranean in particular).

1- Samuel Huntington, *The Third Wave. Democratization in the Late Twentieth Century*, University of Oklahoma Press, 1991. The third wave began in the 1970s, following the waves of 1828-1926 and 1943-1964. Southern Europe in the mid-1970s, Latin America (1980s), Central and Eastern Europe and, subsequently, Africa, Asia since the early 1990s, Ukraine and Georgia (first half of the 2000s).

2- Francis Fukuyama, 'The End of History', *The National Interest*, summer 1989.

3- Edward D. Mansfield, Jack Snyder, "Democratization and the Danger of War", *International Security*, vol 20, n° 1, Summer 1995.

Flowers in
the gun barrel of a tank
celebrating the fall
of the Ben Ali government,
20 January 2011, Tunis



MARTIN BUREAU/AFP IMAGEFORUM

4 Ideological transition, new political configurations and identity-based restructuring

4.1 - From ideological transition to new commitments

Progress is no longer the leading lens through which societies consider their future. The major ideologies which had polarised and structured the world for more than half a century and were ideologies of progress, not only scientific, but also social and political, in their Communist or liberal-democratic form, and the pro-active attitude that accompanied them, have been weakened but not destroyed on a worldwide level.

In this context, struggles for influence between powers will probably be situated less on the terrain of political ideology and more on that of soft power, entertainment, lifestyle, and consumption practices. The attraction of the American way of life should not be clearly questioned, but the exact scope of the influence exerted via entertainment and the consumer spirit could be more difficult to evaluate.

In the context of the globalisation process, cultural hybridisation seems to need to continue to prevail in the coming years. This hybridisation is fed by scattered elements taken from different places and eras: Ancient cultural strata are reactivated, traditions are reinvented, and the technical resources born from modern science are used to convey all ideas, including anti-modern ones, irrespective of their provenance.

Whilst a certain sense of disenchantment with politics currently prevails, particularly in Europe, the coming years will probably constitute a period of ideological transition, and should continue to be characterised by a certain ideological wavering. The political exhaustion is obvious, particularly in the oldest democracies, where the intermediate bodies such as parties, unions, employers' organisations, etc., are suffering from a legitimacy deficit. Democratic regimes are coming up against the increased suspicion of leaders, the exhaustion of voter participation, and the appeal of populist discourse.

National or international (nascent) opinion will probably continue to exert its influence from time to time and in different ways according to the circumstances. Ideological preferences will probably continue to be expressed in accordance with circumstances, which does not rule out the structuring of new political thoughts and the consolidation of generalised or sectorial industrial action. Thus, new national or transnational political organisations could gain influence on the scale of nations or the world, and could even exert increasing pressure on international politics:

The growing number of factions and rise in membership of sometimes very heterogeneous groups should continue.

Although membership communities might have replaced the traditional communities (family, village, region, and then nation) that prevailed in the past, today they differ by their method of formation, which increasingly occurs by elective affinity on various bases (brand logic emanating from the omnipresent world of consumerism, counter-society approach in certain territories, religious approach in certain areas, etc.), which make them more or less closed, more or less uniform, and some of which can be sources of destabilisation.

Transnational or non-governmental organisations running charitable networks that incarnate humanistic ideals or values (whether lay or religious) will be called on to play a major role in the identification processes on the international scale. The rise of powerful denominational NGOs, whose political project combines material support capabilities with ideological indoctrination on a transnational scale could result in the emergence of non-state powers able to take the place of the state.

In parallel with the emergence of new identities, the reference to national identity should continue to be eroded and to lose its relevance due to the combined effect of several phenomena, and particularly:

- the abolition of distances, permitting communication without reference to a unique community that belongs to a territory;
- the strengthening, as a reaction to the effects of globalisation, of local ties, specific cultures, and community memberships;
- the weakening of the national states on an international level,



making it more difficult to feel a sense of belonging to/identifying with the nation alone.

This crumbling of identity could weaken national cohesion and the ability to create and maintain the social link. In parallel, a growing number of individuals could come to view their connection to the state and their membership in society from the point of view of consumerism. There could thus be a decline in the public-spirited attitude of citizens in consumer societies, and this dynamic could spread with the growing access of certain emerging countries to mass consumerism.

In pluralistic societies, subject to the influence of globalisation like other societies, the civic institutions are undergoing restructuring. The question of civic membership processes could be raised in the years to come, giving rise to increasingly detailed legal and cultural codification. Modes of civic action could also change: some new tools are already a part of the landscape, from community referenda in Europe to the lobbying actions of new communities acting as interest groups addressing regional or international authorities. Populations and their political centre of gravity could thus gradually be redefined across national borders, on the basis of emerging mechanisms and movements, at different decisional and territorial levels.

Several international forums, 1996-2011

- WTO ministerial conferences
No conferences have been held since 2005 because of the failure of the last round of negotiations launched in Doha in 2001.
- G8 summits since 1996
G7 annual summits have been held since 1975. When Russia joined at the 1998 Birmingham summit, it became the G8.
- G8 members
- ▲ World Social Forum
- ▼ Thematic or regional social forum
- National social forums are not included.

Source: WSE, www.forumsocialmundial.org.br ; official sites of the various G8 summits; WTO, www.wto.org

M.-F. Durand, Ph. Copinchi, B. Martin, P. Mitrano, D. Placidi-Frot, Atlas de la mondialisation, Presses de Sciences Po, 2010



STEP CHANGE

The development of the feeling of European citizenship would indicate caution concerning the establishment of a European identity to supplant the national identities. It is, however, progressing slowly, and this should continue in the coming decades, possibly accelerating due to internal developments (progress towards a social or political Europe with which citizens can identify better, constitution of a true European public space, etc.) or external developments likely to reinforce a feeling of belonging, e.g. the appearance of a threat to the principles of freedom, democracy and human rights, or an attack threatening the security of one or more member states.

Even though the advent of a 'world society' is not foreseeable in the next thirty years, just as the 'planetary state' is not about to be created, it seems likely that the co-ordination and integration of human societies on a worldwide scale will continue over the very long term. Social and political conflicts and identity-based restructuring will contribute to creating a social connection in a framework that will undoubtedly be post-national.

FOCUS

Women's equality and freedoms, a 21st century issue

Women's equality and freedoms will remain decisive issues in the decades to come, both in developed and developing countries, with implications in every field (economic, political, cultural, and demographic), including for the stability and stabilisation of states.

Although the question of women's equality has progressed more slowly since 2000 than certain other millennium development objectives¹, the situation of women could remain mixed, and the gap between countries where equality is progressing and those where it is stagnating, which does not necessarily correspond to the distinction between developed countries and developing countries¹ - could widen.

The development and stability of many countries could be affected by improving the situation of women, by massive attacks on human rights, where discrimination and violence against women would be a major obstacle to development and post-conflict reconstruction, in which women are known to be primary participants.

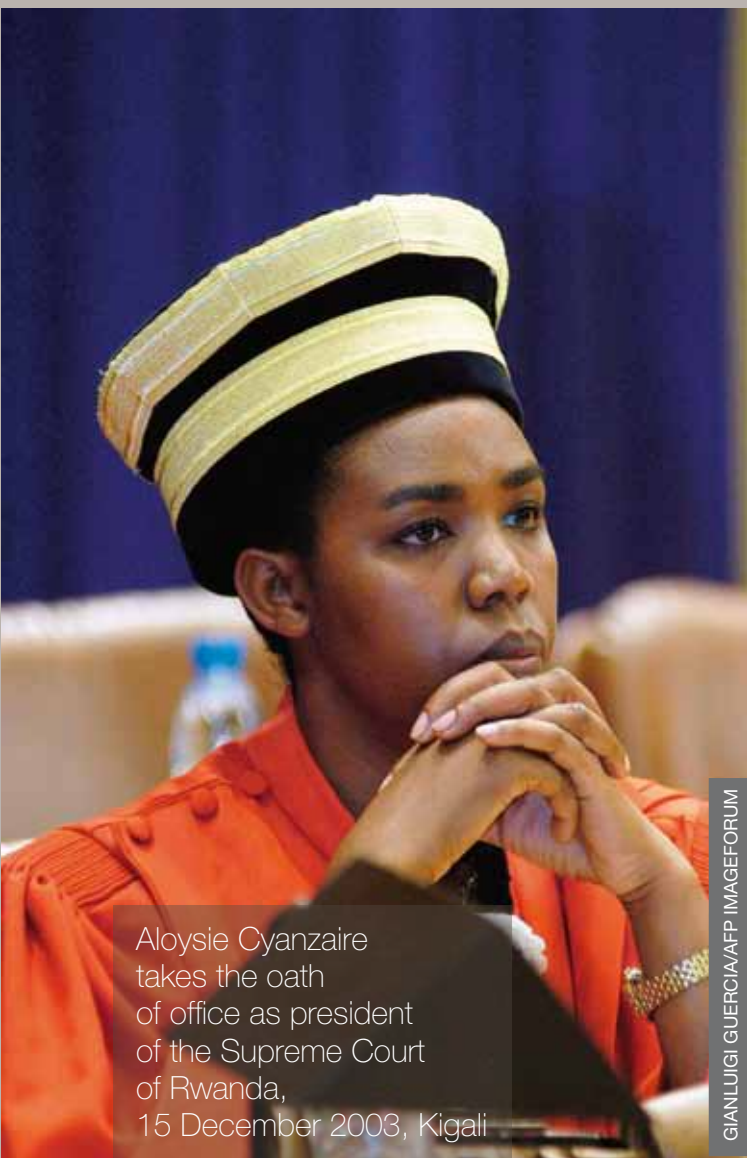
These advances, however, will remain dependent on fundamental human rights: equality of access to public services (education and health in particular), economic independence (access to land, jobs), possibility of participating in the public life of their country (the right to vote, representation), combating the violence perpetrated on women, and in certain countries, giving them an identity and a civil status, which could continue to run up against prejudices and cultural relativism, exploited by state and non-state players, including in international environments.

In developing countries, urbanisation and the socio-economic and cultural implications that this movement will bring (easier access to education, health, evolution of representations, etc.) could be a factor in the improvement of the status of women.

Whilst career inequality and the insecurity of women will no doubt remain a significant feature of society in developed countries, and even more so in the others², the coming years could see a reversal of the gender-related trends in unemployment, at least for jobs requiring few qualifications. In parallel with the boosting of their presence on the job market in the industrialised countries, women could also occupy more positions of responsibility in both the public and private sectors, and economic and political sectors. In view of the effects of social and cultural inertia, however, the question of the adoption of pro-active policies (quotas) to achieve these objectives could arise in a growing number of countries.

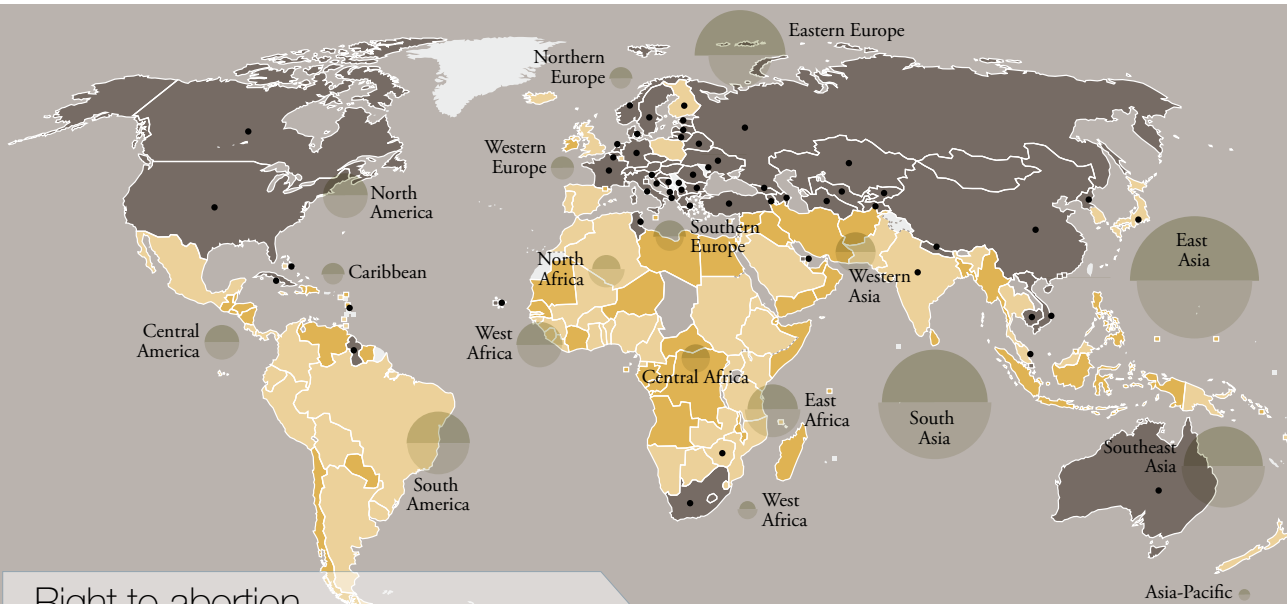
1- Among the approximately 30 countries where women hold at least 30% of the seats in the legislature, half are developing countries; four-fifths have achieved these results by quotas.

2- The unemployment gap between men and women is the largest in North Africa, the Middle East, Latin America and the Caribbean.



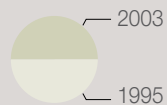
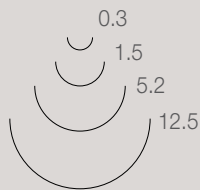
Aloysie Cyanzaire takes the oath of office as president of the Supreme Court of Rwanda, 15 December 2003, Kigali

GIANLUIGI GUERCIA/AFP IMAGEFORUM

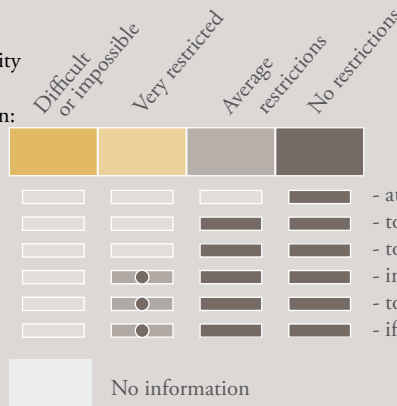


Right to abortion Laws around the world, 2011

Number of abortions by large regions (in millions)



Opportunity to obtain an abortion:



Conditions:
 [Dark grey] Yes and...
 [Medium grey] Yes or...
 [Light grey] No and...

Sources: Center for Reproductive Rights, *The World's Abortion Laws 2007*, New York: Center for Reproductive Rights, 2007 - Singh, S. et al., *Abortion Worldwide: A Decade of Uneven Progress*, New York: Guttmacher Institute, 2009 - United Nations Department of Economic and Social Affairs, Population Division, *World Abortion Policies 2007*, New York: United Nations Department of Economic and Social Affairs, 2007. www.un.org/esa/population/publications/2007_Abortion_Policies_Chart/2007_WallChart.xls

Manon Wallenberger, Malek Saidi and Patrice Mitrano, Map Department of Sciences Po, 2010

5 Religious restructuring

The search for meaning at a time of instability and uncertainty, a return to one's identity in the face of the increasing of the world and the consequences of globalisation combined with the marginalisation of political ideologies for the radical transformation of society all favour the rise of religious practice. Religion can be a crucible of solidarity, but can sometimes become a vector of protest or the expression of a hegemonic desire to impose certain principles and values. In these misuses involving the legitimising of violence, or even terrorism, religion plays an increasing role in international life, destined to continue in the years to come.

There is little doubt that the religious factor will continue to affect international relations, but in different ways according to the geographical zone, the type of political power, and the socio-economic conditions in which it is found.

5.1 - The increasing role of religion worldwide

This religious revival, however, is not uniform. The weight of religion in the formation of social relationships is not the same all over the world. The dynamic is different in different regions of the world, and even within the regions; according to the country, certain regions are following a path of secularisation[▲], and others are rediscovering religious roots.

Without fundamentally challenging the highly secular nature of European societies, including amongst populations from the most recent migration flows, we are currently witnessing a religious revival in terms of declared social identities. This 'post-secularisation' phenomenon reflects the desire of certain groups to assert, in extremely varied forms, new forms of recognition of religious practice, and religions, in the political arena and public debate. Thus, the place of religious practice in society could be re-evaluated in western societies in the coming decades, as witnessed by the introduction of a reference to religion and the recognised role of religions in the latest European treaties. It will be up to the legal and political systems to solve the problems that the expression of certain beliefs can raise in a pluralistic society and to arbitrate between an individual and a more community-wide perception of the principle of religious freedom.

Outside Europe, which is characterised by its singular approach to freedom of expression concerning religious matters and its relative isolation on the international scene, and North East Asia (China, Japan), two secularised poles, the importance of religious practices and identities should persist, or be accentuated, even though, here again, these are complex phenomena. Thus, the secularisation of Iranian society is still underway in a theocracy that makes religion its sole ideological point of reference.

Protestant religious culture should continue to leave its mark on public life in North America, where it unites the majority of the population and attracts bigger and bigger segments of recent immigrant populations (particularly Latin Americans). Since the fall of Communism, the influence of the Orthodox Church has been growing in Russia. The return to *Sharia* law in certain Muslim societies (e.g., in the Indonesian province of Aceh since 1999 and in 16 states of northern Nigeria since 2000) is evidence of a desire for a legal and political identity based on religion.



Inter-religious prayer
for peace
in the Middle East,
San Nicolas de Bari
(Buenos Aires)

JUAN MABROMATA / AFP

Societal and technological changes

5.2 - The persistence of global imbalances between major religions and the rise of evangelism

The balance between the major religions should not be disrupted in the next thirty years¹. In the time frame 2025-2030, Christianity should remain the leading religion in terms of number of followers, with approximately 25% of the world's population, followed by Islam (25%, including approximately 20% Sunnis and 5% Shiites), Buddhism (13%), Hinduism (5%) and Judaism (0.2%).

Islam and the churches of the evangelical movement² will continue to experience significant growth (although more slowly than in previous decades) between now and 2050: Islam, which passed the 20% threshold in the 1990s, should pass the symbolic level of one quarter of humanity early in the next decade (2.2 billion people). The evangelical churches, which will experience the fastest growth, will rise from less than 9% today to 12% of the world's population, with the number of faithful doubling between 2000 and 2050 (from 730 million to more than 1.5 billion).

1- Note: these are only estimates. The figures are taken from a dated publication (2001) by David D. Barrett, *World Christian Encyclopedia*, Oxford University Press, 2001, drawn up based on censuses conducted at the turn of the 21st century. Since that time, systematic forecasts have been conducted only with regard to certain religions. They appear to indicate that these orders of magnitude will be reached much sooner (see, for example, *The future of Global Muslim Population*, published in January 2011 by the Pew Forum on Religion & Public Life, a US 'fact tank', which states that Muslims will represent 25% of the world's population in 2020 and will reach 26.4% in 2030).

2- The evangelical churches (or 'revivalist churches'), which are Protestant, include primarily the Baptist (125 million worshippers around the world), Methodist (approximately 75 million, for the most part in the US, Great Britain and English-speaking countries), Seventh-day Adventists (approximately 25 million) and, within the charismatic renewal movement (which also affects the historic Protestant denominations and the Catholic church), the pentecostal movement, which includes approximately 600 million followers.

Within the various evangelical denominations, which represent the first proselytising movement with a global dimension, the Pentecostal-Charismatic movement is experiencing the fastest growth. Although the USA and Europe remain the main suppliers of missionaries, the movement is increasingly being exported from south to north, confirming a 'reverse evangelisation'. South Korea, Brazil, and Nigeria are now asserting themselves as planetary centres of dissemination. The individualistic philosophy focusing on self-fulfilment of evangelical and Pentecostal churches, their operation in networks (decentralised structures, autonomy of churches), and the power of their funding networks, their entrepreneurial approach (some are like real commercial and industrial conglomerates) accompany the globalisation dynamics.

5.3 - The map of religions is undergoing restructuring

In parallel, the map of religions is being transformed: religions are emerging from their areas of origin or establishment and setting up in new areas.

The centre of gravity of Christianity is moving south: between now and 2040, most Christians will live in developing or emerging countries. Whereas Catholicism used to be associated with Europe, Brazil, Mexico, India and the Philippines have now become the leading Catholic countries. The evangelical churches are in a declining dominant situation in North America, but are booming in Latin America, Africa, and Asia (on the verge of overtaking Latin America in terms of number of members). These regions will constitute the main centres of Christianity. Nigeria will thus be the second Protestant country, whilst China and the Muslim countries are top-priority objectives for evangelical missions.

Whilst the Arab countries now only contain 20% to 25% of Muslims, Asia is the leading Muslim region, and Indonesia is now the leading Muslim country, before India.

Buddhism, on the other hand, should remain inside the boundaries of its traditional territories (South East Asia, Japan, and China, where it is growing strongly). The same should apply to Hinduism, which has demonstrated an excellent ability to adapt to changes in society and its environment.

5.4 - Religion: a persistent factor in tensions and protests

Certain forms of proselytism may give rise to tensions in the coming years, and their occurrences will not reduce, given the aggravation of religious sentiment and its radicalisation under the perverse effects of globalisation and the growing rivalry of states in the field of soft power

For example, the sometimes aggressive proselytising of certain evangelical and Pentecostal churches, which comes up against resistance from the dominant religions in the targeted countries, could exacerbate inter-denominational rivalries and tensions.

The evolution of relations between Islam and Judaism will remain dependent on the Arab-Israeli peace process.

Within the major religions, tensions, or even conflicts, will persist or possibly increase: between Catholics and evangelical/Pentecostal worshippers, or between Sunnis, Shiites, and other groups viewed as 'deviants' or 'heterodox'.

The association in representations of a religion with an area of civilisation—the basis of Samuel Huntington's¹ controversial theories of the 'clash of civilisations' in particular—should thus turn out to be increasingly far-removed from reality.

The situation of religious minorities could also be aggravated with the rise of political ideologies that reject the principle of freedom of thought, conscience, and religion on which the model of a pluralistic society is based. This hostility to Article 18 of the Universal Declaration of Human Rights crystallises on the issue of apostasy, with remarkably strong political mobilisation,

The reawakening of apocalyptic messianisms, whether based on Islamic or Christian references, could also contribute to the rise in religious violence.

Conflicts with a religious dimension that mobilise community identity should continue to increase, against the background of the disintegration of certain states, social and economic destructuring and lack of a feeling of citizenship. This allegiance is placed in competition with other identities (clan, language, ethnic group, religion, etc.) that step into the void left by politics. The religious reference will continue to be exploited politically, serving as a fallacious but stimulating pretext by which to grasp political and social issues.

The destabilising effects of globalisation and the growing rivalry between states in the field of soft power combine to aggravate religious feeling and its radicalisation.

5.3 - The increasing weight of religion in global debate and international diplomacy

The growing weight of religion in international relations and debate and the visibility of beliefs have led some people to demand the creation of a G8 for religions. Although this prospect is unlikely, the fact is that religions are increasingly taking global issues into account (bioethics, globalisation, climate, etc.) and becoming involved at the centre of multilateral initiatives (such as the creation of the Alliance of Civilisations²).

Moreover, the representatives of religions or religious groups, having become participants in the international order in their various capacities, could increasingly be mobilised in diplomatic action (mediation, conflict resolution, advisers to heads of state). A growing number of western countries could incorporate this change into their foreign policy, following the example of Switzerland and the United Kingdom³.

In the coming decades, the universality of human rights could increasingly be challenged by states or non-state players in the name of ethnic and religious principles, which are already used in international circles, most notably in the Human Rights Council.

1- Huntington, 'The Clash of Civilizations and the Remaking of World Order', *Foreign Affairs*, summer 1993. His theories are both simplistic and confused as he blurs categories; civilisations may thus encompass a religion, an alliance or, even, simply countries.

2- The Alliance of Civilisations (AdC) was created by UNESCO with the objective of encouraging dialogue among cultures. It includes a religious component.

3- The British 'diplomacy of the communities' or the Swiss-led 'Montreux Initiative' that promotes cooperation with Islamic charitable organisations.

⇒ CONSEQUENCES FOR DEFENCE

The major technological and societal changes will generate vast and complex restructuring on a global scale. They can also be factors in new weaknesses, heightened tensions, or conflicts (rise of communitarianism, religious radicalisation, biological threats, cyber threats, etc.), requiring the military to adapt to new challenges.

The challenge of technological superiority

The use of science and technology will continue to allow more effective and more numerous capabilities for action on the environment and the development of the most technically advanced equipment to provide an advantage at every stage of a conflict: information, surveillance, speed, endurance, and protection of personnel.

This capability will be an undeniable factor for power in the worldwide competition, in the economic domain ensuring access to markets and commercial positions and, in the military domain, allowing the development of equipment or systems conferring operational superiority, but will nonetheless be dependent on the resources allocated to these new strategic areas. A gap could develop between the powers able to fund them and those not able to do so, and if France fell into the latter category, there would be a risk of its international status being downgraded.

The possible redefining of budget priorities, particularly to the detriment of scientific and technological research in the fields of interest for defence, could relatively soon put an end to the scientific superiority enjoyed by the European countries, most notably France, ever since the Renaissance. The impact of such developments on the competitiveness of their defence industries and on their strategic position could be significant. The USA will not necessarily be subject to comparable pressures.

In the medium term, the spreading of technical and scientific knowledge should lead to a certain levelling of power between the 'major players' on the international scene, or even the southern countries gaining an advantage in the development of certain weapons (following the example of the Chinese ballistic programme Dong Feng 21D, which could be used, in particular, to threaten a naval aviation group). The residual but essential power differential will also reside in the global integration capability (joint forces operations and international operations) and the capability to control overall flows and spaces (sea, air, space, cyberspace, financial).

Since the threats against information and communication systems should increase further, France will need to follow the example of other countries (like the USA) by implementing protection strategies in cyberspace

The challenge of knowledge and information

Whereas the armed forces are stressing the need to recruit personnel at every level of the hierarchy whose qualifications will make them better able to make decisions in complex operational environments, the hiring pool could shrink because of the transformations affecting knowledge regimes.

Interventions, which will more often involve contact with populations, will require in-depth knowledge of the operational zones: geographical and cultural factors, specific local features, community and religious identifications. This knowledge of operational zones will involve the development of interdisciplinary and geographical expertise within the Defence department and connections with the academic world (universities, research centres) or civil society (companies, religious leaders, NGOs, etc.).

In parallel with the emergence of a public space in cyberspace, the analysis and monitoring of Internet media, particularly the blogosphere, and in the most unstable geopolitical areas, will be increasingly essential, not only in terms of prevention and early warning (crises and threats), but at every stage of an operational engagement.

The new information and communication technologies (NICT) will not fail to have a growing impact on the military profession, recruiting and gaining the loyalty of young people, amongst other things because of the opposition between socialisation via social networks favoured by the younger generations, favouring a la carte and selective availability, and military socialisation, which is different in that it demands continuous, complete, and collective availability.

Likewise, military operations will be increasingly dependent on NICT, and their constant visibility will accentuate the sensitivity of public opinion, particularly with regard to collateral damage.

The ability to control its image and its messages on the Internet will remain a difficult challenge for the military. The requirement to control information, at both a strategic and an operational level, will involve growing efforts, particularly with regard to:

- equipment (renewal, adaptation, etc.);
- interoperability and securing of information and communication systems and networks, both internally and with allies;
- adaptation and training personnel to cope with upgrades to these new technologies;
- defensive and offensive information warfare.

The challenge of adapting to changes in the relationship with the nation and the 'Defence Spirit'

The processes of partial denationalisation and the reconfiguration of the state, including in the field of defence and security, could have an impact on all matters concerning the engagement of forces: on behalf of which community or communities? Under which flag(s)? What type of force should be engaged: national/state or private? In the name of what principles and by what justification?

A strong and steady discourse based on the essential values and political principles of our Republic must provide an answer to these questions, in a context where the universality of the values in whose name France intervenes in the world will be increasingly questioned abroad, and possibly even within the national community.

The transformations to be anticipated in the civilian attitude to death could confirm the distance that separates the western world from other societies concerning this question and could change the stance of citizens with regard to military engagement and, specifically, with regard to combat. This context should continue to have an increasing influence on how decision-makers make their evaluations about committing the lives of soldiers, and should increase the appeal of remote warfare technologies and the robotification of the battlefield.

Finally, the consumer and entertainment society and the increase in identity-based attachments to the detriment of identification with the nation could make it more difficult to recruit young people into the armed forces.



Reporting on the Côte-d'Ivoire mission

T. SAMSON/ECPAD