Catalan Geography in Times of Crisis¹

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Introduction

The year 2014 was a milestone for the history of Catalonia and, at the same time, for Catalan geographers. In 2014, Catalonia commemorated the tercentenary of the fall of Barcelona into the hands of Philip V's army during the Spanish War of Succession, an event that led to the abolition of the institutions that had existed in Catalonia since the Middle Ages and, most significantly of all, the dissolution of its Government (the Generalitat). In the 1930s, the Generalitat would be restored, now as a subordinate institution of the Spanish Republic, and after the 1936–1939 civil war, it survived in exile, until, in 1977, it was re-established for a second time. In 1979, thanks to the passing of a Statute of Autonomy, provided for under the Spanish Constitution and adopted the previous year, it once again began to operate within the institutional framework of the Spanish State. Coinciding with this tercentenary, in 2014 the *Generalitat* organised a popular consultation on the political future of Catalonia, a self-determination referendum that would subsequently be suspended by the Spanish Constitutional Court before it was held and declared unconstitutional by the same court in 2015.² The referendum formed one of the events of the so-called *procés*, that is, the 'process' which would supposedly lead to the independence of Catalonia (a subject we return to in the following pages), initiated in 2010³ and culminated in 2017,⁴ albeit that at the beginning of the 2020s it is not entirely clear that it has yet run its course.

This chain of extraordinary events has had, as we show below, a marked impact on Catalan Geography. In 2014, Catalan geographers were also celebrating their own anniversary, the year marking fifty years since the publication of *Geografia de Catalunya* [*Geography of Catalonia*] — an edited book coordinated by Solé i Sabarís (1958-1974) and published in three

^{1.} Text reproduced from Paül i Carril, Valerià; Giménez Capdevila, Rafael: "Catalan Geography in Times of Crisis". In: Spanish Committee of the International Geographical Union: Spanish geography at contemporary times. State of the question (1972-2022). Spanish contribution to 35th IGC. Paris 2022. Time for Geographers. Madrid: Asociación Española de Geografía, 2022, pp. 353-380. DOI of the complete book: https://doi.org/10.21138/ugi.en.2022.lc

^{2.} Some 2.3 million votes were cast (from a census of 6.3 million). Of these 84% voted 'Yes-Yes', that is, 'Yes' to Catalonia becoming a state and 'Yes' to this state being independent.

^{3.} Usually considered the year in which the *procés* began, given it was when the Spanish Constitutional Court delivered its ruling on the lack of constitutionality of key articles of the 2006 Statute of Autonomy of Catalonia, opening the floodgates to massive, openly pro-independent protests (Paül i Carril, 2021).

^{4.} The year in which the independence referendum was held and although preventively suspended by the Spanish Constitutional Court, voting went ahead. On this occasion, nearly 2.3 million votes were also cast (from a census of 5.3 million), of whom 92% voted in favour of Catalonia becoming "an independent state in the form of a republic".

volumes — which can be considered fundamental in the evolution of Catalan Geography. In 2021, the SCG proceeded with the publication of a new multiauthored Geography of Catalonia, entitled *La nova geografia de la Catalunya postcovid* [*The New Geography of Post-COVID Catalonia*]. The publication, coordinated by Burgueño (2021a), sought to establish a connection with the earlier work, as its introductory chapter, contributed by Burgueño and Oliveras i Samitier (2021), makes patent. Indeed, the inside sleeve of the dust jacket claims that:

If the *Geografia de Catalunya* [...] overseen by Lluís Solé Sabarís [(1958-1974)] was the point of reference for Catalan geography at the end of the Franco regime and during the transition, the *Societat Catalana de Geografia* has believed it necessary that the geographers of the first decades of the 21st century make their own collective contribution to our understanding of the new country emerging from this period of multi-crises.

In 2021, the SCG also published a history of the institution, coordinated by Bertran (2021), analysing 85 years (1935–2020) of activity only interrupted during the onsets of the dictatorship from 1939 to 1947. As such, recent output by Catalan geographers includes both an in-depth reflection on the evolution and state of Geography as well as a study of Catalan geography in the form of a collective monograph in which a series of different crises play a central role in the narrative told. It is against this backdrop that the present contribution has been written in the hope of providing a critical review of this and other recent literature published since 2010, but firmly grounded in the traditions of the discipline as it has developed in Catalonia. Nel·lo's (2021) epilogue provides what might be considered the guiding principle for this

present article, since what the author does is to take stock of the 29 chapters and the 24 brief contributions that make up Burgueño's (2021a) *New Geography* and he does so by organising his discussion around five "regional challenges" — population/cities, mobility/ location of activities, cohesion/access to services, sustainability/energy and government/citizen organisation — albeit that here we adopt a slightly different classification, as will become clear.

The present article structures its discussion around four crises that we consider significant for understanding the current tasks of Catalan Geography: (1) the crisis that was initiated in 2008, initially impacting the property market and the financial sector, but which later would have far-reaching socioeconomic effects for the whole of Catalonia; (2) the COVID-19 crisis, which broke out in March 2020 and which is profoundly reconfiguring the lives of people everywhere, including in Catalonia; (3) the geopolitical crisis in Spain and Catalonia, whose origin, as mentioned above, can be traced to 2010; and, finally, (4) the global environmental crisis, which, if we adhere to one of the recent theories about the Anthropocene, began with the industrial revolution but whose effects did not acquire a combined human signature until the last decades of the 20th century or even the beginning of the current one.

The Long Shadow Cast over Catalonia by the Socioeconomic Crisis Initiated in 2008

Although the emphasis of the contributions in the collection edited by Burgueño (2021a) is very much on the pandemic that broke out in 2020 (a crisis that



we return to later), it should be borne in mind that the pre-pandemic situation, to which their authors often refer, is marked by an earlier crisis. In fact, there must be some doubt as to whether this crisis had been fully overcome by this date. Thus, Gutiérrez-Palomero and Domènech (2021), for example, record that the bursting of the housing bubble in 2008⁵ was followed by a period of more than 100,000 foreclosures (evictions) in Catalonia as home owners defaulted on their loans, a devastating situation that persisted with the recovery of housing prices in the years after 2016, when we would enter a new expansionary cycle of the property market. So, although the macroeconomic indicators suggested the crisis had been left behind some seven or eight years after it first broke out, its social effects not only did not disappear, but rather they grew worse and continued to be present throughout Catalonia.

Based on specific data charting the demographic evolution and changes in the labour market, Alberich (2021) and Pujadas and Bayona-i-Carrasco (2021) conclude that as of 2015 Catalonia was enjoying something of a recovery: on the one hand, because the number of people being furloughed fell from almost 80,000 in 2012 to little more than 10,000 in 2016 and, from then until 2019, the numbers held steady at around or below this level; and, on the other, because of the reactivation of immigration, among other reasons, thanks to the recovery of the labour market, with

^{5.} Lehman Brothers filed for bankruptcy on 15 September 2008, symbolising the beginning of the global financial crisis, which would soon affect the rest of the world, Catalonia being no exception.

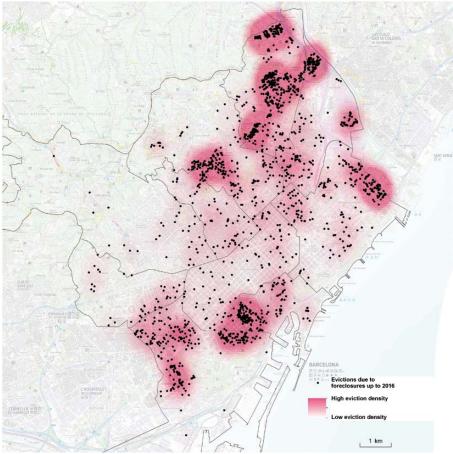
the consequent entry of new population — in 2019, the number of new immigrants once again exceeded an annual figure of 100,000, returning to pre-2008 levels. And yet Pujadas and Bayona-i-Carrasco (2021: 40) point out that "immigration is growing again, not so much because of the incipient economic recovery as because of the persistence of expulsion factors in the areas of origin". Here, they refer above all to Latin

America and Africa, the two main regions supplying population born abroad according to 2020 data (some 1.5 million of Catalonia's present population of 7.7 million inhabitants). In short, towards 2015 these indicators were used to infer the end of the crisis that had begun in 2008, but, as mentioned, other persisting effects cannot be ignored.

A study of the Catalan geographical literature dedicated to the 2008 crisis highlights that the downturn was a consequence of the extraordinary bubble in property prices that formed in the 1997-2007 cycle — somewhat appropriately referred to in Spain as the "prodigious" decade of construction (Burriel de Orueta, 2008). The effects of the bursting of this bubble in Catalonia have been analysed by Domènech and Gutiérrez-Palomero (2018), a book published by the SCG, whose main title eloquently translates as

Landscapes After the Battle: Geographies of the Housing Crisis [Paisatges després de la batalla: geografies de la crisi immobiliària]. This study, as well as that undertaken by Gutiérrez-Palomero i Domènech (2021), shows that the geography of evictions — the most dramatic phenomenon associated with the post-2008 crisis — is highly uneven, affecting, above all, the most vulnerable neighbourhoods, that is, those with the highest rates of

Evictions in Barcelona up to 2016.



Source: Burgueño (2021a: 329).

unemployment, the most non-European immigrants and the lowest levels of education, etc., in such a way that it exacerbates existing socio-economic inequalities. According to Bertran (2021: 218), Domènech and Gutiérrez-Palomero's (2018) study "is the book in the collection [i.e. the SCG collection, comprising 21 works published between 1998 and 2021, one per year, approximately] cited most frequently in the news media, a study that showcases the importance of the contribution of the work of geographers in analysing the main issues of the day".

The social consequences of the post-2008 crisis in Catalonia are clearly captured in the following excerpt:

It had a far-reaching impact on the labour system [...], resulting in a dramatic reduction in jobs and a highly significant increase in unemployment. The most immediate consequences were an increase in poverty and social exclusion for one part of the population and a reduction in the well-being and quality of life for the other part. Over the last decade, [...] [there occurred] a general rise in poverty with a fall in the mean family income, an increase in poor households with dependent children, a reduction in the ability of some families to face unforeseen expenses and a chronification of poverty. [...] Between 2013 and 2018 [as such, well beyond the alleged end of the crisis], there was talk of the risk of the chronification of these situations, and even of the polarisation of the social structure. (Ortiz and Solana-Solana, 2021: 70–71).

Nel·lo and Donat (2014), Prats *et al.* (2015) and Blanco-Fillola & Nel·lo (2018), among others, have dedicated studies to the socioeconomic effects of the post-2008 crisis from a geographical perspective. Of particular note is the geographical contribution made by Nel·lo and Checa (2019) to the report on social cohesion in Catalonia (edited by Cardús, 2019), which focuses on territorial *fractures* or divides and which encapsulates much of this previous research. In this work, the authors return to previous contributions, including Nel·lo (1991, 2001), that showed that the geographical treatment of spatial divides is nothing new, being associated, for example, with the notion of the spatial imbalances which geographers have been concerned with for decades. Nel·lo and Checa (2019) report that spatial divides have increased with the post-2008 crisis with regards to both poverty levels and segregation. This is true of Catalonia as a whole, at the level of the *comarques* (roughly speaking, equivalent to 'counties' in English), but also within metropolitan areas, along urban corridors, and within municipalities, neighbourhoods and even between streets. Indeed, Blanco-Fillola and Nel·lo (2018) show that urban segregation in Catalonia is currently dictated by the obstacles the poorest face to escape the areas they inhabit and, just as much if not more, by the efforts taken by the most affluent to distance themselves from these areas.

In this discussion of the socioeconomic crisis, we cannot ignore questions related to gender inequality. In practice, Catalan Geography has not been slow to adopt feminist approaches (Baylina and Rodó-de-Zárate, 2019). Salamaña (2021) shows that the most feminised sectors of the economy — corresponding to those with a high occupational segregation of women — have been hit hardest by the cuts associated with the post-2008 crisis, the case, in particular, of healthcare and primary and secondary education. This has led to a widespread increase in the precarious nature of both job contracts and wages, with the consequent rise in female unemployment and a greater loss of purchasing power among women workers. In parallel with this, Salamaña (2021) reports that the crisis has led many women to opt for a reduction in their working hours in an effort to reconcile family life with their work and that this has served to widen the gap between women and men.

One notable effect of the post-2008 crisis has been the emergence of gentrification, a term with more than half a century of history — its origins usually being traced to a seminal work by Glass (1964) — but in Catalonia it has only really begun to be used in the last decade, achieving, for example, a considerable presence in the media and in public debates about the city, sparking conflict even in some neighbourhoods (Blanco-Romero and Blàzquez-Salom, 2018; López-Gay, 2021). The epicentre of gentrification is, undoubtedly, Barcelona, where it has been associated with the city's rapid touristification. López-Gay (2021: 352) holds that the emergence of gentrification occurred in the wake of the economic recovery, i.e. around 2015 based on macroeconomic indicators, while Blanco-Romero and Blàzquez-Salom (2018: 10) argue that it was the crisis which began in 2008 that led to a restructuring of capital and the massive buying and selling of real estate by large property holdings and corporations ----in short, a process of property concentration that, ultimately, led to gentrification.

The recovery undergone by immigration has also contributed to the processes of gentrification, above all in the city of Barcelona, particularly since the flows recorded in the second half of the 2010s (an average of more than 25,000 people each year) are no longer dominated entirely by non-European Union, low-income contingents as was the case prior to 2008, and they now include a significant percentage of qualified people (with university studies) from other European countries, that is, with higher incomes (López-Gay, 2021). This new wave of demand is impacting on a property market already suffering the past stresses — including, the so-called, airbnbification (Gutiérrez-Puebla et al., 2017) — and reconfigured, as discussed, by the crisis that broke out in 2008. Closely related to these processes of gentrification, Benach (2021) carries out an analysis based on a deconstruction of the discourse of the city of Barcelona since the 1992 Olympic Games, a subject she broaches in part in an earlier study (Benach, 2015). We have been at pains to emphasise here that this particular crisis ends with the social effects of the COVID-19 crisis, but Benach (2021: 348) stresses that "none of this [what has been observed since March 2020] has been, in fact, the result of the pandemic", stressing that the pandemic has merely served to exacerbate prior processes already in motion and reinforced since 2008: "the urban planning violence and poverty already existed; they form part of a system that is, by nature, unfair and which no vaccine can solve".

The Effects of the COVID-19 Crisis in Catalonia since March 2020

The target set the authors in Burgueño's (2021a) new Geography was to analyse the consequences for Catalonia of the pandemic that broke out in March 2020,⁶ which means here we shall seek merely to sum-

^{6.} Paül i Carril and Trillo (2022) provide a detailed chronology of the out-break of COVID-19 in Catalonia. In February 2020 the first cases had been reported, but it was not until the week commencing March 9 that the spread of the virus led to the taking of a series of unprecedented decisions: on March 12, the first territorial confinement was announced in Conca d'Òdena (Anoia, Central Catalonia) and, then, on the (long) weekend of March 14–15, a series of meeting and debates would end in the declaration of the first 'state of alarm', with a general lockdown of the entire Spanish population.

marise these contributions. To do so, we distinguish between two main blocks of research carried out into this question: first, the effects on the Catalan population and its settlement dynamics; and, second, its impact on mobility and the economy. Between the two blocks we examine a question linked to the first of these, concerning the recent Rural Geography of Catalonia, but which, as we shall see, dates back to a period pre-COVID-19. Finally, two additional lines of research are briefly introduced that are closely related to the geographical studies undertaken on this matter: namely, climate and geopolitics.

In discussions of the demographic impact of the pandemic, Domingo et al. (2021) report quite alarming figures of its effects: some 20,000 deaths attributable to the virus in the first year of the pandemic (from February 2020 to February 2021, that is, 2.7 %)⁷ and a consequent fall in life expectancy of 1.7 years in 2020 (having stood at 83.8 years in 2019). Moreover, Domingo et al. (2021) predict other effects of the disease on Catalan demography in addition to this excess mortality, including a deterioration in health conditions as a consequence of the virus and the impact on other causes of mortality, such as cancer, because they have not been detected in time or it has not been possible to treat them properly. They also predict a further fall in fertility and a stemming of the flows of immigration, changes that, if confirmed by data for 2021 and 2022, will make it difficult for Catalonia to achieve the 8 million inhabitants that demographic models have forecast for the end of this decade.⁸ Finally, it should be borne in mind that Ortiz and Solana-Solana (2021) stress that the impact of the pandemic has been much more marked among the disadvantaged. And, operating within the framework of Gender Geography, Salamaña (2021) shows that women have been particularly affected by the crisis, finding themselves overburdened with reproductive work as a direct result of the lockdowns, the largely mandatory implementation of remote working and the associated psychological effects and impact on wellbeing of having to care for children and dependents.

Baylina (2020), Aldomà (2021) and Nel·lo (2021), in discussing the impact on Catalonia's settlement dynamics, reflect on a certain discourse, widely disseminated in the media since the outbreak of the pandemic, to the effect that because of the virus, there is, or will be, a shift of the population from denser urban areas towards less dense (perhaps, rural) areas. The links between this discourse and that of the sanitary movement of the 19th century and with the idealisation of the countryside (Baylina, 2020; Paül i Carril *et al.*, 2020) are more than evident. However, initial analyses based on data of residential census displacements for 2020 and 2021 indicate that the vast majority (88%) of those recorded from the Barcelona metropolitan

^{7.} For indicative purposes only, and without considering the structural defect of the crude mortality rate, this ratio stood at between 8 and 9‰ between the years 2000 and 2019, except in two years when it fell below 8‰ and one when it slightly exceeded 9‰ (reaching 9.07‰ in 2003, the year of the major summer heat wave). In 2020 it climbed almost two points per 1,000 inhabitants to 10.32‰. At the beginning of 2022, the latest annual crude mortality rate available was still that of 2020. Source: *https://www.idescat.cat/indicadors/?id=anuals&n=10344&col=1* (accessed in March 2022).

^{8.} The latest projection made by the *Institut d'Estadística de Catalunya* ('Statistical Institute of Catalonia', 2021–2071, average scenario) suggests the 8 million threshold will not be reached until 2027. The *Instituto Nacional de Estadística* ('National Statistics Institute' of Spain), which only offers a forecast for the 2035 horizon, also forecasts a Catalan population at over 8 million by that year. Sources: https://www.idescat.cat/pub/?id=proj and https://www.ine.es/prensa/pp_2020_2070.pdf (accessed in March 2022).



region have as their destination other urban municipalities and that only the remaining 12% have taken up residence in municipalities with fewer than 5,000 inhabitants. In fact, it seems that a significant proportion of the residential changes reflect registrations in second homes and that many of these were reversed before the year was out.9 In short, if in certain Catalan rural comargues characterised by depopulation and ageing it was thought that there would be a change in these trends due to an influx of urban population to the countryside, this does not seem to be happening. Another thing is that domestic rural tourism (of Catalans visiting rural Catalan comarques on staycations) has increased dramatically since the summer of 2020, the one immediately following the first strict lockdowns, unlike international urban tourism that visited Barcelona and the coastal regions, which has fallen dramatically since that date (Paül i Agustí and López Palomeque, 2021).

This is an opportune moment to mention a specific characteristic of Catalan Rural Geography that has emerged in recent years in relation to Spanish Rural Geography, and which is in part linked to the pandemic. Spanish Rural Geography has been dominated by the debate on the so-called España vacía or vaciada (empty or hollowed out Spain), a term coined by Del Molino (2016), to such an extent that the 2020 Spanish Rural Geography conference was devoted to this demographic challenge. The debate generated, initially in the media and academic circles, has had a rapid reflection in the political map, with the emergence of provincial candidates in the interior of the peninsula that have won parliamentary seats in the Spanish gene- ral elections and in some autonomous regions, based on the perception of grievances in Spain's rural communities attributable to the cities, above all Madrid (Paül i Carril, 2020; Paül i Carril et al., 2021). The origin of this debate can be traced to 2016, although, since

^{9.} Keynote address delivered by Jordi Domingo "Covid-19 i migracions: parèntesi o canvi de paradigma?" at the IEC on 19 January 2022.

the outbreak of COVID-19, the controversy has been renewed, largely due to the role played by the news media. Indeed, it is argued that it should be possible to correct this negative dynamic, although, if the studies conducted in Catalonia are anything to go on, this does not seem to be happening nor does it seem likely to happen in the foreseeable future.

Yet, in Catalonia this debate centred on an *empty* or hollowed out rural space hardly seems relevant, given that Catalonia's rural communities have, for decades now, presented both positive demographic and economic indicators (Garcia-Coll and Sánchez-Aguilera, 2005; Aldomà, 2009, 2015, 2021), with the result that Catalan Rural Geography has developed in a different direction exploring other avenues of research. In fact, a recent book published in this subdiscipline, co-edited by Cerarols and Nogué (2022), offers a fresh, exciting vision of the Catalan countryside, one that is full of hope for its future. It reports a plethora of positive experiences, which have little to do with the pessimistic discourse of Spanish Rural Geography critical of the recession affecting its rural areas. In many ways, this particular vision of Catalonia's rural geography was already present in previous studies, including that of Monllor (2015) on young rural dwellers. On the other hand, we cannot overlook the fact that Catalan Geography has developed a whole line of territorial thinking on the relationship between Barcelona and Catalonia, embodied in the work of Casassas (1977, 1991), a debate continued in Burgueño's (2021a) new Geography, with the contributions of Castañer and Martín-Uceda (2021) and Nadal (2021), in which it is evident that the nature of the relationship between the capital and the rest of the Catalan territory is highly idiosyncratic.

Having digressed to examine for a moment the concerns of Catalan Rural Geography, we now return to the second block of geographical analyses of the effects of Covid-19 in Catalonia territory focused on mobility and the location of activities. The reduction in mobility that characterised the lockdowns impacted the population enormously, especially in middle- and high-income neighbourhoods, and above all the collective transport sector (Checa et al., 2020; Miralles-Guasch et al., 2021; Nel·lo, 2021). The enforced adoption of remote working constitutes one of the main reasons (Alberich, 2021; Blanco-Romero, 2021). Despite this, it appears that neither international trade nor Catalan internal trade have suffered the effects; in fact, they have actually remained buoyant thanks to e-commerce, although the distribution activity of local, zero-km, trade has been impacted (Carreras and Frago, 2021; Pallarès-Barberà and Vera, 2021; Salamaña, 2021). And, as mentioned, tourist mobility has decreased significantly across the board, with the exception of Catalan domestic demand for Catalan destinations (Paül i Agustí and López Palomeque, 2021). Likewise, urban mobility has been transformed, so that, in the case of Barcelona, for example, there has been a rapid expansion of personal mobility vehicles (bicycles, scooters and other devices), to the detriment of collective public transport (Miralles-Guasch et al., 2021).

One of the main socioeconomic consequences of the COVID-19 crisis has been a new rise in unemployment, which, as we have seen, had recovered in relation to the previous crisis. The unemployment associated with the pandemic has impacted, above all, the services sector, particularly in those coastal municipalities specialised in tourism, both on the Costa Daurada and the Costa Brava (Alberich, 2021). Alberich (2021) reports quite alarming figures: if during the post-2008 crisis almost 80,000 workers were furloughed each year, in 2020 a million workers were affected in one blow, multiplying by a hundred the number of workers affected in 2019. Once again, the impact on female workers has been especially marked, among other reasons, because the destruction of jobs has been higher in the more feminised sectors of the economy characterised, that is, by a high occupational segregation of women (Salamaña, 2021).

One specific outcome of the Covid-19 crisis that should be mentioned here is the improvement experienced in air quality due to the decrease in pollution, especially from transport, during the months of lockdown (spring 2020). This reduction has been clearly documented in the case of Barcelona by Martín-Vide *et al.* (2021). These authors report that during this period the emissions of CO_2 and other greenhouse gases derived from the use of fossil fuels fell. Although the reduction was still insufficient, they conclude that we should have taken advantage of this change in trend to build a new energy model, a critical opportunity given the seriousness of the global environmental crisis (see below for a more complete discussion).

Finally, Paül i Carril and Trillo (2022) adopt an original approach to the study of the Covid-19 crisis that ties in with the discussion in the following section. They employ a geopolitical perspective to demonstrate that much of the debate in the first month of the pandemic centred on the political management of the crisis was a response to the Catalonia/Spain conflict. Their study also emphasises that the post-1978 Constitution "Spain of the autonomous communities" model was put under considerable strain and while



this was not a problem exclusive to Catalonia, the tensions here were notable. Indeed, Burgueño (2021b), Galindo *et al.* (2022) and Trillo *et al.* (2022) highlight these tensions in studies of the specific characteristics of the regionalisation of healthcare in Catalonia, at variance with the regional map of the Spanish State in Catalonia. This, in fact, is not a new topic, since questions concerning political divisions (*organització territorial* in Catalan) within Catalonia is one of the most timeworn aspects — or, dare we say, *the* most timeworn — of Catalan Geography since the foundation of the SCG (Bertran, 2021).

The "Catalan Crisis"

Among the different names coined to refer to the stormy political debate centred on the possible independence of Catalonia over the last decade — the procés, as we have called it so far — the "Catalan crisis" has been one of the most frequently used. However, Geography has not been the most active discipline in the undertaking of analyses of this conflict, although various contributions can be found, for example, Paül i Carril (2021). In fact, of the five chapters of Burgueño's new Geography (2021a) included under the heading Atzucac polític (A Political Blind Alley), only one, that of Paül i Carril (2021), refers directly to the "Catalan crisis", while two of the others - as mentioned above - concern themselves with the relationship between Barcelona and Catalonia (Castañer and Martín-Uceda, 2021 and Nadal, 2021), one focuses its attention specifically on Northern (French) Catalonia (Becat, 2021; we return to this study below) and

a fifth, ironically, is the "*procés* seen by a historian" (Puigvert, 2021).

When all is said and done, the response of Catalan Geography to the "Catalan crisis" has been timid. As Paül i Carril (2021) points out, it is evident that geographers from other parts of the Catalan language area have paid more attention to this conflict — the case, for example, of Rullan and Vives-Miró (2020) based in Mallorca, and the prolific output of Romero (2006, 2009, 2012, 2017) based in the Valencian Country. Significantly, the SCG opted to mark the end of the 2020-2021 and 2021-2022 academic years with address given by Joan Romero and Onofre Rullan, respectively. It would seem, therefore, that in Geography it has been more common to approach the crisis from 'abroad', but based on the proximity that comes from belonging to the same language community. Moreover, and again according to Paül i Carril (2021), in the few studies examining the Geopolitics of Catalonia carried out by Catalan geographers, a largely retrospective historical component dominates, normally starting in modern history, as indeed we began the present article. As such, what can be regarded as being more strictly geographic in nature tends to have less weight in this debate.

One of the motives for the apparent lack of *appetite* shown by Geography for this debate might be attributed to a degree of conservatism, inertia even, among geographers, unable to break free from the political map inherited from previous generations (Paül i Carril, 2021). For this reason, the argument defended by Font (2013) to the effect that Catalan Geography is built on Catalan nationalism must be questioned; at least, it is not especially evident in current academic Geography.¹⁰ This attitude of relative indifference towards internal geopolitics contrasts with the unreserved geopolitical interest aroused from 'abroad', as exemplified by the case of French Geography years ago, with a study dedicated to this question (Loyer, 2006).

Among geographical studies, Nel·lo (2013) offered his own somewhat unique take on the "Catalan crisis", arguing that it had much to do with the effects of the 2008 crisis, which saw many members of the Catalan middle classes embrace independence because they understood that the Spanish Government (or, perhaps, more accurately, the Spanish State as a whole) was not doing anything to help them, rather just the opposite. And, yet, analyses of the electoral geography (including Nel·lo and Gomà, 2018, and Paül i Carril, 2021) fail to bear this out fully, as they do not find a spatial correlation between socioeconomic variables, on the one hand, and electoral behaviour (grouping pro- and non-independent stances), on the other.

Other geographers who have conducted specific analyses that provide a distinct understanding of the causes of the Catalan independence movement include Vicente (2019) and Nogué and de San Eugenio (2020). The former considers that the conflict is due to an 'antagonism of nationalisms' (Catalan and Spanish), where reconciliation is impossible. The latter, on the other hand, recognise the civic, participatory and democratic foundations on which the *procés* is built, disconnected, that is, from more formal party politics. Elsewhere, Olcina (2013), Oliveras i Samitier (2019) and others stress the role played by questions of language and culture as the trigger for the post-2010 "Catalan crisis". Meanwhile, within the framework of the theorisation of the Geopolitics of Regional Planning (Subra, 2007), Giménez-Capdevila (2008) identifies the massive disruption suffered by the suburban commuter rail network in 2007 — associated, in part, with the disastrous work being carried out on the highspeed train project and in the broader context of the highly deficient Spanish State management of Catalan infrastructure — as a possible trigger of the growing support for independence.

Elsewhere, the analyses of electoral geography carried out by Frago (2019) and Paül i Carril (2021) show that in recent electoral contests there has been a contrast between Catalonia's two main metropolitan areas (Barcelona and Tarragona), on the one hand, and the rest of the Catalan territory, on the other. In general, support for independence in the latter area is above the average, while support in the two great metropolitan areas falls below. Yet, it should be borne in mind that these metropolitan spaces contribute hundreds of thousands of votes that are key for the *procés*. Likewise, it ought not to be forgotten that, outside these two metropolitan areas, the urban sys-

^{10.} In the past, a marked Catalan nationalistic sentiment, even pro-independence, was evident among the first generations of the SCG. This was true of Casassas (1977, 1991) and, at an earlier date, of Pau Vila. The latter's writings, included in the anthology edited by Tort (2004), offer little doubt of this. For example, "Now in light of the insistence of the Catalans to reasonably assert *the indisputable right that we have to govern and administer ourselves alone*, now in a generous spirit of brotherhood with the other peoples of Spain, *we are content, instead of the complete freedom that corresponds to us, with autonomy;* [...] the [port] of Barcelona and that of Tarragona [are] [...] the only two ports that really count in our *national* economy. [...] It is a true surpation, because it must be recognised that the *Spanish State has no right to our ports*. [...] [T]hey are, then, very much ours; therefore, as they are consubstantial with our economy, which is the life of us all, we should be able to dispose of the multily. In the *national interest*, the *Generalitat* must act accordingly" (Vila, 1934, in Tort, 2004: 69–71; italics added). Incidentally, these arguments are similar to those of Giménez-Capdevila (2008) three quarters of a century later in a study of the origins of growing sentiments of independence in the last decade.



tem is particularly dense (Casassas, 1977, 1991; Nel·lo, 2001; Aldomà, 2015), so that we are not dealing with a simple rural/urban divide. Indeed, *comarques* such as Penedès, which is often considered "metropolitan" (Paül i Carril, 2017), are markedly pro-independence in terms of their voting behaviour (see map 19: Distribution of electoral support for independence by basic health areas in the 2017 election).

As mentioned above, a fairly unique geographical contribution is provided by Becat (2021), in a study that seeks to relocate Northern Catalonia - under French sovereignty since the 17th century — within Catalan territory, by describing, for example, its contribution to the procés, by providing storage for the ballot boxes that were to be used in the 2017 referendum and which the Spanish authorities sought to confiscate. Becat's (2021) point of view, together with the geographical gaze — as discussed — from other territories in the same language area as that of the "Catalan crisis", highlight another issue that is also key in this debate, namely, the deployment from a geopolitical perspective of the Catalan-speaking territories - often referred to as the Països Catalans ('Catalan Countries') (Rullan and Vives-Miró, 2020), albeit a name that attracts few adherents, especially in the Valencian Country. Without specifically invoking this name, Boira (2011, 2021) has referred on numerous occasions to the consolidation of a Catalan-Valencian corridor as being key for both regions in their efforts to counter the influence of a radial Spanish system centred on Madrid. In all circumstances, this is a geopolitical reading subordinated to present-day

Spain, in line with various geographers who maintain that "[a]n independent Catalan republic might be the wish, but it is one that is quite removed from reality" (Oliveras i Samitier, 2019: 54).

Oliveras i Samitier (2019) and Rullan and Vives-Miró (2020) offer a list of possible ways out of the "Catalan crisis", which range from upholding the *status quo* to independence, passing through various intermediate steps of (con)federalism of the Spanish State. Whatever the outcome, since the Covid-19 crisis — and even before — geographical research has confirmed the consolidation of a Spanish nationalist position as part of a recentralising position that seeks to reconfigure the "Spain of the autonomous communities" introduced with the 1978 Constitution (see, among others, Giménez-Capdevila, 2008; Romero, 2006, 2009, 2012, 2017; Vicente, 2019; Rullan and Vives-Miró, 2020; Paül i Carril, 2021; Boira, 2021; Paül i Carril and Trillo, 2022).

Finally, an issue that bears a close relation to the "Catalan crisis" has emerged in the study of borders, as Paül i Carril and Trillo (2022) report. They refer not only to the present-day international borders, but also to Catalonia's borders with Aragon and the Valencian Country (internal borders within Spain). This question is a longstanding one in Catalan Geography (Paül i Carril, 2017) and one that the emerging agenda of Border Studies has brought to the forefront once more (Paül i Carril *et al.*, 2017), while it has also gained increasing relevance as a result of the *procés* and its current, or potential, geopolitical fallout. Specific exam-

ples of this academic output include analyses of the creation of a cross-border Euroregion - often seen as emulating the so-called expanded Països Catalans or the former Crown of Aragon (Durà and Oliveras González, 2010; García-Álvarez and Trillo, 2013) —, the cooperation established between the autonomous community of Catalonia under Spanish sovereignty and the département of the Pyrénées-Orientales - coinciding largely with Northern Catalonia under French sovereignty — (Castañer and Feliu, 2012; Oliveras González, 2013; Berzi, 2017; Paül i Carril et al., 2017; Becat, 2021) and the problems created by the borders between the autonomous community of Catalonia, on the one hand, and those of Aragon and the Valencian Country, on the other (Sancho and Tort, 2012; Tort and Galindo, 2018).

The Global Environmental Crisis and its Impact on Catalonia

An entire block of contributions to Burgueño's (2021a) new Geography, under the heading "Environmental Emergency", addresses the global environmental crisis, from which, of course, Catalonia is not immune. Chronologically, this crisis cannot be compared to the three crises analysed up to this point, all of which can be clearly delimited in time, since its origins cannot be pinpointed with any accuracy.¹¹ In Catalan Geography, Boada and Saurí (2002) wrote a key book focused on *global change*, which might well mark

^{11.} Any discussion of the debate concerning the onset of the global environmental change lies outside our remit here. Having said that, a consensus appears to have been reached to the effect that the 18th century represented a point of no return in the acceleration of the anthropic impact on the Earth's natural systems, although these effects on the environment are clearly observable since, at least, the Neolithic and many of the indicators employed to speak in terms of the Anthropocene did not begin to rise dramatically until well into the 20th century –the 'Great Acceleration' (Castell and Terrades, 2019).



the awakening of interest in this matter. These authors illustrated the magnitude of the planetary change induced by mankind by resorting to studies previously conducted in Catalonia, for example, in the Montseny natural park. In the words of Ribas (2021: 252), recorded in Burgueño's (2021a) new Geography "by global environmental change we understand the alterations caused by human activities to the functioning of the natural systems, the effects of which cannot be assigned to one specific location, but rather they affect the whole of the Earth".

It is significant to point out here that Javier Martín-Vide, one of Catalonia's most highly renowned geographers, was to change his opinion in the early 2000s about the causes of the variation in climate recorded in preceding decades. Having previously maintained that it was attributable to natural climate variability, he was to recognise that it is a consequence of anthropic action (Martín-Vide, 2007). His shift in thinking coincided with the period between the third and fourth reports issued by the Intergovernmental Panel on Climate Change (IPCC), that is, between 2001 and 2007, when the claim that climate change is "likely" caused by human action shifted to a recognition of the fact that this was a "very likely" explanation. In fact, from the fourth report onwards (2007), Martín-Vide has participated in the IPCC reports and coordinated the third report on climate change in Catalonia (Martín-Vide, 2016), the conclusions of which he examines (Martín-Vide, 2021) in his contribution to the book edited by Burgueño (2021a).

Martín-Vide (2016, 2021) documents that the climate of Catalonia is currently warmer than a century ago, with statistically significant rates of temperature



increase, corresponding to a "very high level of confidence". This results in a greater recurrence of tropical (minimum temperature of >20 °C) and torrid nights (>25°C) in summer, particularly in cities, with a notable contribution from the urban heat island. On the other hand, rainfall does not show a statistically significant trend during the same period, despite the fact that water needs are greater because the temperature rise increases evapotranspiration. Looking to the future, Martín-Vide (2016, 2021) and López-Bustins and Martín-Vide (2020) indicate that climate projections foresee marked increases in temperature, even if global emissions of greenhouse gases decrease - something that is not occurring but, if it were to occur, the inertia of the climate system would not facilitate a direct change in the trend either. The climate models also predict a reduction in annual precipitation, with greater annual and interannual variability and a consequent increase in droughts.

As Martín-Vide (2007) explains, the atmosphere is fully interrelated with the hydrosphere, the lithosphere, the biosphere, the cryosphere and the socioeconomic system, so that climate change interacts and has effects on these other five components. Summarising the research carried out on this crisis, if we adhere to the sequence adopted by Burgueño (2021a), the first aspect to consider is hydrology, the focus of the study by Farguell and Pavón (2021). On the one hand, these authors show how rates of river discharge are tending to fall, largely because the increase in forested areas traps or intercepts a good part of the precipitation as occurs in the Montnegre mountains, according to Otero et al. (2011). On the other hand, Farguell and Pavón (2021) observe an increase in the recurrence of flooding, a phenomenon studied by other geographers, including Aldomà (2007) and Ribas et al. (2020). This trend correlates with an intensification of rainfall irregularity, but also with an increase in vulnerability.

Here, it is worth mentioning that in 2020, the SCG journal, *Treballs*, published a special issue, coordinated by Ribas and Saurí (2020), dedicated to Storm Gloria, an extreme meteorological event that occurred in January of the same year. Much of the work focused on floods, for example, Pavón and Panareda (2020) studied the Tordera basin and Ribas (2020) the Ter basin. The special issue also contains a number of studies based on what is strictly climate research that debate whether Gloria constitutes a short- or medium-term episode of climate change (Barriendos and Barriendos, 2020; López-Bustins and Martín-Vide, 2020), while other contributions examine the storm's impact on coastal areas (Blay and Àvila, 2020; Pintó *et al.*, 2020; Santasusagna and Tort, 2020).

Another aspect that tends to correlate with climate change is the coastal regression being experienced in Catalonia due, among other phenomena, to the rise in sea level attributable to the melting of planetary ice masses. This process is, in turn, associated with the major artificialisation of the coastline and a decrease in the sediment levels provided by the rivers, due, among other factors, to the building of reservoirs. Pintó (2021) focuses on these processes, reporting evidence of the regression of the three main Catalan deltas: the Ebro, Llobregat and Tordera. Yet, Pavón and Panareda (2020) explain how the latter actually grew due to the effects of Storm Gloria. Pintó et al. (2020) also refer to this delta and extend their reflections to the whole of the Catalan coast. Blay and Avila (2020) specifically analyse the case of the regression of the Ebro Delta, a particularly heart-wrenching account. It should be noted, here, that a number of geographers, including Josep Pintó, have participated in joint studies led by experts from other disciplines, the case, for example,

of the third of the reports on nature in Catalonia entitled *Natura, ús o abús?* [*Nature, use or abuse?*] (Folch *et al.*, 2019), in which the chapter on the coastline was contributed by Pintó *et al.* (2019).

Turning to the cryosphere, studies here connect with a deep-rooted line of Geomorphological research in Catalan Geography (Oliva, 2018). To give a recent relevant example, Oliva *et al.* (2019) analysed the almost absolute contraction of the cryosphere in the Pyrenees, correlating it with global environmental change.

Mention has already been made of a number of studies that report the increase in forest area in Catalonia and how this affects runoff (the case of Otero et al., 2011 and Farguell and Pavón, 2021). In Burgueño's (2021a) new Geography, Panareda (2021), Pèlachs and Vila-Subirós (2021) and Úbeda (2021) also address this problem. These geographers have vast experience in the study of the environment, especially its vegetation, from different perspectives. One that we wish to highlight here is the increase in, and also the deseasonalisation, of forest fires due to climate change, with an increase in the intensity of the large fires that affect wooded areas, with more and more episodes occurring out-of-season in autumn, this despite the fact that it is the season marked by the highest rates of rainfall in most of Catalonia and, therefore, when there is most humidity available (López-Bustins and Martín-Vide, 2020). Indeed, if we correlate forest fires and torrential equinoctial rains, it is clear that the intensity of flood events increases.

Panareda (2021), Pèlachs and Vila-Subirós (2021) and Úbeda (2021) also all confirm changes in biodiversity and the landscape — in particular, the reduction of areas dedicated to crops and of agroforestry mosaics, which has consequences not only strictly for the environment, but also for food security in Catalonia and its sustainability (Paül i Carril, 2009). Here, studies confirm that protectionist policies and the proactive management of nature and landscapes have been limited, despite the fact that various geographers have been particularly active in such efforts. This is the case of Joan Nogué, as illustrated by the vast literature produced during his years heading the Landscape Observatory (2005-2017), above all the seven landscape catalogues prepared under the auspices of the *Generalitat*¹² (Nogué *et al.*, 2016). The importance of Joan Nogué's research is also evident in his contribution to an edited volume on the Anthropocene, directed by Castell and Terrades (2019), in which he analyses the state of Catalan landscapes (Nogué, 2019).



The global environmental crisis has initiated a profound reconsideration of the need to change the energy model, a change that involves a reduction in the use of fossil fuels and, in parallel, the promotion of renewable energy sources such as solar and wind power. In this discussion, Saladié Gil and Saladié Borraz (2021) ask whether such a global energy transition is actually taking place, supported by a radical reset of political thinking, but they find the answer to be negative. However, this is by no means a new issue if we consider that the conflicts centred on the expansion of wind farms, especially in the Terres de l'Ebre (the southernmost Catalan region), have been raging since the beginning of the present century, as reported at the time in the edited work coordinated by Nel·lo (2003) and, more recently, in the specific study undertaken by Saladié Gil (2018).

Conclusions

As we have seen at the beginning of our discussion here, the dust jacket of the book coordinated by Burgueño (2021a) defines the current situation as a period of "multi-crises" and Catalan Geography has certainly not been immune to these upheavals at this the start of the 21st century. Indeed, it has had to respond in real time to the multifaceted manifestations of the crises throughout the geographical region, including floods, elections, lock-downs and evictions, to mention, in reverse order, significant examples of each of them as discussed in the preceding paragraphs. We can, as such, conclude that Catalan Geography has been able to overcome the usual geographical preference for the recent past (Haggett, 1975), which Mendizàbal

^{12.} From the Landscape Catalogue of the Terres de Lleida, in 2008, to that of Central Catalonia, in 2016. The eighth catalogue, dedicated to the Penedès, is currently under preparation, and re-plans a region which to date has been the subject of three previously approved catalogues by the *Generalitat*. See *http://www.catpaisatge.net/cat/catalegs.php* (accessed on March 2022).

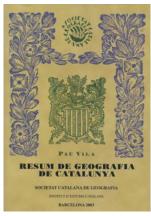
(2013) summed up with the claim (or curse, perhaps) that "there is no Geography that is not Historical Geography". In fact, as we have seen in this review, many studies have been published the same year, or the year after, the events occurred: Storm Gloria, political demonstrations, the gentrification of city neighbourhoods, etc. We have even reported climatic or demographic forecasts — to give two highly credible examples — which show that Geography has acquired the capacity to make future projections. Likewise, as we have also shown, many geographers have been involved in the discipline's applied dimension, including that of politics, and have participated in decision-making in areas that range from landscapes, city neighbourhoods and housing to river basins, to mention again the examples described in the preceding pages.

However, this ability to conduct geographical analyses of Catalonia that has developed in the course of the last decade should not be separated from the sustained tradition enjoyed by Geography as a consolidated science in Catalonia. Hence the constant references made, as facilitated by Bertran (2021), to the history of the SCG, which is the history of the geographic discipline in Catalonia. Similarly, we should stress that many of the considerations made about the current crises refer to works by previous generations of geographers, for example, by many of those who participated in the *Geografia de Catalunya* by Solé i Sabarís (1958-1974), reflecting on such concerns as spatial imbalances, spatial and regional organisation, borders, evolution of vegetation cover, etc.

According to Oliveras i Samitier (2020) and Bertran (2021), the vehicle of expression of the first generation of SCG geographers was the regional monograph conducted at the scale of the *comarca*. One of the first and best known was a study of La Cerdanya (Vila, 1926), later analysed by Nel·lo (1984), Tort (2004, 2019) and Oliveras i Samitier (2020). Indeed, Solé i Sabarís and Vila (1964) would return to the geography of this comarca four decades later and update its contents. In Paül i Carril et al. (2017), we argue that this comarca constitutes a highly convenient "laboratory" for examining the evolution of the geography, as well as the Geography, of Catalonia. Today, this comarca is dependent on winter tourism and the property sector and, as a result, it has been hit hard by the post-2008 crisis, with a property market that has become dissociated from the territory itself. It is also suffering the problems of sustainability faced by the snow sports sector due to the global environmental crisis. In addition, its cross-border character has led to it being the object of practices of cooperation, including a cross-border landscape plan (Nogué and Sala, 2016) and the only truly cross-border hospital in Europe (Berzi, 2017; Paül i Carril et al., 2017), which has adopted fairly unique management practices during the Covid-19 pandemic, a crisis characterised elsewhere by the strengthening of the borders between the Member States of the European Union (Galindo et al., 2022; Paül i Carril and Trillo, 2022). Indeed, La Cerdanya has been one of the main scenarios for this crisis, at least in the media, due to the massive arrival of those living in Barcelona to take up residence in their second homes, despite restrictions on mobility. Nor should we forget the geopolitical role that this *comarca* has played in the peculiar deployment of the Northern and Southern Catalonias (Becat, 2021), a question that Vila himself (1926) had, in his way, earlier addressed. In short, thanks to this unique "laboratory", the continuity between tradition and current research in the Geography of Catalonia is made patent.

At the present juncture, the current political-administrative map, and the mental framework of the nation-states that have determined it, appears to hold sway in Catalan Geography. Indeed, with the exception of the aforementioned chapter dedicated to Northern Catalonia (Becat, 2021), the other Catalan-speaking territories (the Valencian Country, the Balearic Islands, Andorra, the Franja of eastern Aragon and L'Alguer in Sardinia) are as good as absent from the discussions included in Burgueño (2021a). Nor do they get a mention in their role as neighbours of Catalonia. However, the vocation of the SCG, in keeping with that of the IEC, is to protect and to take a broader perspective on all of these areas, in line with the best Geography of one of the classic geographers in the history of the SCG according to Bertran (2021): that is, Deffontaines and his essay on La Méditerranée ca*talane* (1975).

Although the Geography of the incipient SCG produced a *Resum de Geografia de Catalunya* [A Brief Geography of Catalonia] by Vila (1928–1935, reissued



by the SCG in 2003 with a prologue by Tort, 2003), we would have to wait for the *Geografia de Catalunya* edited by Solé i Sabarís (1958–1974) to have a monographic work specifically conceived as such, among other reasons, because Vila (1928–1935) divided his Geography in three major regions — coastal and

pre-coastal, the Central Depression and the Pyrenees/ Pre-Pyrenees — and, therefore, he did not provide a global overview of the territory of Catalonia. Since then, the Geographies that have been produced (for example, the work edited by Majoral, 2002), have adopted approaches and include contents that coincide with those of Solé i Sabarís (1958-1974). In contrast, the work of Burgueño (2021a), which we have reviewed closely here, has involved a reorganisation of the classic sequence of contents of a Geography of Catalonia, witness for example the interpretation made by Nel·lo (2021) of the five "territorial challenges" that Catalonia faces and which we have listed in the introduction to this contribution, and the organisation of the edited work in five major blocks: public healthcare issues, the economic impact of the Covid-19 crisis, the environmental emergency, urban conflicts and the (geo)political situation. We think that this innovation responds to the adaptation that Geography has undergone with respect to this period of "multi-crises", which we have focused on here in our discussion of four different, albeit interrelated, crises. However, it is not, we believe, entirely appropriate to consider it a new Geography, as Burgueño's (2021a) title suggests — if anything a *renewed* Geography — given that the work continues to be rooted in a well-established tradition (Bertran, 2021).