Environmental Scanning and Sustainable Development
Environmental Scanning and Sustainable Development

Edited by
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Introduction

Strategic scanning and sustainable development are two notions that are seemingly quite distinct. Nonetheless they have certain striking commonalities, as much in their purpose as in their history.

The two notions appeared simultaneously around the 1970s. The concept of strategic scanning first appeared in 1967 with the publication of the founding work by Aguilar entitled Scanning the Business Environment. The origin of the idea of sustainable development dates back to 1970, when first Ignacy Sachs and then the international conference of Stockholm (in 1972) proposed the concept of ecodevelopment. This was finally replaced with “sustainable development”, in a work entitled World Conservation Strategy, presented in 1980 by the International Union for the Conservation of Nature. The Brundtland report, published in 1987, picked up on the concept of sustainable development, which became firmly established shortly afterwards by the Earth Summit in Rio in 1992.

The two notions represent an increased awareness for the intensification of interactions between economic activity and its external environment. Strategic scanning appears to be a managerial requirement, at least for certain authors, such as Ansoff for example, as well as a strategic requirement in order to cope with globalization. The complexification of the economic environment and the intensification of competition between companies, or between States – which can be a source of turbulence – surprises and can cause possible ruptures. Sustainable development is a public and political reaction to the devastation that economic growth wreaked on the ecological environment during the “Trente Glorieuses” (The Thirty Glorious Years) and the dangers that the economy is generally exposing society to.

Introduction written by Nicolas LESCA.
Today, their respective developments are official and institutional “strategic” and political priorities. In France, the development of sustainable scanning is part of the assignments of the “senior competitive intelligence officer” – a position created at the end of 2003 that is under the supervision of the Prime Minister, and was then changed to the Interministerial Delegate for Economic Intelligence, created by decree in September 2009. This time the post was placed under the supervision of the Elysee and Bercy.

Sustainable development has been at the center of all debates on the Grenelle environment, in particular, where it was officially recognized as a national priority with the creation of the National Committee for Sustainable Development in 2003. This was followed by the Ministry of Ecology, Energy, Sustainable Development and the Sea.

The purpose of sustainable development is to define viable plans bringing together the three following fundamental principles:

– An economic principle that underlies a carefully planned use of financial, human and natural resources. It consists of the conditions of the economic development of companies, but also includes all the aspects of territories where they are located, all the while ensuring a decent standard of living for people, without putting future generations in jeopardy.

– A social principle that underlies the fact that everyone must be treated equally. This therefore relates to the social consequences of the activity of a company on all corporate levels: employees (for example, work conditions, rate of pay, equality of chances, etc.), suppliers, customers, local communities and society in general.

– An environmental principle that underlies the fact that civil society and organizations must equally protect natural resources. This involves the search for compatibility between the economic and social activity of a company and maintenance of the natural milieu, biodiversity and various ecosystems. It includes an analysis of the impact of the social development of companies and their externalities in terms of flow, consumption of renewable resources that are difficult to obtain or slow to produce, as well as in terms of the production of waste and polluting emissions.

The objectives of strategic scanning are to develop the ability of organizations to acquire and use information concerning events, trends, and the dynamics of the external environment, the knowledge of which would help managers adjust their current decisions and the course of their future actions. In other words, strategic scanning is an informative process in which the company is receptive to its environment, with the creative aim of discovering opportunities, reducing uncertainties and perhaps even anticipating threats. By way of analogy, strategic
scanning is sometimes compared to radar. It is to people and organizations what radar is for boats and planes. It is a system for helping decision making and coordination, the aim of which is to detect signals and signs that are precursors of the external and sometimes internal environment in terms of events, risks and actual or potential opportunities. The knowledge of this is important to people and organizations in order to adapt, anticipate, react before the fact and sometimes also to innovate. Like radar, strategic scanning is an information system. In contrast to radar, which is generally automatic, it is a human and organizational system that is more analogous to the “watchmen” on submarines. The sensors are men and women, often the members of an organization. The acquisition, diffusion, interpretation and processing as well as the use of information is carried out by people, within a framework of more or less structured and formal processes. Indeed, such processes are often relatively unstructured.

The dictionary defines the environment as “the totality of natural and cultural conditions in which living organisms develop” and this definition is the one that most easily comes to mind when the word “environment” is used in everyday speech. Despite this, the ecological, social and cultural environment seems to have been long forgotten or neglected by practitioners and researchers in management science. There is no reference to sustainable development in management science before 2000, at least to our knowledge, and there does not yet seem to be a reference to sustainable development in academic publications on strategic scanning.

This book therefore explores the relationship between strategic scanning and sustainable development. It questions the utility, characteristics and implementation of a sustainable scanning, i.e. orientated towards sustainable development.

The first six chapters explore the concepts and characteristics of the notion of sustainable scanning:

– its definition;
– its aim and objectives;
– its outlines and content;
– the associated practices;
– the underlying motivations; and
– the difficulties the players involved in the construction and implementation of sustainable scanning practices will face along the way.

These chapters all offer answers to the questions: “what is sustainable scanning?”; “what new issues does it raise in terms of practice and management science?”, “who is involved?”, and “what forms can it take?”. 
In Chapter 1, Yvon Pesqueux provides us with an outline, reminds us what is at stake and outlines sustainable development projects, all the while highlighting the gray areas and ambiguities. The author questions the aim and the role of sustainable scanning for the purposes of immediate economic concerns, which have been the focus of attention of those involved in strategic scanning. He thus lays down new principles, in line with the objectives of sustainable development, which can guide the discussion of collective action and elaborate on sustainable scanning.

In Chapter 2, Marie-Laurence Caron-Fasan takes on the task of describing the outlines of strategic scanning orientated towards sustainable development. By basing her chapter on works relative to the activity of traditional strategic scanning, she shows that an environmental scanning device orientated towards sustainable development has several characteristics. Such a project implies the construction of a global, transversal and systemic vision of the internal and external environment of the company. It is a project that relies on the investment of the company, in terms of sustainable development. Finally, it is revealed that this is a risky project due to the individual, collective and organizational learning that it implies, the number of players it involves and the extent of the scope for analysis.

Chapter 3 deals with the idea of a sustainable company, respectful of the locations of its operations. Alain-Charles Martinet and Marielle Audrey Payaud more precisely question the relations that large service companies have with the territories they work in and the key role of middle managers in this system of company-territory interaction. The authors present heuristic modeling and formulate a series of propositions to guide these field strategists in their learning of local characteristics, as well as their management and strategic environmental scanning.

Chapter 4 leaves the realm of the big companies to look at small businesses (SBs) and the entrepreneur. Michel Marchesnay questions the role of SBs in sustainable development and the characteristics of the activity of sustainable scanning when the company is of a very small size or has just one employee. The author suggests distinguishing four types of entrepreneur based on their thought processes and actions as well as their personal identity. This typology enables a distinction to be made between different practices of sustainable scanning and to help us make recommendations adapted to organizations of very small size.

Chapter 5 deals with one side of sustainable scanning: human resources scanning (HRS). Marie-Christine Chalus-Sauvannet questions the links between the notions of sustainable development and HRS. The author explores the reasons that some companies adapt their practices of strategic scanning to encompass sustainable development. She shows, on the one hand, that HRS – both internal and external – can be useful to motivate and involve the stakeholders in a process of sustainable development. On the other hand, she shows the possible impact of HRS in the
creation and implementation of new practices that are more respectful of man and the environment.

Chapter 6 widens the field of investigation of sustainable scanning by giving it a more systemic and complex dimension that takes into account the societal, economic and ecological environment all at once. Magalie Marais, Solange Hernandez and Olivier Keramidas question the outlines, content, possible significance and process of sustainable scanning. The authors put forward a definition that specifies both the stakes and sub-themes of surveillance. They show how and why interorganizational sustainable scanning is built and implemented in the PRIDES, regional relay structures, the end goal of which is to favor innovation, cooperation and mutualization of means and competencies between companies in the same territory and same business sector. Along the way, they specify certain difficulties encountered by the players involved when taking on board the notion of sustainable scanning and translating it into concrete actions and devices.

The four following chapters explore the concepts, tools and methods that could be useful to players wishing to develop their sustainable scanning ability. These chapters all try to offer a few answers to the question “how can we carry out sustainable scanning?”.

Chapter 7 suggests using the greenhouse gas report as a tool to fight climate change. Odile Blanchard shows how the inventory of emissions of greenhouse gases, initially conceived as a reporting and diagnostic tool, can also be a useful source of information for sustainable scanning. This is the case both internally, for the entity that is building it, and externally, for the entities that are seeking information on emissions and what actions their competitors and partners are taking to tackle climate change. Implicitly, this chapter raises the issue of the usage, appropriation and new uses of current management tools in a process of sustainable scanning and anticipation. It also raises the issue of identification of useful and perhaps specific sources of information for sustainable scanning.

Chapter 8 deals with the targeting of sustainable scanning when its objective is to favor the global understanding of complex phenomena in order to develop the ability of organizations to anticipate and construct new solutions and strategic pathways for the future. Nathalie Fabbe-Costes, Christine Roussat and Jacques Colin suggest a processual systemic approach to help people define and isolate the field of investigation for sustainable scanning and identify the associated information to transform them into intelligent products. This is in view of building a vision of the future that guides strategic coordination and collective action. The authors base their methodological construct on their experience in the logistic and supply chain domain, labeled as one of the main causes of greenhouse gas emissions and global warming. Implicitly, this chapter shows that the strategic scanning and local
solutions are no longer adapted to address the complex task of global warming. New management tools must be thought of, implemented, and built to apprehend this complexity and suggest more relevant solutions to reduce greenhouse gas emissions throughout the lifecycle of products.

Chapter 9 deals with the anticipation of unknown and unexpected risks, which forecast and “classic” risk analysis tools do not always detect. Nicolas Lesca suggests a theoretical and conceptual framework for strategic anticipative strategic scanning that is based on the detection of signals and (warning) signs – sometimes weak, but early – that can manifest themselves in the peripheral vision of people. With the help of many examples, the author shows that actions, events and their possible impacts are often manifested by natural signs and human signals that are qualitative and sometimes not linguistic. The author pays special attention to the need to develop the people’s ability to perceive these clues and question their significance in order to explore the field of possibilities that they could reveal. This chapter raises the issue of individual and collective competency, heuristics and the management tools that need to be identified and built with the aim of developing people’s perceptive ability, to interpret signs and make sense out of them in order to anticipate and act before the fact.

Finally, Chapter 10 deals with the detection and use of sporadic information, some of which can be in the form of weak signals, playing the role of stimuli causing the construction of an anticipative vision of the future. Humbert Lesca presents two stages of an anticipative strategic scanning device in warning mode – the preparation of information and the collective creation of meaning. The aim of this is to begin a collective discussion in a field that is still unclear and uncertain, with a view to seeing a new strategic axis of innovation. The author illustrates this approach for the issue of green/sustainable chemistry, in the context of an organization that is asking itself questions regarding the future of its business and the direction in which it should aim its governance for the next 10 or 12 years. He shows that a learning process is necessary to develop people’s ability to detect weak signals that can cause warnings and collectively build meaning based on these stimuli. This chapter highlights the need to conceive new management tools and information systems adapted to support and allow for signal detection in various organizational contexts and the collective creation of meaning. Implicitly, this chapter also highlights that organizations should dedicate time and resources to these stages in the process of strategic scanning if the goal is to develop the ability to anticipate.
1.1. Introduction

The notion of sustainable development appeared in the social sciences in the 1970s with the realization that the growth during the economic boom, dubbed the “30 glorious years”, had a destructive effect on the environment. Since then it has had a very brief and somewhat turbulent history. It includes the idea of taking a step back from economic reductionism by putting forward a multidimensional aspect and a pluridisciplinary way of dealing with the questions in its field. It includes an intersection between the social objectives of economic development, the solidarity between present generations, the environmental conditionality of future generations and the viability of economic progress. It is therefore both a product and a critique of the technique. It is also a project that allows the rethinking of capitalism based on the idea of a reformed capitalism: in addition to full employment and a protective state, the ideas of environmental objectives, a development negotiated between partners (that have since become stakeholders) has been added. The main partners are the state, CEOs, workers and civil society. Thus it is a kind of “theory” of development.

It is therefore important to highlight the specificity of references and their differences compared to those of today: business ethics, the social responsibility of the company and the doctrinal corpus of the business activity. Let us observe that sustainable development is frequently associated with being just as vague an idea as
human rights, of which we shall reiterate the three concepts that appear in the universal declaration of 1948: freedom of expression, freedom of opinion and freedom of movement.

Let us remember that human rights were developed by the United Nations Commission on Human Rights, which set about giving a practical application to the rights of the universal declaration. This declaration, as a matter of fact, contains a fourth concept: the right to own property, the debatable universality of which sets it apart and is the reason it does not figure as a universal right. The right to own property has more legal than moral sense and its universality is contingent. Anthropology teaches us that numerous societies have lived and do live without property rights, such as the surprising results it has obtained from the study of “primative” societies. Two pacts were adopted in 1966:

– the international pact relative to civil and political rights; and
– the international pact relative to economic, social and cultural rights.

The Commission then worked out directives and agreements left, right and center: the independence of justice, the prohibition of torture and cruelty, inhumane or degrading treatment, the rights of children, rights for migrant workers, protection against abductions, the rights of elderly people, disabled people, etc. We can, with regard to this, talk about normative inflation but also about a process of the translation of “Rights” into “rights”. This translation process tends to confuse Human Rights, which are institutionalized as such, with the rights of individuals, which are considered political and moral entities in keeping with “theories of justice” [RAW 87]. It involves building the right conditions for the possible establishing of a hierarchy of rights. Correlating these with the notion of sustainable development largely contributes to people’s lack of clarity. This no doubt means that beyond the relationship between man and nature, the notion is fundamentally linked to that of respect (of ourselves, others and our environment).

1.1.1. The origins of the notion

To put some order into the references to sustainable development, we might suggest distinguishing the people who have made references to it. These all appeared separately from each other, essentially in the 1970s, and have various origins:

– a philosophical origin with Jonas [JON 93] and his “responsibility principle”, his critical conception of technoscience and “the heuristic of fear” that is inherent to him, this being at the origin of the political acceptance of the “precaution principle”, a European principle;
– an economic origin following the thesis of the Rome Club, which was used as a base for the prevention policies (of global warming, pollution, etc.) and their “technical” component;

– an ecological origin – a scientific argument that has led to current mathematical theories, such as the catastrophe theory and systemic reasoning. Nature then becomes a specific object of study in view of its own scientific methods. This is the case with the “Gaia hypothesis” proposed by Lovelock [LOV 79], which considers the Earth as a living, autoregulated ensemble;

– a political origin, which is demonstrated by the election of representatives of “green” parties in different parliaments or by the integration of “green” arguments by the more traditional parties.

There are no references to science in organizations before the year 2000. When the notion appears in speeches and managerial practices, it is most often mentioned under the term “sustainable development”. This perspective therefore does not appear to be linked to previous ones. There is a delay of three decades for the transition from a macroeconomic and political plain to an organizational one, without mentioning the modification of its layout on the way, in other words reducing the problem to the receptiveness to environmental expectations of company and political leaders. It is in this respect that sustainable development has a stake in environmental scanning with regards to its potential to influence the formulation of strategy as much in terms of opportunity as of threats. This materializes in the media hype dedicated to sustainable development as an aid for the development and commercialization of new products and services and therefore as a new source of profit. This is no doubt also what enables the leaders of the largest companies to justify their infatuation with sustainable development. This is the case particularly for those whose business depends primarily on an environmental viewpoint (Veolia, the collection of household waste and water distribution, for example) and whose business can lead to direct environmental damage (the chemical industry, for example). We can therefore understand the involvement of the business leaders’ additions to the notion of sustainable development, contributing to its lack of clarity.

1.1.2. The extensiveness of the notion

Sustainable development, in its different forms, today concerns business as much as the state, a given industry, consumers and citizens. This extensiveness is a second reason for the lack of clarity of the notion. The notion is born out of a collection of different trends: secularist and religious schools of thought, consumerism, movements for the defense of civil liberties and human rights, ecology, investment trust, international organizations, leaders of multinational companies, states and public bodies, etc. It is therefore necessary to highlight the falsely consensual aspect
of the notion that is an inherent aspect to its status as a “frontier object” (an object that is common to different domains, the significance of which includes both a common aspect and differences according to each domain). This is a third argument that contributes to the vagueness of the notion. The notion of sustainable development brings to light the idea of a consensus on its correlates: solidarity, responsibility, equity, etc. It therefore takes on an ethical dimension that acts as a political dimension in view of the collaborationist ideology where the idea of consensus is key (fourth argument). It contributes to the “confusion” (term to be taken as meaning “passive fusion” rather than the general sense of “confused”, i.e. deprived of any real meaning) of ethics and politics. “Confusion”, which is another aspect of what can be qualified as “ethical evidence” – is evidence that touches as much upon philosophical references (in this case with sustainable development) as applied ethics (the ethics of business, for example). This is the fifth argument.

Sustainable development covers projects that are already institutionalized including that of literacy and culture (UNESCO) and sanitation (UNICEF, WHO, etc.), which in some respects constitute the conditions that make sustainable development possible. The definition given by the UN is as follows: “the capacity of present generations to satisfy their needs while enabling future generations to satisfy their own needs” (and aspirations we should add if one is conforming to the English version of the text) [BRU 87].

Other terms, such as sustainable development and acceptable development, are now appearing. Here again, the suggested definition, because it is quite broad, does not facilitate a precise understanding – the fourth argument for the vagueness of the notion.

With sustainable development, there are two aspects:
– a development part (of a socio-economic nature);
– an “environmental” part stricto sensu.

This is indeed both the strength and the weakness of the notion – the fifth argument for its vagueness.

1.1.3. Milestones of the institutionalization of sustainable development

The milestones of institutionalization are as follows:
– 1986: community program of policy and action for the environment and sustainable development (European Union). This program led to the precaution principle being highlighted.
Sustainable Development

– 1987: the World Commission on Environment and Development, called the Brundtland Commission, report put forward the following definition: “sustainable development is development that meets the present needs without compromising the ability of future generations to meet theirs. Two concepts are inherent to this notion: the concept of “needs”, and, more precisely, the essential needs of the most impoverished to whom it is appropriate to give absolute priority, and the idea of limitations, which the state of our techniques and social organization impose on the ability of the environment to meet our current and future needs” [BRU 87].

– 1992: the Rio Conference and the elaboration of AGENDA 21 (a program of action for the 21st century) of which the points of discussion were:

- the social and economic dimension: to reduce the disparities in the standard of living and improve quality of life for people around the world;

- the conservation and management of resources with the aim of development, transfer of knowledge and wealth (including natural wealth) from one generation to the next and the conservation or improvement of the quality of the natural environment;

- reinforce the role of the main groups (for example women, youth, indigenous peoples, non-governmental organizations, local cooperatives, syndicates, commerce, scientific and technical research, farmers, etc.);

- the mobilization of financial, technical, educational, institutional and legal means, as well as means of information.

All this was at the origin of the appearance of a supply and demand, which is as political as it is social or economic. It is necessary to highlight its emotional dynamic and the ambiguity of the relationship between the notion of sustainable development and the question of technique. The notion cannot base itself on being a critique of the technique as it arises out of it – the sixth argument – founding the idea of “vagueness”.

This initial approach to the notion of sustainable development clearly shows that it is now a major stake for businesses; a stake that is ever evolving, thus making it a particularly important subject for environmental scanning.

The structure of this chapter will be based around the following arguments:

– the presentation of sustainable development as a “vague” theory;

– empirical proof of this lack of clarity and analysis of the ambiguity regarding business actions – actions that find their justification in the notion of sustainable development;

– the ambiguities of the notion.
1.2. Sustainable development as a “vague” theory

It is important to note the “catch-all” aspect and its seductive rhetoric. This notion indeed goes beyond how natural resources were typically dealt with in economics, from the perspectives of externality and irreversibility, up until now. As Allemand [ALL 06] points out, the notion lends itself to an almost unlimited declension of its principles for action (for example: sustainable tourism, sustainable consumerism, sustainable town planning, sustainable agriculture, etc.).

These are different arguments highlighting the confusion between several aspects that will serve to support the “vague” aspect of the notion.

1.2.1. Sustainable development and “principles”

The principles of “accountability”, precaution, transparency and independence are curiously intermingled in relation to the business field of the players involved. This is particularly noticeable in the awakening of “diffused” stakeholders during ecological disputes (the Shell/Brent Spar affair) or even ecological disasters (“black” tides, Seveso, Bophal, etc.). Throughout the past decade we have seen a transformation of the stakes for companies and players involved. Is the notion of sustainable development worth anything without a reference to these “principles” which, \textit{stricto sensu}, are in fact not principles but more “conventions” or even “habits”? Moreover, the meaning given to the notion of “principle” tends to be confused with methodology. Even if a principle is difficult to debate, this is not the case for convention, habit or methodology. This confusion serves to attribute a symbolic value to the principle, even though its transcription will only ever be made in terms of procedures and by conforming to the principle in terms of verification. Above all, reference to the principle serves only to make it an unconditional objective.

The same applies to the notion of sustainable development as to globalization. It includes a descriptive, historical, economic, geographical, political and dogmatic meaning, but the way it is used mingles these different aspects in different ways. This is where the difficulty in comprehension stems from and thus the need to carry out an analysis for each of the ways in which it is used.

It is an economic principle (economic science is, literally, a science of scarcity) focused towards the foundation of a “reasonable” quality of life, i.e. which will not threaten future generations. At the same time it is an ecological principle that is the basis for the need to protect natural resources and a social principle that outlines equitable treatment. The generality of the notion and the absence of a legitimate authority to institutionalize it, however, limit its prospects. The economic dimension
is equally linked to the notions of “development” and to the unconditional recognition of the existence of “need”.

1.2.2. Conceptual dimensions and sustainable development

Talking of sustainable development also means conceiving and establishing a more chronological and linear relationship to time, which is in contrast with its systemic foundations. Let us remember that “system time” is not chronological time. It is the materialization of a kind of project that imposes stability (“sustainability”) on that which is unstable (“development”) as well as the installation of a “long-term” policy faced with the pressures of the “short-term” impacts.

For its part, the ethical dimension of sustainable development is based on the idea of an intergenerational (through time) and intragenerational (through space) responsibility that has its ecological corollary. It gives priority to those who are the most impoverished, which links time and space in an orthogonal manner.

As Camerini [CAM 03] points out, the epistemological dimension is linked to the development of our knowledge about nature, taking into account the technical contingency and its social corollary in the amalgamation of this knowledge. On an epistemological level, the notion covers the idea of the aggregation of heterogeneous elements, the genesis of which depends on sophisticated technical equipment.

On a methodological level, as Pinson [PIN 06] points out, the notion combines three principles:

– an equity (intra- and intergenerational) principle;
– an interdependency principle (between what is economic, social and environmental but also between the present and the future); and
– a principle of uncertainty on the effects of the action.

This third principle is in tune with the economism, which dominates today, and also the relativism of the actions of each player. The two latter principles (interdependency and uncertainty) also make up a “system”, the unilateral action of such-and-such a player (public powers especially), not having value without the others. These two principles therefore go hand-in-hand with the dispute of the sovereignty of public forces and the economism of the legitimacy of “cooperative games”.
1.2.3. Sustainable development and its indicators

Sustainable development begs the question of its representation in terms of indicators; a question that also covers macroeconomic indicators (gross domestic product [GDP], unemployment rates, inflation level, etc.). Two main schools of thought underlie the publication of indicators for sustainable development:

– the analytical school of thought (or the “dashboard”), which groups together a number of disparate indicators of sustainable development; and

– a concise logic that seeks a single indicator that could be considered coherent.

The indicators are most often built by taking a “broader” view of GDP-type issues for economic acceptation or profit-type issues for the company (the triple bottom line). The difficulty is in covering both parts of sustainable development: the “development” part (meeting needs and providing intragenerational equality) and the “sustainable” part (ecological efficiency, prudence, ecological resilience and intergenerational equality). The main economic variables taken into account are quite limited, with demography, consumption per unit, the technological and ecological impact. We must take care to highlight the fact that an increase in technological efficiency tends to elicit an increase in consumption per unit.

The notion of sustainable development in relation to time includes the idea of the uncertainty of relationships between man–economy and society–nature based on parameters that are exogenous to it. We must, moreover, highlight the difficult boundary between uncertainty and indeterminism, to which is added the question of a metaphysical credo according to the vision of science chosen. From an ethical point of view, the relationship with uncertainty favors a Western cultural perspective regarding the use of science and techniques applied to nature (considered as a “means”), when neither science nor techniques offer solutions to the problem that is exposed by the reference to the topic of sustainable development. Furthermore, the notion of “collective choice” is implicitly integrated.

1.2.4. The organizational dimension of sustainable development

On an organizational level, as Dubigeon [DUB 06] points out, sustainable development is:

– a concept (with regards to the increased representation of the company’s heritage);
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– a process of regulation and development (where we find the “principles” – precaution, prevention, responsibility, transparency, participation and subsidiarity [PES 07]);
– a method of management that expresses action principles (relation to the environment and to others);
– a new organizational knowledge;
– a way of working (of strategic analysis, planning and measurement of the impact); and
– a way of doing things based on behaviors that “conform”.

If in addition we see it as an argument in favor of best practice, sustainable development tends to be considered the archetype of excellence, despite all the relativity of judgment as to what is “sustainable”.

The notion of sustainable development leads us to act on the necessary cooperation (intra- and interorganizational). A different content is given to continuous improvement and to a territorialization of the implementation, from which, here again, the numerous dimensions simultaneously tend to result in a lack of clarity.

The dimensions of the vagueness of the notion are significant and render the construction of a structured process of environmental scanning difficult. The stakes of the mission are therefore made more complicated by the “object” stakes.

1.3. Company actions justified by reference to the notion of sustainable development: consequentialism tested by modern deontology

As an introduction, let us first of all highlight the existence of a Kantian deontology (which is formalistic and based on the criteria of universality) and a modern deontology, the elements of which are the intrinsic value of actions, respect of rights, the expression and respect of rules and constraints and the morality of the intention. Modern deontology differs from consequentialism, i.e. the position that consists of judging the value of an act based on its consequences.

Let us highlight, in regard to this, that none of the actions taken by companies in terms of sustainable development can be in any way criticized from a consequentialist point of view (who would willingly call a company “dirty”?). In contrast, deontology constructs a judgment from the primacy of what is right (political domain) on what is good (ethical domain) and therefore gives a political perspective that enables a critique to be constructed.
This will be the case for the *eco-conception* of goods (e.g. a digital camera) that, through their use (thousands of photos are taken and sent to people and printed, even if only some and not all), ultimately end up being less ecological (let us not forget the analog “cousin” – the cost of which restricted paper printing).

This is why, around the theme of sustainable development, we find positions such as:

- taking advantage (for instance by launching “organic” products);
- caution, which means doing everything to avoid disaster;
- another version of caution, which consists of doing everything possible to be “forgotten” or overlooked;
- the hypocrisy of transforming vice into a virtue;
- investing in it through a sense of conviction.

1.3.1. The chronological stages of taking ecological stakes into account

We can put forward a chronology of the ecological response given by companies through the successive addition of views from different people:

- anti-pollution, of a technico-regulatory kind, that appeared at the beginning of the 1970s as a reaction to the accelerated economic growth during the 30 glorious years;

- prevention, which first centered around the economy of resources and excessive consumption, which appeared following the oil crisis of the mid-1970s;

- the integration of environmental stakes into strategic thinking in the mid-1990s with, for example the development of eco-conception and ecological management in response to the growth of ecological protest in political power, which became more radical with the opposition to military and civil nuclear power;

- the requirements for sustainable development that appeared later in the 1990s.

As Aggeri *et al.* [AGG 05] highlight: “up to the middle of the 1990s, sustainable development seemed like a notion which was alien to business”... For this reason, let us point out the sudden and deep infatuation that large corporations have had with it since.
1.3.2. The management stakes of sustainable development

The inherent achievements of the growth in power from equitable commerce to industrial ecology within the framework of voluntary initiatives resulting in:

- employees acting in the direction of sustainable development, with this adjustment possibly constituting a new external factor of motivation;
- the integration and internalization of the external perspectives of the notion;
- the integration of local communities’ viewpoints in company policies;
- respect for the transparency principal with regards to company actions and therefore the need to be accountable;
- the developing verification by “independent bodies”;
- anticipation and resolution, and not only the avoidance of problems;
- implementation of incentives that are internal to the company.

The stake is particularly interesting in the “burying” of environmental viewpoints in management issues. This burying operates today in a somewhat disparate fashion (as much on a strategic level as an operational one, the choice of investment to the design of products, etc.). The reference to sustainable development leads to the “confusion” of the “times” of the organization (short and long term, for example). The development of the reference to sustainable development would seem to mark the desire for a passage from what is profitable to what is viable, equitable and sustainable. In practice, sustainable development also appears as a standardization/normalization (for example, the ISO 14001 standard) and meets the “conformity – conformism – transgression – deviance” dynamic.

The taking into account of these viewpoints is the theme of the work coordinated by de Tessier called Company and Environment [TES 98]. The authors of this work lay down certain postulates before making their remarks based on facts, investigations, projects, etc. They begin from the premise that it is the industrialists, in a capitalist economy, who are responsible for the poor health of the environment and that they have grown rich by abusing and wasting natural resources by predation, with a kind of declaration of guilt. To this, in the spirit of the “welfare state”, is added a necessary involvement of the state, which is at the center of this rescue.

The starting hypothesis that is the basis of this book is that the environment is in danger and we must do what is necessary to save it, in an almost disciplinary manner. To do this, we must all rally round. To support their thesis, the authors used a well-documented approach. They based their work on facts, actions, work in progress, legislation, research, attempted and/or successful experiments. They based
it on the “reality” that they tried to render “objective” by basing their work on facts to limit the bias that they could themselves put on it. Being an assessment of what was happening, the authors managed to highlight a phenomenon that could no longer be ignored: the damage done to the environment.

In their eyes, sustainable development is based on a conflict of interests based on different rationales:

– the dynamics of standardization (with its advantages and disadvantages);
– the criticism of damage done to growth, leading to consequences in terms of the conception of the efficiency and cost of reparation;
– the criticism of the place and company aims: is it really the central institution of our society? Can it be the base for a new social pact?;
– the criticism of economic development and its methods (in line with the thoughts of Perroux and Sachs);
– political criticism (for example, that of alter-globalization).

The stakes of sustainable development for business would therefore be:

– an innovation that would respect the ecological data (recycling, eco-industrial business parks, renewable energies, etc.);
– the implementation of fair trade relations with clients and suppliers;
– the definition and implementation of codes of conduct concerning the environmental and social practices of companies dealing with “Southern” countries (clear environmental, social and ethical positions with regards to forced labor, child labor, etc.);
– a clear answer to the demands of managers of so-called “green” and “ethical” investment trusts;
– the implementation of social and environmental audits to check whether the measure of companies’ performance respects the environment (see the triple bottom line – with reference to an economic, ecological, social result or even the expression and implementation of strategies built based on the profit–planet–people axis, see Figure 1.1) and being accountable for it. It is also possible to appreciate the stakes with regard to these three aspects:

– the economic externalities and the search for a “real” price taking into account the greater or smaller irreversibility in the consumption of natural resources;
– an ethical heritage based on a conception of heritage broadened to include what is environmental – a concept that differs from that which serves as a base for the search for a financial optimum;