

THE 'SOPHIPOLITAN' MODEL

In 1969, Sophia Antipolis was a name bearing an ambition: to build an International City of Wisdom, Science and Technology in a pristine wilderness north of Antibes. It was a symbol of renaissance, of the ambition to become the Florence of the 21st century.

What, then, were our objectives?

To create a place where the spirit of innovation and enterprise would be linked with Humanism and Conviviality. A place where economic growth would respect Nature and the Quality of Life. A place where technology and ecology, partners at last, would be the symbols of sustainable development.

Did this - utopian - dream come true?

Today, the 'Sophipolitan' model works; it bears creative dynamism and continues attracting brainpower from the world over. This 'Sophipolitan' model, the essential driver of the development of humanity -*intelligence in action*- has attained its initial objectives at least in part.

There remains to develop what has not yet been accomplished:

- strong interaction with the world of the arts, philosophy and ethics,
- fighting the social, cultural and economic fracture that threatens our future,
- democratizing knowledge, by setting up a Showcase Portal for Sophia, accessible to everyone,
- Reflecting on the future by creating a structure for networking the centres that aim to shape our future in Europe and worldwide.

Today, around Sophia Antipolis, a new organization is building up, resulting from the merger of fourteen communes into a **Communauté d'agglomération**, from the Mediterranean Sea to the mountains (the line of the Baous), with nearly 200,000 inhabitants and brimming with new projects in common. The necessary cooperation of this new intercommunity structure with administrative units on various levels (such as the Region, Département and Cities), as well as international institutions, should provide new momentum, new synergy with the site's true operators, the enterprises and teaching and research centres.

What are Sophia Antipolis's objectives today?

Of course, there remains the strong will to become a melting pot of ideas and weave dynamic links between Europe, under construction, and the Mediterranean, still incipient.

The 1200 institutions and enterprises, public and private, present at Sophia Antipolis, their global networks of relations, the entire 'Sophipolitan' Diaspora, the 'veterans' of Sophia like the new 'Sophipolitans' must be motivated to this end.

It is possible. These men and women, structures and organizations, have more or less one point in common: permeation by a new dynamic innovative culture, open to change and difference, resolutely enthusiastic, the new culture we were instrumental in building up.

This culture - this 'Sophipolitan' frame of mind - is experienced, day by day, year after year. And I can attest that visitors all feel it, whether they are key personalities or business customers, students or trainees... The 'Sophipolitan' success story leaves no one indifferent. If it sometimes arouses envy, the admiration is general (sometimes even excessive since, like all human creations, nothing is ever perfect).

This culture, this frame of mind, did not arise by chance alone. It results from the action undertaken with tenacity and obstinacy in the very first years by *Association Sophia Antipolis*, then after 1984, by *Fondation Sophia Antipolis*. The support of the structures involved in the management and life of the

Science Park was capital, as was that, from the start, of the teaching and research centres and enterprises, as well as the press, Nice-Matin in particular. These actions evolved, of course, over the years, becoming increasingly complex, multiform and burgeoning, like life itself: this multiplicity is what makes for Sophia Antipolis's richness and originality and it would be dangerous and futile to want to restrain it.

Four main objectives have always characterized the organization of activities.

1. Establishing a strong bilateral link between knowledge and know-how. Knowledge and its social use must bring together scientists and entrepreneurs. **Oriented research covers this concept.**
2. Facilitating contacts between personalities from different cultural horizons: **cross-fertilization** symbolises this will for convivial contacts.
3. Science is global and the economy is becoming so. **International scope** is a crucial necessity, but it must also be enriched through respect for cultural diversity.
4. Accepting and anticipating innovation, whether technical, administrative or hierarchical. This is often a difficult exercise, but it is necessary. **Futurology** prepares minds for change. By orienting change, it is possible to avoid unforeseen, ill-prepared rupture.

A - ORIENTED RESEARCH

Basic research is psychologically driven essentially by the "*Joy of knowing*", according to the title of a work by the geologist Pierre Termier. It characterizes Humanity: understanding the world, its laws and structures; astronomy, the story of the Planet, the origins of life, interactions, gravity, remote effects, all that fascinates, attracts...

Applied research (industrial, medical, social, etc) enables humans to control their environment and destiny. The effects of this research are tangible: new products, new medication, etc.

Oriented research, a concept born at the École des Mines in Paris in the 1960s, is a dialectic between these two extremes. Applied research often reveals new directions and new questions for basic research. And basic research enables oriented research to discover new applications (chemical kinetics or cardiology from the theory of chaos, new therapy from ionic canals in molecular biology, etc). It means going from knowledge to know-how, which, as at INRIA, can generate the creation of new enterprises. INRIA is surely the best example of this. We should also note that the Law on Innovation of July 2000 is imbued with the spirit of oriented research in its objectives, which will lead to its generalization. We can recall here that transforming an idea into innovation, then into an innovative project in a fast-growing enterprise, implies complementary networks of consultants, managers, financiers, etc. Hence the importance of the following points.

B- CROSS-FERTILIZATION

There is such a thing as the solitary scientist. But, quite generally, innovative capacities develop through discussion, confrontation of ideas and the meetings of diverse skills.

This was, since the Middle Ages, the privilege of academic communities, what I call the "Latin Quarter effect". Hence the idea of creating a "Latin Quarter in the country", an idea launched in the month of August 1960 in the daily newspaper *Le Monde*. Why in the country? Because in crowded megalopolises most free time is used up in commuting, stress and fatigue, which handicaps the capacity for innovation.

Many thought it was a very risky challenge to create a meeting place in a wilderness north of Antibes. Particularly since, in addition to the material investments, it had been decided to privilege investments concerning the immaterial, which implies urban planning to promote conviviality and promote contacts. Yet urban planning rules required building away from the main roads and limits of parcels, which meant the buildings would be isolated.

Association Sophia Antipolis and the SAVALOR Group proposed and realized the following:

- Reserving a place for conviviality and services in common (restaurant, café, library, outdoor theatre, etc);
- Building the first hotel, anticipating the need;

- Asking enterprises not to create their own cafeterias to facilitate contacts;
- Creating clubs and various associations (Executive Club, software club, poetry club, choir, free trade union, etc);
- Organizing regular tours of enterprises and organizations for newcomers;
- Intensifying meetings through breakfasts, for visits by personalities or of enterprises, etc;
- Hosting colloquia, symposia, international meetings (almost weekly for nearly 30 years);
- Establishing a regular monthly newsletter;
- Organizing many cultural events, concerts, master classes, exhibitions, conferences, etc.

These functions concerning the **immaterial** were funded by the GIE SAVALOR (*Sophia Antipolis Valorisation*), then by *Fondation Sophia Antipolis*, aided by the General Council of the Alpes-Maritimes and the PACA (Provence-Alpes-Côte d'Azur) Regional Council.

Public institutions and private enterprises participated in the same collective action, which gradually developed the 'Sophopolitan' spirit. This spirit has led to more innovation, the **essential reason** for the success of Sophia.

The concept of cross-fertilization, mocked at first, is now recognized. Many players alongside *Fondation Sophia Antipolis* contribute: in addition to the above-mentioned clubs, many of which are sustainable, others group categories of enterprises (Hi-Tech Club, Telecom Valley Club, Sophia Start-Up Club, etc), the French Riviera Chamber of Commerce and Industry *Maison des Entreprises*, CICA, corporate hotels and initiatives on the part of the various training and research centres.

Cross-fertilization: a prophetic self-fulfilling concept is the title of a thesis, defended in June 1997 by Solange Picquet working with Professor Tony Tschaegele of the University of Nice. Sophia Antipolis's originality is tied to this concept, which is so striking to informed visitors.

If, for example, the Vice-President of Oracle or many other Silicon Valley managers assert that they really feel "at home" in Sophia Antipolis, it is doubtless thanks to the generalization of this spirit, which is not spontaneous in Europe.

Some (perhaps overly hasty) surveys demonstrate that the concept is not always perceived by everyone. But those who claim not to know it admit in conversation that many of their thoughts and ideas result from contacts made in the Park at various scheduled occasions... After all, Monsieur Jourdain, Molière's Would-be Gentleman, used prose unknowingly...

C - INTERNATIONAL SCOPE

International scope is vital for Sophia Antipolis.

In the initial phase, it was the only possibility for success. Thirty years ago, Parisian decision-makers considered that the absence of any industrial and scientific tradition alongside the Mediterranean tradition precluded any modern economic dynamics. This made it necessary to turn to foreign operators.

The success of the American Sun Belt, the quality of life, the Nice-Côte d'Azur International Airport and the initial private character of the Sophia Antipolis operation (the guarantee of no State interference⁽¹⁾) were precedents and precious assets (especially for our U.S. friends).

The first great names in American technology helped establish the Science and Technology Park's international image by facilitating prospecting for newcomers. What could be more effective than technical and managerial word of mouth? When the Director of Dow Chemical at Sophia Antipolis writes that his productivity has increased by 20% since the company's location, it is more credible than any advertisement in the press.

Similarly, Sophia Antipolis acquired worldwide fame thanks to the systematic organization of international colloquia and seminars every week, with the support of the ACCOR group. Moreover, this boosted the 'pioneers' already present by demonstrating that they had the physical possibility of working side by side with the great names in science and technology from all over the world more convivially even than in Paris or London.

What was vital thirty years ago remains so in our age of reinforced globalization.

⁽¹⁾ This is quite clearly what I was told, when I met them in the United States, Donald Rumsfeld (current Defence Secretary for the USA), then the President of Searle in Skokie, Illinois, and General Doriot, the inventor of venture capital and the initial financier of Digital Equipment. The Research Director of the Rohm & Hass Group in London confirmed.

And have shown that the mobility of brainpower is not one-way, from the provinces to Paris or from Europe to the USA.

Today, the **International Lycée of Valbonne** has students from over **fifty countries**. Many enterprises have more than forty nationalities among their executive staff and it is by the thousands that foreign brains are greeted - and welcomed - to Sophia.

Moreover -and this is essential - these staff members from all continents generally feel very much at ease in the convivial multinational atmosphere and culture of Sophia Antipolis. As many of them say: *"It's the 'Sophilopolitan' virus."*

Let's take an example: Digital Equipment, which was the largest group in terms of staff at the time (1,500 employees), suffered a strong recession before being acquired by Compaq. Part of the staff was rehired in various enterprises in Sophia Antipolis and the rest dispersed throughout the world. As soon as they were able, many of them returned, sometimes at the head of other firms. With their skills enhanced by their globalizing experience, they are happy in Sophia.

In the course of the now frequent restructuring movements in large groups, the staff may leave, but they may also wish to stay. This is true for Searle, Wellcome, AT&T, Lucent and many others.

At any rate, it is certain that the 'Sophilopolitans' of Sophia Antipolis and long-time 'Sophilopolitans', the 'Diaspora' of former 'Sophilopolitans', do a great deal to maintain the 'aura' of Sophia Antipolis.

We are proud (and find it practically normal, given our feelings about Sophia) of the presence of ETSI (European Telecom Standards Institute), which gave rise to GSM⁽²⁾. The same holds true for the training centre, built and funded by European cardiologists and the INRIA resource centre for the Internet of the future. And we will continue!

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International scope involves compensation and obligations.

They have not all been fulfilled and they must be reinforced. Thus, we will have to organize French classes for foreigners (since the International Lycée of Valbonne is a victim of its own success and cannot accommodate all the foreign children wishing to receive bilingual or trilingual education).

And, on the neighbouring sites and communes, and particularly in the future *Communauté d'agglomération*, we must create secondary schools with bilingual and trilingual teaching.

-we must diffuse actions for the promotion of cultural diversity:

for the Indians working in the establishments of Sophia Antipolis, *Fondation Sophia Antipolis* has created a Franco-Indian Club. This Club should promote and organize weeks and soirees highlighting Indian culture. Such a system should definitely be extended for Scandinavians, Chinese, Koreans...

International scope and multicultural humanism: in my feeling, this is not only the future for Sophia Antipolis, but also for Europe and the Mediterranean.

D- FUTUROLOGY

It appears that rapid evolution of techniques and globalization make it necessary to take into account the worries of the general public in the face of change. What some call the anti-globalization revolution must be analysed to determine its underlying causes; whatever the ulterior motives of those involved, they reveal a true problem.

To identify it and help find appropriate solutions, vigilant persistent action of accurate analysis is required, along with independent information, democratization of knowledge and transparency of decision-making. It is always necessary to assess the advantages and disadvantages of a policy, since we must not submit blindly to the "laws of the market", but rather to human needs. Beyond science and technology, many issues deserve futurological consideration.

The reduction in the cost of certain food products may (somewhat) favour consumers while it may penalize producers, to the point of threatening their existence... Is this desirable?

- Can equitable trade procedures facilitate economic convergence?
- Can NICTs reduce the fracture between North and South and how?

⁽²⁾ Some even suggest that it is thanks to Sophia Antipolis that Europe is ahead in the area of mobile telephony.

- How are the consequences climatic changes, the worsening of natural catastrophes perceived? What are the most appropriate measures to be taken?
- Is the management of domestic, industrial and nuclear waste treated with vigilance and according to the true impact?...

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With its concentration of brainpower, Sophia Antipolis should become one of the places for dealing with major scientific, technological and administrative problems, true (such as the allocation of frequencies), the use of satellites, the problems of industrial, household and nuclear waste, etc, but also spiritual, philosophical and ethical issues.

At the colloquia and other initiatives of *Fondation Sophia Antipolis*, often supported by clubs or enterprises, some of these issues, over the years, receive some consideration. This is what we group and will continue grouping by diversifying under the name ***Institut Sophia, la Prospective en Réseau*** (The Sophia Institute, Networking for the Future).

At the same time, alongside scheduled events, there will be **a *showcase portal***, intended for the dissemination and democratization of knowledge with various audiences or partner associations. This project may be able to federate not only the organizations and enterprises of Sophia, but of the entire region, or even a group of regions and Mediterranean states.

The *showcase portal* of Sophia will be an element in the diffusion of scientific culture, which must be broadly accounted for on a regional, national and European scale.

La Cité des Sciences et de l'Industrie, like the *Palais de la Découverte* in Paris, are accomplishing a great deal of good work in this area, still concentrated on the population of the Île-de-France (Parisian area) and Northern Europe.

The Mediterranean world is still lacking in equivalent structures. The renown of Sophia, of its colloquia and other events, now regularly organized, should contribute to generalizing understanding of our contemporary world and its evolution. We can all feel the lack of markers for the inevitable trends underway in the evolution of the world. It is necessary to study, design and communicate the stakes of human action and, in particular, all that is done and all that can be done to prepare sustainable development.

We must demonstrate to everyone that we can and must control our future.

*This is the purpose of the association of **Institut de Sophia** think tank and **Vitrine Portail de Sophia** (showcase portal) for communication to the public. Such communication should be both fun and educational, social and cultural, or professional in nature, according to the various interests and the needs of the moment. This could also be the forum for reflection on the future of the Lake of Peace we must make of our Mare Nostrum (the Roman name of the Mediterranean Sea).*

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