

2- The new mechanisms that govern us

For the past several thousand years, our society has adapted itself to changes by using various forms of communication between people. It develops new ways to live and act together based on the information provided to a critical mass of people¹. The process which governs us consists of clarifying and transforming our environment into a form of messages shared by those who live in the society. This informational mechanism operates in the following manner ([postindustrial 8](#)):

- Information² becomes knowledge because the purpose of the information and the communication technologies used give them meaning vis-a-vis a given time and space (context : the Quebec of 1608 or Quebec in 2008, as examples)³.
- When information⁴ acquires meaning, it becomes useful knowledge⁵ capable of generating a range of opinions amongst the citizens of a society.
- Then, the opinions modify the culture, which is a way of coming to terms with reality, time and space⁶, and of expressing the desired changes.

Culture is the way in which a group of human beings represent their environment to themselves and others, and they use cultural symbols to adapt to new situations⁷. Culture shapes our identities. Culture is the channel through which human beings understand each other and act. It is not the culture of music concerts or of museum exhibitions that we are speaking of but rather **culture** in the sense of the **art of living together** effectively and constructively ([postindustrial 12](#)).

For a group, its collective imagination reflects the group's identity and is a primary means of creating and shaping a culture. Human beings are used to living in a culture created by the groups to which they belong. They embark on a collective adventure because they are informed by collective context and activities. In turn they inform the society of their needs. Thus, humans live in *societies directed by the opinions of others*.

Because we have aspirations for the future, all humans evolve in a certain direction, each generation constructing its future based on the achievements of the preceding generations. History teaches us that

human culture is transformed mainly by the acquisition of new information and knowledge. New information and knowledge modifies the opinions and behaviours of citizens, and thus provokes the desired changes in the society⁸

We can translate this process by using the following equation (equation used for the next tables and the [postindustrial 8](#)) :

$$\text{Democracy and sustainable development}^9 : \frac{\text{Knowledge} \times \text{Communication}}{\text{Context (given space and time)}} = \text{Opinion}$$

History does not unfold in a linear fashion, but rather in discontinuous shifts¹⁰, one era after another. In each new era, the evolution of information and knowledge is interrelated with the use of new media tools and services. At the same time, these new tools become the reflection and the multiplier of the society's changes : for example, the tools of the last three eras were the printing press, the television and now the Internet supporting and multiplying the impacts of the current break with the past ([postindustrial 3](#)).

The enhancement and growth of knowledge translates into greater complexity for a society, which in turn demands of its citizens an increased level of consciousness¹¹ regarding the necessary behavioural and attitudinal changes¹².

What will our new world look seem like ?

Based on the synthesis of work by several authors, here on the first table a composite vision setting out the **three tectonic power shifts** of the last 500 years¹³ (postindustrial 1). In the second table (postindustrial 2) we see the role of culture. In the third table (postindustrial 3) a comparative review of the first two columns takes us back in time, and sets the stage for speculation about the shape of things to come (**in bold characters**, following) .

In the table, indebtedness to other authors is presented in the references at the end of this section of the document.

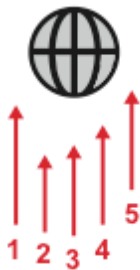
See also the three tables which synthesise the events and authors which have influenced the development of this document :

[see synthesis](#)

Postindustrial 1 :

1700

1st industrial era



This society is based on exploiting the primary sectors

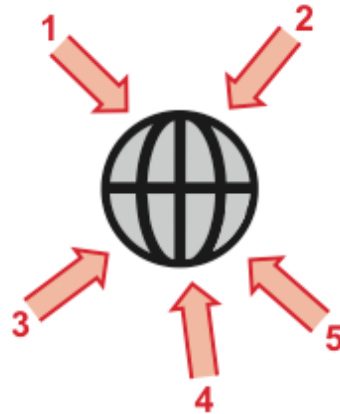
Several mutations make themselves felt, but the crises seem «normal» because they happen in a given territory, are mainly agricultural, and thus constrained.

The inhabitants belong to an homogenous culture framed by the church, the state and the school.

A form of standardization was imposed by the state.

1900

2nd industrial era



the secondary sectors

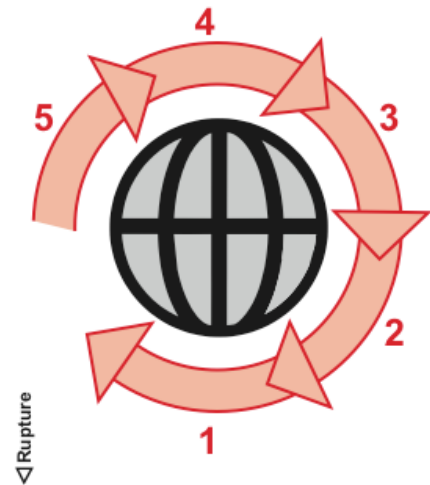
The mutations become more important because of their global nature, and involve enlarging commercial and industrial territories.

People belong to disparate cultures that are constantly fed by an omnipresent and powerful mass media.

Globalization accelerates because of the pressure exercised by global multinational corporations

2000

Postindustrial era



the third sectors (*services*) and fourth (*high tech*).

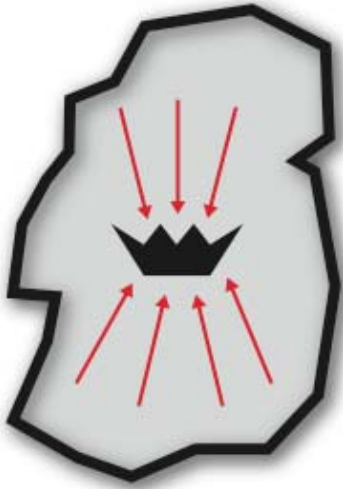
The mutations become of extreme importance because they are being driven by five interrelated crises. All the inhabitants of the planet and cyberspace are affected.

Culture will become interwoven because of the unique interconnected platform for : communication : an interactive Internet 2

A form of globalization is developing (via social networks) which seeks to create new ways to live.

Postindustrial 2 :

1700
1st industrial era

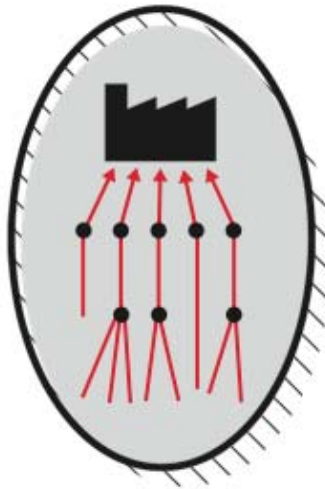


A new general order organised around the state

Citizens lived in a state enclosed in its boundaries, and wherein a small amount of printed information was carefully distributed and controlled.

Decision-making strategies were top-down and controlled by a political elite

1900
2nd industrial era

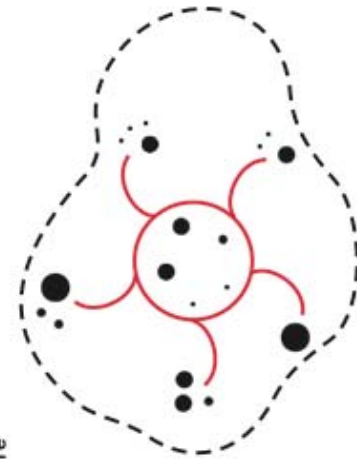


It is enlarged via consumer markets

The citizen-consumer lives on a continent which reacts to markets directed by corporate conglomerates. Information is distributed mainly on screens, and the content is controlled by the corporate conglomerates.

The continent reacts to marketing campaigns aimed at stimulating consumption; strategies are directed by an economic elite

2000
Postindustrial era



It branches out through different state areas of interest

The citizen-consumer will also become a mediator. He will always live in a state and in markets, but will also live in several « spaces » defined by precise interests not necessarily geographic in nature but which operate based on rules of participation.

Decision-making is based on negotiations between the political and economic elites and the citizens of a civil society; strategies are inclusive and generally bottom-up

Postindustrial 3 (*Read both horizontally and vertically*)**1700**1st industrial era**1900**2nd industrial era**2000**

Postindustrial era

Space- time / context (*The world we inhabit*)-----Western civilization
A civilizing missionAmerican civilization
An imperial mission**Postmodern civilization**
An unifying missionThe space : the region
The times: religiousThe space : the continent
The times : civil calendar**Space : virtual / simulated**
The times: the presentThe source of power:
territoryThe source of power:
capital**The source of power:**
knowledge**Knowledge** (*Critical mass and context*)-----Information is rare,
controlled, and
printedA lot of disparate
information, distributed
whether by print, radio,
cinema or télévision**An overload of unverified
information from
convergent media :
Internet 2****Communication** (*The tools that give meaning to information*)-----The state writes
The world is interpreted
via textThe state screens
The world is interpreted
via the audiovisual**The state networks**
**The world is interpreted via
the screen image**Printing
Typographic codeCinema and television
Audiovisual code**Internet 2**
Hyperlinked codeContent : printed
encyclopediasContent : films and
television programs**Content : mediated by amateur
creators as well as professionals**The Republic
Of lettersThe Society
of the spectacle**An interactive cyberspace
built by social networks**The network : top-down
(hierarchy)The network passive
mass-media distribution**Networks : participation
bottom-up & top-down
(Wirearchy)**

Speed : the horse

Speed : the electricity

Speed : the light**Opinion** (*The behavioural changes that occur*)-----The catalysts of growth:
trains and the steam engineThe catalysts of growth:
auto, railways plane**The catalysts of growth:
the digital screen**The goal: an industrializa.
of production thanks to the
synergy of energy & capitalGoal: seeking benefits
at all costs from distri-
buting in new territories**The goal : creating consensus
to reinforce social integration
and development**

In all industrialized countries, we still remember the period 40 or 50 years ago when our grandparents left the countryside to find work in urban regions. We know just how hard it was for them to migrate from an agricultural society to an industrial society : families uprooted, acculturation, loss of existing values, etc.

From the experiences lived by our grandparents, we are also beginning to understand the intuition that we are in transition from one known society to another unknown society. We are just now beginning to realize that we are entering a period of disorder which will be difficult to live through. All of us, citizens and decision-makers alike, are living in the early days of a *new world* for which the necessary foundations of shared meaning have yet to be built.

But the crisis which we are beginning to experience and will have to live through is also an unique occasion to change our ways of life and our models of society¹⁴

The five crises :

At roughly the same period in time five major crises have arisen which are interrelated and which influence each other. These crises involve not only the whole of each society but also each citizen on the planet :

- 1- The **economic crisis** : *the financialization of the economy triggered a fundamental economic crisis.*
- 2- The **energy crisis** : *the « flame » of rising oil and gas prices ignites other economic fires.*
- 3- The **ecological crisis** (climatic and/or environmental) : *global warming.*
- 4- The **geopolitical crisis** : *10 years ago, the USA seemed to be THE solution; today increasingly it has become THE problem. In reaction, the planet may be re-aligning in a tri-polar approach to power: the USA, the EU and China.*
- 5- The **generational crisis** : *the latent conflicts between the Boomer generation used to making the decisions and the younger generations' demands to be consulted and listened to*¹⁵.

The simultaneity of these interrelated crises bears an eery resemblance to a « perfect storm » or « planetary alignment » wherein everything seems to happen at once

It's not one crisis or another which is troubling per se, but the combination of one linked to another and interrelated with the third and fourth, and so on, which is unfamiliar and very dangerous.

Where's the threshold of failure for our societal system ?

What are the human sacrifices that the transition to a new society will require ?

What are the new aspects making our society more complicated?

References

- ¹ In the battle for media and IT regulation which has now begun, there cannot be a global democracy without reflection on the status and use of information technologies, UNESCO, 2004.
- ² Information is the raw material, the primary ingredient of this process. It is information which can give meaning to the chaos our environment appears to be. Information can take different forms which suppose an added value at each stage: : *raw data - organised data - information - knowledge*
- ³ *In the battle for control over media and IT there can be no global democracy without a global reflection on the use and status of information technologies.* UNESCO, 2004
- ⁴ Information is the result of an interpretation or an observation of the data linked together in a defined time and space. It is connected to the intellectual capacity of being. To understand is to perceive a significant relationship between phenomena.
- ⁵ Does knowledge result from an individual's adaptation to time and space ?
- ⁶ A country is at the same time a territory, a history, a knowledge and above all a desire (a will).
- ⁷ *Culture is society's self-portrait*, Tzvetan Todorov, *La peur des barbares, A dela du choc des civilisations*, Robert Laffont, 2008, p. 91. *It's a large framework / mechanism which allows human beings to address problems in precise and concrete ways*, Bronislaw Malinowski, p. 47
- ⁸ The I-Ching, the Tibetan Book of Change, teaches that it is the culture which produces change. A common or shared culture, is the key to all revolutions based on ideas.
- ⁹ According to the Brundlandt Report, *Sustainable development is a developmental means which responds to current issues without compromising the capacity of future generations to respond* (Global Commission on the Environment and Development).
- ¹⁰ *When technology changes enough, it doesn't just change how we do things, but what we do*, William A. Wutf, The next 50 years.
- ¹¹ Steven Mithen is an anthropologist who thinks that the larger the group into which a human being integrates, the greater the complexity created for that individual. When the number of partners increases, staying up to date becomes harder. For each major era, the cognitive function of the human brain needs to become more fluid. See *The Prehistory of the Mind*, Lewis Wolpert, 1996
- ¹² *Revolution doesn't happen when society adopts new techniques, it happens when society adopts new behaviours*, Clay Shirky, *Here Comes Everybody - the power of organizing with organizations*, Penguin Press, 2007.
- ¹³ Various authors discuss the *Three Tectonic Power Shifts*, and we are witnessing the appearance of book titles such as *The Post-American World*, by Fareed Zakaria, Norton, 2008.

¹⁴ Examples of behavioral changes: a circular economy, i.e. zero deficit, an energy self-sufficient home, the reduction of personal carbon footprints, the purchase of regional agricultural products, “green” or renewable energy (solar, wind, etc.), shared services (car sharing, free bikes, etc.) smaller cars, etc. It is best to no longer orient strategies toward the particular object but to develop a social relationship around the use of said object.

¹⁵ The under-30's are seeking an opening or a window onto the future. They make up the largest part of the global population and yet they still don't have any real voice or position of power in today's societies : *The young should be considered as part of the solution and as essential partners for building our world*, 4^e Congrès mondial des jeunes, Québec, August 2008.