

**ANDORRA, THE EUROPEAN MICRO-STATE'S ARCHETYPE :
THE BORDERSCAPE'S ORIGINAL FEATURES OF A DUTY-FREE EXCLAVE**

André-Louis SANGUIN Faculty of Geography University of Paris-Sorbonne

E-mail: alsanguin@wanadoo.fr URL: <http://alsanguin.monsite.orange.fr>

Andorra, a small state of 468 km² nestled in the heart of the Pyrenees, is trapped between Spain and France. Its designation in Catalan (the official national language) is *Principat d'Andorra* (Principality of Andorra). Before and up to 1993, Andorra was not a state equipped with an international personality. Its political status followed from *Actes de Paréage* (Parity Act) of 1278 and 1288 placing it under the joint suzerainty of Count of Foix and Bishop of Urgell. The rights allocated to the House of Foix passed by marriage to those of Bearn, then to France during the accession of Henri IV, King of Navarre and Bearn, to the French Crown. The two coprinces are today the President of the French Republic and the Bishop of Urgell, a small town to the North-East of Catalonia situated in the high valley of the Segre River 12 km from the principality. A democratic constitution was implemented on 4 May 1993. The new constitution transformed the small Pyrenean country into a sovereign State which immediately became a member of the UN, UNESCO, the Council of Europe and the OSCE. In order to implement its international relations, Andorra has a network of 21 embassies located in the capital cities of some European States. The new constitution makes the co-princes a single constitutional monarch and provides for a parliament (the *Consell General de les Valls d'Andorra*, 28 members) elected for a 4 years term. The government is made from 9 Departments, headed by a Prime Minister (the *Cap de Govern*).

Even if the € is acting as its national currency, Andorra is not a member of the European Union. On 24 June 1990, a customs union agreement was signed with EU but this accord doesn't concern the agricultural matters. Since 1995, Andorra directly recuperates the customs duties for all non EU's goods and products imported to Andorra.

In 1897, Andorra consisted of 1000 houses and 5000 individuals. Today, the population is little more than 76000 inhabitants. In 2004, Andorra received 11,6 million visitors (among them, 8,8 million were day-trippers !) and they entered Andorra by means of 4 million vehicles. Skiing

has grown at lightening speed in recent years : 1,4 million ski lift tickets sold during the 1990-1991 winter season ... but 2,5 million ski lift tickets sold in the 2000-2001 winter season ! Nowadays, the Principality, though not a tax haven, is however the archetype of a cross-border economy pushed to fever by the effects of a duty-free system amplified by large scale tourism. The oversizing of commerce and consumption, due to an annual market of 12 million consumers, bears out results which are extraordinary for a permanent population of 76875 persons in 2004. In less than forty years, the Pyrenean microstate has become the most important free zone in all continental Europe : *emporium* say some, *souk* retort the others ! Andorra has its own spatial logic : it's the field of tobacco right in the middle of buildings with several stores, it's the church with the Romanesque bell tower on the background housing scheme, it's the attack of the slopes for the use of luxurious chalets, it's the shopping center built level to the level of torrent with devastating floods.

How has it passed in less than half a century from traditional agro-pastoral type economy to the reign of urban anarchy ? How can a modern State be unaware of the concept and practice of town and country planning ? These questions will now be analyzed.

1 – THE GEOGRAPHICAL FRAMEWORK OF ANDORRA

For more than 40 km North-South, Andorra is only hierarchy of valleys not only deeply embanked in the mountains and, moreover, strongly marked by glacial relief. The mountains are sunny and dry. Atlantic beech-tree species do not exist ; starting from the basin of Escaldes-Engordany, mediterranean populations of holm oaks begin to appear. The built-up area extends from between 850 to 2200 m in altitude. Vast natural pastures cover 40% of the surface of the country and can accomodate numerous herds during the three summer months. Up to and around 1950, *transhumance* rearing was the principal economic resource of Andorra (thousands of sheep and cattle and horses grazed on high pastures). In the winter, these herds and flocks stayed in Languedoc and Catalonia.

The glacial valleys open out, from place to place, in *ombilics* (glacial basins), which has historically allowed installation of the main villages and towns : Canillo, Encamp, Ordino, La Massana, Andorra-Escaldes. Because of high altitude (it's the highest country in Europe), Andorra

is a cold country : the average temperature drops by 0,8°C every 100 meters. Everywhere throughout the country, one sees the opposing *obagas* (slopes in the shade) and *solanas* (sunny slopes). The *ubacs* (the North facing shady slopes) are given over to forests whilst the *adrets* (the South facing sunny slopes) are occupied by villages, fields and meadows.

During the interwar period (1919 to 1939), Andorrans lived from rearing, smuggling and the local tobacco industry. It was an enclosed country (the single road towards Spain was only opened in 1916 and the single road toward France only in 1933). No taxes but, in return, no telephone, no state schools and no public services. The State was almost non-existent. Living in a difficult and isolated environment, the small Andorran economy knew a slow movement of demographic growth accompanied by a traditional emigration towards Spain : 2300 inhabitants at the end of the 12th century... but only 5291 in 1941 !

2 – FROM THE MIDDLE AGES TO THE 21st CENTURY IN LESS THAN FORTY YEARS : AN UNCONTROLLED ECONOMIC MUTATION

Up to the beginning to the 1950s, Andorra was not frequented by Spanish or French visitors. So, the traditional mountain economy centered on the growth of potatoes, tobacco, hay, cereals and transhumance is going to completely collapse in less than forty years. Around 1947-1950, one counted 20 to 25.000 head sheep, cattle and horses on the high summer. In 2001, it remained only 4661 head livestock (including 1100 cows and 2000 sheep!).

In the space of three decades (1970-2000), Andorra has become the most important European duty-free center. In the overall absence of any urban law since a government did not exist before 1982, business and commerce have forced a rapid swelling of the urban fabric in the chief towns : Pas de la Casa, Encamp, Andorra-Escaldes, La Massana, Sant Julia de Loria... In 2001, 6464 shops and services were counted in the microstate. This tertiarization of the Andorran economy (94% of the total jobs) has generated considerable labour needs which are lacking locally. Therefore one sees a call to the massive immigration of Catalans, Andalusians and Portuguese. The Portuguese were non-existent in 1970 ! In the principality they form a true colony of heavy workers, a local proletariat employed essentially in the construction and public works for the men and in hotels and restaurants for the women. The present Andorra' s population

(2004) is made from Andorrans (27465), Spaniards (28728), Portuguese (9980), French (5095) and others (5607).

To the duty-free tourist trade one must add from the 70s the lightning development of ski tourism. A total of 5 ski resorts are distributed within the Andorran space : Pal-Arinsal, Arcalis, Pas de la Casa-Grau Roig, Soldeu-El Tarter, La Rabassa. That means 177 ski pistes for a total length of 286 km, 105 ski lifts, 1083 snow-blowers, 580 ski instructors... In the winter 2001, the ski resorts of the principality sold a total of 2,5 million ski lifts. Generally speaking, the length of the skiing season is longer than in France. For example, in 2000-2001, the season has started on 24 November and has stopped on 21 April, that means 149 days of intense skiing. This second type of tourism has had the effect of swelling the number of hotels. At present, 267 hotels are able to propose an availability of 12.527 rooms. The hotel trade contributes therefore for its part to the galloping urbanization if we also mention the existence of 2297 apartments for holiday use.

In short, the duty-free tourism and the skiing have generated an oversizing of the Andorran economy. In other words, this economy is not made for a population of 76875 people (of which 48738 are active in 2004) but for the 12 million visitors which annually frequent the small Pyrenean State. This is why Andorra imported in 1990 540.000 tons of merchandises with a value of €722 million and, in 2004, imports for a total value of €1,41 billion (80% from Spain and France). One must mention here that the number of cars on the road in Andorra has increased to 69228 in 2004, this represents the highest ratio in Europe: 900 vehicles per 1000 inhabitants! Such a motorization rate combined with the duty-free petrol purchase justify the imports of 46 million unleaded gasoline litres and of 91 million diesel litres in 2001.

It is very clear that the gigantic duty-free trade, the multimillion tourists, the galloping urbanization and the overmotorization of cars are the signs of the more direct impacts upon the small Andorran territory of only 468 km². If these indications are much stronger than in other small states of equivalent size, it is simply because, according to the principle of minimal state function, the essential aim of public powers consists only to make the market work without maintaining the public sector.

3 – THE ABSENCE OF TOWN AND COUNTRY PLANNING AND ITS CONSEQUENCES UPON THE ANDORRAN ENVIRONMENT

The almost disappearance of the pastoral transhumance economy has direct consequences on the Andorran mountain pastures. Nearly everywhere, the herbaceous biomass (lawn of *Nardus Stricta* and *Festuca Rubra*) is on the increase and it has started to absorb dispersed erratic blocks. On the upper slopes, the lawn-moor of *Festuca ESKIA* and *Calluna Vulgaris* equally densifies, including on the glacial benches. More importantly, the upper forest limit reaches around 300 meters in altitude. Similarly, the reconstitution of the coniferous forest on the ubacs (exposed North facing slopes) is visible almost everywhere. These forests served as pastures at the end of the summer and remained at the free disposal of the inhabitants. Despite its recovery and its thickening, the Andorran forest is the object of modern aggressions essentially due to the absence of town and country planning policies. These aggressions are of two orders:

1/ Firstly, the disembowelling of the forestry massif to insert ski rounds and ski pists have created irreparable disorders in the flora and fauna. The ski resort of Pal is the archetype of this kind of situation : one of the most beautiful forestry massifs in Andorra has been completely massacred. To a lesser extent, the resorts of Arinsal and Soldeu may be put in this category.

2/ Secondly, and in a more insidious way, urbanization attacks the lower forestry limit or torrential sheet flow zones. It is in La Massana and at Escaldes and at Sant Julia that this type of urbanization called « balcony above the thalweg » is the most visible. Sometimes, it occurs that new built areas are installed closed to dangerous rock screes.

Considered in a wider perspective, the problem of the Andorran forest is the clearest illustration of a total absence of national forestry policy. The paradox is that this forest, today exceeds 12000 hectares, which does not belong to private owners but, everywhere, to the *comu* (the Andorran municipality). One might be expected to think that each of the seven comus of the co-principality could establish their own forestry policy. This is not, however, the case. Free range herds in the forest, vegetation burnt by the sheperds, the intensity of closed cropping, the absence of regulations and untidy exploitation, all these deplorable practices have contributed to the ruin of Andorran forests. Covering 15000 hectares at the beginning of the 18th century, the Andorran forest has been subjected to a true pillage and has shrunk to 11000 hectares in 1960.

In truth, if the Andorran forest has increased in surface area since the 1970s, it is simply because of changes in the mountain way of life. In other words, the increase in the upper limit is

because of the disappearance of transhumance and summer pastoralism. Down below, the forest advances its lowest limits on the terraces abandoned by cultivation. When the forest is left to itself, it shows the extension of silver birch, poor specie by excellence. In both cases, the reconquest is a shift by natural regeneration in the absence of all programmed policy and even less tree planting schemes.

The *tobacco situation* in Andorra is a unique case in the all of the Pyrenean cordillera, from the Atlantic to the Mediterranean. It is the illustration of perverse effects on the environment of a delinquent policy. Indeed, because of the duty-free zone status from which Andorra benefits, a country outside the European Union, the main cigarette brands have set up centers of production to dispose of their product in the EU but also to face the demand of the millions of tourists who come in the principality to buy packets of cigarettes and boxes of cigars at prices 60% less than in France. Because of this, since 1972, Andorra obliges these manufacturers to buy the total production of Andorran tobacco. In exchange for this favour, the government authorizes the main cigarette brand manufactures to import the equivalent of the local tobacco production. This artificial policy is a form of subsidy devoted to agriculture... but financed by the private sector ! Moreover, to increase their import quotas of cigarette tobacco, the same manufacturers pay the farmers for fictitious tobacco harvests (two to three times the real yields!). The today's result is perfectly visible in the landscape : in less than 30 years, the surface given over to tobacco has not only more than doubled in Andorra but, moreover, reaches even up to 1600 meters of altitude (the local superior climatic limit for tobacco cultivation). On the lower slopes, pastures have retreated before the tobacco and one even sees some farmers organizing the planting of tobacco parcels on artificial embankments covered with a layer of good soil! This also explains the existence and the maintenance of parcels of tobacco in the town center in the very middle of the builtup areas.

So, one can see that this cultivation is so profitable that the farmers do not seek to sell their parcels of land to real estate companies. However, it seems very clear that if the Andorran government put a stop to this system of tobacco contracts, the Andorran agriculture could disappear in few years. In 2001, there were just 84 surviving farms in Andorra (93 in 1997) with an average number of employees of 139 in 2004 (199 in 1997), namely 0,7% of the active population. On the one hand, the tobacco cultivation has to adjust to new internal and external circumstances

since 1998 : the crop decreased from 1047 tons in 1997 to 340 tons in 2001. On the other hand, the successive livestock crisis in Europe (« mad cow disease ») also created deep anxiety among Andorran livestock farmers. It's important to emphasize that the Andorran ecology and environment depend greatly on how farmers are treated, considering the huge importance of tourism. In other words, the Andorran farmers have become the guardians of the Andorran landscapes and the mountain's makers. One therefore sees that the agricultural space in Andorra survives in a totally artificial even unhealthy context. The essential problem is that the government has neither policies nor clear programs to secure the agricultural future of the country apart from this false system.

Finally, the blow by blow realization of the five ski resorts of the principality without an overall policy is carried out according to the concept of *camp de neu* (snowfield in Catalan). What does the meaning of this concept include? Concretely, the ski resorts of Andorra are snowfields. One practices skiing on the runs equipped with skilifts but aside from the parking lots and one or two service buildings, these resorts are white deserts without houses, hotels, restaurants, chalets, buildings, flats, business and shops. The environmental consequences of the *camp de neu* are easy to understand : the skiers are obliged to seek accommodations several kilometers away in the hotels of the towns and traditional villages. This spatial dichotomy generates intensive commuting in the mornings and evenings. This commuting process throws hundreds and hundreds of private cars and coaches onto the access roads of the ski resorts. At the end of the afternoon, after the ski slopes are closed down, several kilometers long queues block the entries to the capital city's conurbation Andorra la Vella/Escaldes. This scenario distinctive to Andorran skiing does not exist elsewhere in Europe and consequently it aggravates the problems of circulation in this small state with narrow steep-sided valleys.

4 – AN ANARCHICAL URBANISM WITHOUT MASTER PLAN OR ZONINGS

The biggest town in the interior of the Pyrenean cordillera is today the conurbation constituted by the twin cities of the capital area, i.e. Andorra la Vella/Les Escaldes with 36.306 inhabitants in 2001 (more than 50% of the Andorra's total population !). Owing to the crowds attracted by duty-free tourism and cheap skiing, Andorra has become a pole of immigration in the

Pyrenean high mountains which are elsewhere empty. This scenario of unplanned urbanization is equally same outside the capital city area at Encamp, La Massana, Sant Julia or Pas de la Casa : buildings packed together, perpetual building sites tear into the moraine or levels the rocks, the approach roads on steep slopes lead to residences or condos perched on the slopes. At the bottom of the valleys, right in the middle of the urban fabric, the parcels are often occupied with tobacco and form clearings : this land is not for sale or, if it is, the prices are prohibitive. In the absence of all expropriation for public purposes (something almost unrealizable in Andorra), things stay the same.

With the commercial revolution, the old main street of the village or the small town has become a main artery for business of all kinds. This is the obvious situation regarding Meritxell Avenue in Andorra la Vella or Carlemany Avenue in Les Escaldes. Buildings with three to five floors comprise shops on the ground floor and accommodations on the upper floors. Moreover, the hotels, apartments-buildings for foreigners or skiers-tourists and even the shopping centers are slid in the same urban fabric. After 40 years of rapid urbanization, it is not an exaggeration to say that the process was realized by a succession of private initiative blow without any overall plan or preliminary impact studies but in a kind of mercenary fever and without large technical or financial means. It is therefore a very clear phenomenon of urban anarchy : the urban sprawl of the five Andorran chief towns (from the North to the South : Pas de la Casa, Encamp, La Massana, Andorra la Vella/Escaldes, Sant Julia) has been entirely the result of private initiatives and the will of those with land at their disposal. They was never a plan for urbanism. One is faced with a juridical void: the single rule was not to construct less than two meters from the edge of the road. This fact alone explains why so many streets are without sun.

In short, in this respect, Andorran towns are *improvised towns* having grown like oil stains or in linear extensions. The proof is that the old historical residencies are completely submerged in the urban fabric today and none of these towns have a real center. On the occasion of surveys I managed in the 1990s with the locals, the people questioned were totally unable of identifying or localizing the center of any given town.

A similar problem to the urban anarchy is the one of the *circulation* because the tourist and commercial flows are organically linked with this aspect. In this way, the Spanish border sees 15.000 vehicles a day in August and the border with France sees 11.000 vehicles a day for the

same month. So, in the absence of a national road policy and, above all, of a North-South expressway with tunnels and viaducts, the circulation is incoherent and chaotic. One has seen that Andorra forms a kind of *hydrographical Y* whose base is in the South and both branches head towards the North. The capital city's conurbation (Andorra la Vella/Les Escaldes) is, for its misfortune, located at the center of the Y. It is what some call the *gordian knot* of circulation in Andorra since to pass from one valley to another (Valira del Nord, Valira d'Orient), it is compulsory to pass by the capital city obstructed by inusual traffic jams. In 1994, one calculated 17.000 vehicles a day crossing the capital occupied by 89 hectares of parkings.

This general difficulty, due to the absence of a national town and country planning policy, is reinforced by the proliferation of a double phenomenon typically Andorran: the important number of dead end streets and the discontinuity of the pavements (pedestrians are sometimes obliged to walk in the streets because the pavement finishes in a bevelled edge against the facade of a building).

No national sewage network collects liquid wastes and a purification plant localized in the most downstream part of Valira River has not yet seen the light of day. In this way, Andorra exports its liquid wastes towards Spain. If this phenomenon does not occur in Pas de la Casa, the ski resort located close to the French border on the Atlantic side, it is simply because of French complaints pollution of the Ariège River, a sewage and purification plant has been built. In practice, each parish discharges liquid wastes into the river as far as their downstream limits. In this way, each parish localized downstream to its neighbour receives its liquid wastes. This is why the Valira, a trout river, has become a biological desert. The only incineration plant of the country, even so it is concealed in a ravine, belches its smokes above the capital city.

The urban anarchy and the concentration of unplanned human activities have multiplied environmental aggressions. The most apparent of which are the visual blights. Unsightly electric cables are a widespread aggression on the contrary to other aggressions which are more local. For example, at Les Escaldes, a town with 15.519 inhabitants in 2001 and the second largest town within the Principality, from surveys that I have managed in 1994 with a big students team show that 50% of the environmental aggressions come from one or other of the following categories: ugly electric cables, unauthorized dumps, poor quality of facades, waste grounds, rubbish in the torrents....

5 – ANDORRA AT A TURNING POINT : REPULSIVE POLE OR SCENE SHIFT AT THE HEART OF THE PYRENEES ?

A small state enclosed between Spain and France, the Principality of Andorra is not a part of the European Union. With regard to the town and country planning in the Pyrenees, Andorra has placed itself off-side. France, Spain and EU have instigated several programs of large public works aimed at erasing the physical barrier of the Pyrenees (road tunnels, high speed trains, highways...). But, not to take a part in this territorial dynamic, Andorra risks to be left aside of the main currents of circulation. The road tunnel, opened in 2001, under Envalira Pass (2407 m in altitude), the highest road pass in the Pyrenees situated entirely in Andorra, has two objectives:

1/ On the one hand, to try and clear an access from France to Andorra and free it from all winter constraints (snow storms can lead the Envalira Pass being closed and, consequently, French skiers cannot enter forward into Andorra).

2/ On the other hand, it attempted to capture a part of the traffic Toulouse/Barcelona/Toulouse passing through the Puymorens and Cadi tunnels soon to be reinforced between them by the Estel expressway in Cerdania.

Unfortunately, at present, the Envalira tunnel is not connected with L'Hospitalet (the last French municipality) by a secure road running at the bottom of the Solana d'Andorra which is free of any risk of avalanches. Actually, the RN20 road connecting L'Hospitalet with Pas de la Casa is often closed for one or two days, due to huge snow storms. In the absence of a North-South expressway which directly would connect the Envalira tunnel with La Seu d'Urgell (the first Spanish town after the border), the Envalira tunnel is not able to show what it is capable of. The absence of a planning and development will in Andorra on this subject risks to cost it a delay in the near future.

So, as to make disappear the negative consequences of its peripheral position, Andorra would have interest to associate with the Northwest Mediterranean Euroregion (Midi-Pyrénées, Languedoc-Roussillon, Catalonia) in all kinds of joint programs. This perspective today is ignored by the Andorran government.

Andorra lacks a main national law on the conservation of forestry heritage. Equally lacking is a main national law on the fight and prevention against floods and avalanches. A true policy of Andorran town and country planning has not yet seen the light of day. The latter must be backed up by a national plan and on the right of compulsory purchase on account of expropriation for public purposes. To achieve these needs, a clear government will for the moment is lacking. This is because of two reasons :

1/ on the one hand, the fear to contravene the national taboo which is the sacrosanct principle of individual rights of possession;

2/ on the second hand, the vagueness of the new constitution on this matter.

Actually, Article 27 of the Constitution stipulates : « The right to private property ownership is recognized (...) without other limitations than those derived from the social function of ownership ». Elsewhere, Article 31 only tackles town and country planning in a very allusive way : « The State's function is to attend to the rational use of land and all natural resources aiming to guarantee to all a dignified quality of life, to restore and to maintain for future generations a rational ecological equilibrium in the atmosphere, water and earth, and to defend the native flora and fauna ». Article 34 takes into account the patrimonial dimension : « The State will guarantee the conservation, the promotion and the circulation of historical, cultural and artistic heritage of Andorra ».

However, Article 80 gives to each of the seven town councils full competence in town and country planning matters : « In an autonomous administrative and financial framework, the towns are competent in the following matters (...) natural resources, cadastre, urbanism, public highways, (...). These competences refer to, amongst other things, to benefit and exploitation of natural resources. ». The transformation of Andorra into a lawful State and its access to international sovereignty by the effects of the Constitution of 1993 should have solved the question of repatriation, at a government level, from the competence in town and country planning matters and the management, at this level, of clearly formulated and rapidly efficient policies. Unfortunately, the deep and strong contradiction which is the Article 80 explains why town and country planning, conceived, planned and managed by the central power, is today impossible in Andorra. And it is not the parishes, with limited budgets and divergent interests, that can embark on separated policies of town and country planning. In short, in some places, the underminings of

the environment are irreversible. A curious country which cheerfully turns upside down everything that makes it appealing. The risk is now to see the coprincipality rapidly transformed into a repulsive pole at the heart of the Pyrenees.

The duty-free commerce and the cheap skiing only devoted to foreign visitors are showing the limits of an economic system which today seems obsolete and which is totally depending of the EU's goodwill. In order to operate its economic change at the best conditions, the coprincipality of Andorra will be obliged to open new branches of economic activities:

1/ The microstate is well equipped with a good network of 6 local banks with a total deposits of € 8 billion in 2001 and with a €2,2 billion of net credit investment in the same year. If the Pyrenean microstate is able to avoid the traps of the « dirty money washing and recycling», one could imagine the implementation of a center for offshore societies and financial holdings which would be build according to the model of Jersey, Gibraltar or Luxembourg. Such an activity would bring an added value regarding the professional qualification on the job market.

2/ As a sovereign State, Andorra has the right to open casinos. According to the model developed by the Principality of Monaco or by the Italian Autonomous Region Valle d'Aosta, such a new activity would bring not only new jobs but also new revenues for the national budget.

3/ Even if Andorra is a sovereign State, the small Pyrenean country has no national Postal Service. Under the rule of a postal agreement signed with Spain and France in June 1930, both French and Spanish Posts are jointly operating in Andorra. This curious situation explains the simultaneous presence in the Andorran streets of French and Spanish mailboxes and also the use of Spanish stamps « Andorra » and of French stamps « Andorre ». The suppression of this dual postal system and the implementation of a true Andorran Postal service would allow to bring not only new revenues for the public budget but also the insertion of Andorra at the heart of the worldwide philatelic networks.

4/ In the absence of VAT on goods and services and in the absence of direct taxes on wages and salaries, the budget deficit has become chronic at the State level (€8,4 million in 2001) and at the parishes level (€24,5 million in 2001). In the very short term, the principality will be obliged to completely reassess and reset its fiscal policy. New economic branches like gambling and philately, traditionally used in most of microstates, would inflate the Andorra's public revenues.

5/ Finally, the last and worst challenge facing Andorra lies in the unbearable car traffic congestion and its subsequent air pollution. Such a situation militates in favor of a fast opening for a North-South expressway from Envalira tunnel to the Spanish border.

BIBLIOGRAPHY

CAMBRA DE COMERÇ, INDUSTRIA I SERVEIS D'ANDORRA, *Economic Report 2001*, Andorra, Chamber of Commerce, 2002.

CHAPEAU, G., *La mise en valeur d'une région de montagne, les Vallées d'Andorre*, Nancy, CRDP, 1986.

DEGAGE, Alain & Antoni DURO i ARAJOL, *L'Andorre*, Paris, Presses Universitaires de France, 1998.

FOLCH, R., *El patrimoni natural d'Andorra*, Barcelona, Ketres, 1984.

GUIRAUD, Frédérique, « Circulation et environnement en Andorre : un défi à l'aménagement transfrontalier », *Revue Géographique des Pyrénées et du Sud-Ouest*, 1991, vol. 62, n° 2, pp. 187-200.

LLUELLES, Maria Jesus, *La transformacio economica d'Andorra*, Barcelona, Editorial L'Avenc, 1991.

PALAU MARTI, Montserrat, *Andorra*, Paris, Maisonneuve & Larose, 1978.

SANGUIN, André-Louis, « L'Andorre ou la quintessence d'une économie transfrontalière », *Revue Géographique des Pyrénées et du Sud-Ouest*, 1991, vol. 62, n° 2, pp. 169-186.

SANGUIN, André-Louis, *Town and Country Planning Report for the City of Les Escaldes*, Escaldes, Comú d'Escaldes, 1994.

SANGUIN, André-Louis et Frédérique GUIRAUD, « Mutations paysagères dans la haute montagne pyrénéenne : le cas d'Ordino (Andorre) », *Revue Géographique des Pyrénées et du Sud-Ouest*, 1991, vol. 62, n° 2, pp. 201-216.

SANGUIN, André-Louis et Frédérique GUIRAUD, « The Pyrenees : Death of a Border, Birth of a Hinge ? », *European Spatial Research and Policy*, 1995, vol. 2, n° 2, pp. 43-53.

TAYLOR, Barry, *Andorra : World Bibliographical Series*, Oxford, Clio Press, 1993.

www.amb-andorre.fr (Embassy of Andorra in France)

www.andorra.ad (Ministry of Tourism of Andorra)

www.andorraonline.ad

www.ccis.ad (Chamber of Commerce of Andorra)

www.consell.ad (Parliament of Andorra)

www.diariandorra.ad (Diari d' Andorra, the daily newspaper of the Principality of Andorra)

www.estadistica.ad (Statistics Office of Andorra)

www.govern.ad (Government of Andorra)

www.turisme.ad (Ministry of Tourism of Andorra)