APTA RESEARCH GROUP

Cross-Border Territorial Studies

Universitat de Girona
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For centuries, the Pyrenees represented a separation between Spain and France. In only a few decades, it has become an important setting for relations and cooperation between the communities of both sides, in which they face shared challenges, such as mobility, economic development, health care, social cohesion, environment, etc.

Thus, the Pyrenees represent an emblematic case within the European panorama of cross-border cooperation. With the help of European Union funding, the region has developed ambitious projects on infrastructures, services and political issues that positively affect people’s everyday life.

With this catalogue, our objective is to show the potentialities of our studies on European Territorial Cooperation (ETC) involving border regions. Here we present main theoretical contributions and methodologies, as well as the most relevant results of various projects we have carried out in the last 15 years, especially along the Spanish-French border.

As can be later seen, the methodological approach can be easily applied to other European borders. The approach enables us to situate, compare and extrapolate the Pyrenean cases to the most extensive European setting, thereby allowing us to develop new studies and initiate new collaborations.
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The Environmental and Territorial Analysis and Planning (APTA) Research Group of the University of Girona comprises of geographers, who have been working for almost three decades on urban and regional development and its practical application in territorial planning.

The group’s main lines of research focus on analysing the urban dynamics of the intermediate city and its relation to the territory, as well as its management and planning instruments (physical, strategic or environmental). As of 2018, APTA Research Group has been recognised by the Government of Catalonia as a Consolidated Research Group (SGR) for scientific results obtained throughout its career.

Apart from academic research, APTA Research Group had the important task in applied research of developing territorial analysis and planning studies at different scales for different public administrations, thereby promoting knowledge transfer to institutions.

Seated in the province of Girona, an eminent border territory in the Pyrenean region, the research group has developed theoretical and empirical knowledge on local and regional border dynamics dealing with the Spanish-French border. At the same time, the group is also dedicated to extending the discourse and studies on the European Territorial Cooperation policies.

The APTA Research Group: Who we are

Our Research Lines

Definition, analysis and interpretation of the structures and territorial and urban dynamics in Catalonia.

**Cross-Border Vision:** To deepen the analysis of cross-border initiatives at different territorial scales (Euroregions, Eurodistricts, Eurocities,…).

Analysis and management of local development (economic, social and environmental) and territorial systems in urban and rural areas.

**Cross-Border Vision:** To examine the role and functions that the Spanish-French border has in the processes of urban, infrastructural, socioeconomic and cultural development at the local scale.

Analysis and critical reflection on the instruments of territorial planning at different scales, particularly municipal, supra-municipal and regional.

**Cross-Border Vision:** Comparative study on plans and territorial strategies to identify the limits and potentialities of a more integrated and cohesive Pyrenean region.

Analysis of territorial actors, its dynamics for local development and the territorial conflicts that they generate.

**Cross-Border Vision:** To study the territorial impact of the European Regional Development Funds (ERDF), its distribution and the actors involved in the Pyrenean region.
A first milestone of our cross-border research was the publication of the White Book of the Eurodistrict of the Transborder Catalan Space in 2008.

This work, which was coordinated by the Mission Opérationnelle Transfrontalière (MOT) and the APTA Research Group, represents an important result of conceptualisation and study of territorial strategies on the formation of a cross-border space, at the disposal of the local administrations of the province of Girona and the Department of the Eastern French Pyrenees.

In addition, our academic research has focused on studying the territorial impact of INTERREG projects since Spain’s entry into the European Union. We highlight two projects developed with funding from the Ministry of Economy and Science, in which we were able to catalogue, systematise and analyse the entire Spanish-French funded projects, and thereby compare it with other European border realities.

- R&D Project CSO2011-26151: ‘Twenty-five years of cross-border projects between Spain and France within the framework of the EU. An analysis of the geopolitics of plans, projects, agents and territorial results’ (2011-2014).

Over the years, the APTA Research Group has formed many academic collaborations with teams from other universities and research centres in the Pyrenean region as well as those in broader national and European contexts.

While stable collaborations were reinforced, for instance, with the UAB-RECOT Research Network (which deals with Euroregion and cross-border governance issues) or with the aforementioned MOT, new collaborations were formed thanks immensely to the mobility of pre-doctoral and postdoctoral researchers, faculty members (in Spain, France, Germany, Poland, Italy, Portugal, etc.) as well as Erasmus initiatives for students.

As a whole and in specific case studies at local and regional levels, the aforementioned indispensable collaborations have enabled us to contribute quantitatively and qualitatively towards enriching the scientific production on the topic of cross-border dimension of the Pyrenees region, in terms of doctoral theses, journal articles, book chapters, monographs, among many others.

The works were presented at many international congresses and conferences. Notable among them are the Association of Borderland Studies World Conference - ABS (in 2014 and 2018), the 15th Border Regions in Transition – BRIT Conference (Hamburg-Sønderborg, 2016) and the seminars of the European Commission (Cáceres, 2017).
With the experience of working on the aforementioned R&D projects, the APTA Research Group has deepened its knowledge and analysis of Spanish-French cross-border dynamics. As part of the European Territorial Cooperation programme, the team specifically focused on the territorial incidence of cross-border cooperation projects, their logics, protagonists and results.

Given the role of the actors and territorial projects, our underlying hypothesis is that the analysis of the executed projects, the actors involved, the socioeconomic and institutional relations, i.e. the governance structures, can be a good indicator of local development processes occurring in those territories.


Our Research Group has also developed a specific methodology for quantifying and mapping the entire set of cross-border projects, participating actors and affected territories.

This methodology is designed to be applicable to any border you want to analyse and can be utilised for any cross-border cooperation project.

So far, the method has been applied to analyse the INTERREG Programmes of Spain-France (2000-2006 and 2007-2013 periods) as well as those of Spain-Portugal, Germany-Poland and Austria-Italy (2007-2013 period).

The methodology is based on two successive steps: firstly, compiling a database that enables us to introduce different information fields of cooperation projects and quantify their different aspects; and secondly, putting together cartography that renders together the territories on both sides of a border.
The representation of actors and spatial impact provides us a more complex perspective inasmuch as it shows the diversity of the parts and territories really affected.

In the analyses we highlight, for instance, the largest number of mobilised actors on the French side, especially in the westernmost sector; these include actors from the municipality of Toulouse and the department of Haute-Garonne; the municipality of Pau and the department of the Pyrénées-Atlantique.

Specifically, the asymmetry in terms of the mobilisation capacity and actor participation (French NUT3 and Spanish NUT2) is clearly visualised.

The territories most affected by the cross-border projects correspond to relatively small spaces that are adjacent to the border and distributed alternately along the entire border between Spain and France.

Within this category, projects of agricultural and livestock activity stand out, such as the introduction of quality certifications, the adoption of innovative working techniques and the introduction of new technologies for the reduction of negative externalities (i.e. CO2 emissions).

Other highlighted trans-Pyrenean cooperation issues receiving significant amounts of EU funds concern the improving accessibility, enhancing the environment as well as improving social cohesion and integration.

The analysed projects were reclassified into nine thematic areas in order to visualise the global and detailed cross-border dynamics.

With regard to the POCTEFA program 2007-2013, the majority of subsidised projects, which comprises almost 40% of the total, correspond to "local economic development" including fields, such as the promotion and innovation of traditional activities, tourism sector, support for productive activities, or professional training.
From the cartographic analyses, it became clear to us that territorial agents interpret cross-border cooperation as a complementary territorial strategy of socio-economic development, which runs parallel to traditional policies.

The case studies enable us to evaluate whether the local actors are sufficiently competent and equipped in achieving an effective territorial integration of the cross-border space.

The Cerdanya represents an exemplary case. Our analyses have shown how geographical specificity, historical neighbourhood relations, strong local identity and sharing common challenges are fundamental factors for developing successful, stable, multi-thematic and long-term cross-border cooperation.

The various implemented actions, such as water management, hospital, abattoir, landscape plan, etc., represent a joint response to the lack of services, infrastructures and adequate policies for the peripheral mountain border areas.

Therefore, it is possible to hypothesise a ‘cross-border path to local development’, in which the border itself does not represent a limit towards development, but rather a common strategic resource.

We also focus on cases of unstable cross-border cooperation, wherein neither local interactions nor European Territorial Cooperation policy have generated added value to the territory.

Such is the case of the Albera Marítima, a peripheral territory enclosed between the Albera Massif and the Gulf of León.

Analysing the cross-border interactions revealed the presence of shared social, economic, cultural and environmental capital among local actors.

However, the lack of support from regional and national institutions, the competitive attitude among territorial agents (particularly in tourism and fisheries) as well as the lack of mutual trust have led to interrupted and unstable local cooperation.

In addition, divergent economic patterns and existing incompatible planning instruments exacerbate the situation presented by the geographical location of the area as well as the anthropogenic pressures on fragile coastal ecosystems.
Over the last decades, much value has been placed on how the landscape contributes to improving people’s quality of life and its role as a key resource for the local development of many territories.

This also holds true for the landscapes of border territories. In fact, the Council of Europe, according to Article 9 of its European Landscape Convention, advocates cross-border cooperation at local and regional levels, as well as the development of ‘joint landscape programmes’.

Nevertheless, the border situation requires a particular approach to landscapes, both from the diagnostic and technical perspectives. Its location in the peripheries of the member states combined with the existence of multiple administrations presiding over them can often lead to difficult management as well as rendering them more vulnerable to global change processes such as, for example, climate change.

Our research group conducted morphological studies of Spanish-French cross-border landscapes. These studies have enabled us to trace their evolutions as well as identify their main problems, potentialities and drivers of change.

The indirect effects (A) and induced effects (B) of the border on the landscape

Within the European framework, the changes occurring in the nature of borders, for instance, the defunctionalisation within the European integration process, represent an opportunity for their future evolution and management, albeit they can also lead to profound transformations that are not always positive.

For this reason, our research group’s works on landscape start from a deep theoretical and empirical knowledge of possible landscape effects linked to the border and changes in its nature.

At the methodological level, we rely on the landscape morphological analysis based on the retrospective study of land uses and coverings.

Through techniques such as photointerpretation, the digitisation of aerial images or the calculation of landscape ecology indexes, we identify the main problems of the landscape, such as fragmentation, homogenisation, loss of diversity, among others, on both sides of the border.

Therefore, our methodology identifies main landscape transformations as well as their causes, and whether or not they are relevant to the border event.
The methodology used for the Spanish-French border was later applied to analyse other European border realities.

On the one hand, this meant validating an innovative methodology as a useful and adaptable instrument for comparing different situations and territories. On the other, it serves as a tool for evaluating public policies, in this case, EU funding for cross-border cooperation as well as their impact on the territory, its actors and operating networks.

Thus, after analysing and comparing the borders between Spain and France, Spain and Portugal, Germany and Poland, and Austria and Italy, the results show us some recurring patterns throughout the European territory, such as the difficulty that more rural spaces experience in participating in projects of these characteristics, or the importance of the administrative structure of each member state and in what ways they diverge from the neighbouring state when it comes to being able to lead and manage the projects.

An extrapolative methodology applicable to other European Borders

Comparison of the impact of the INTERREG programmes in the Iberian Peninsula...

...and other borders in the framework of the European Union

It can also be said that the physical characteristics and territorial structure generate situations that are difficult for European authorities to ascertain and undertake.

Today assessing public policies is crucial for public and private entities as well as project managers.

The information extracted from the assessment can help administrations to improve and change their policies in order to make them more efficient, as well as aid them in better handling and implementing the set objectives.

Particularly for managers, information assessment enables them to improve their projects and proposals for projects and networks.

In a context of increasing competition among territorial agents for participation in European funding programmes, the need to know better the dynamics occurring in the management of projects could mean a major improvement for the different strategies of each territory and its corresponding actors.

Therefore, studies such as those carried out by the APTA Research Group can be useful for their different applications.
Data structuring allows for further cartographic possibilities, such as those described up to now, e.g. the representation characterised by thematic areas or specific administrative levels.

Namely, levels NUT1, NUT2, NUT3, LAU2, etc., can be mapped separately, according to the interests of the research in progress. Thus, for instance, it is possible to determine and compare the role (and distribution) of regional or local administrations in promoting cross-border initiatives geared towards social inclusion, energy, natural risk management or implementing innovative technologies.

Finally, in the cartographic field, the representation in three dimensions of the density maps facilitates identification of specific transboundary phenomena that are not detectable in the two-dimensional version (high values are often concentrated in very small spaces).

Cross-Border Mobility is divided into passenger and freight flows. The study we conducted on people’s mobility for work purposes, tourist flows, leisure and trade, complements the knowledge of the territorial structure of the space, wherein it shows territories of a more polycentric nature, or, on the other hand, a tendency towards urban concentration.

The mobility of goods based on traffic flows, large transport infrastructures as well as transport organisation nodes allows us to visualise the logistic potentialities of a given territory of passage between Northern and Southern Europe and the load breaking points between long-range maritime and rail transit.

The integration of logistics spaces on both sides of the border that benefit from comparative advantages of each country show an example of cross-border development opportunities.

The orography of the Pyrenean region favours the concentration of intense spaces of mobility at both ends of the border, i.e. the Catalan-Mediterranean and the Basque-Atlantic corridors.
For over a decade, the APTA Research Group has been focusing on territorial studies related to Cross-Border Cooperation. The accumulated experience and insight gained from the conducted research projects (i.e., empirical knowledge of the Pyrenean region as well as theoretical and methodological developments) and the stable scientific collaborations with other European centres of excellence, altogether making it an indispensable and highly valuable reference team. In this sense, its cross-border ‘commitment’ is divided into four axes of action:

Propose, advise and develop joint planning and management tools for border areas: strengthening local economies having natural, cultural and historical capitals as elements of cohesion between communities on both sides of the border.

Advise local and regional agents, public and private, in the context of the European Territorial Cooperation.

Reinforce and encourage collaborations and scientific exchanges between European research centres to apply our methodology to other European borders.

Contribute to the vision of an economically prosperous, institutionally effective and culturally more integrated Pyrenean region by promoting cross-border and thematic and multi-thematic analysis on environment, transport and mobility, economic development, energy, among other important issues.

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Scientific production in relation to Cross-Border Cooperation

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Doctoral Thesis


Book chapters


Doctoral Thesis


Book chapters


Doctoral Thesis

