

"A social neuroscience depiction of Catalanian secessionism as
a far reaching mass movement" —Francesco Olivo, *La Stampa*, Torino

The Secessionist Passion



Psychobiology of
Catalonian Push
for Independence

Adolf Tobeña

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Summary

The secessionist tensions lived in Catalonia between 2010-2017 have been contemplated with undisguised surprise because they erupted in a rich and advanced society, without intolerable abuses from Spanish state or deep social fractures. Despite a bulk of interpretations, the dominant feeling has been bewilderment: why did it happen? why now and with such a display of urgency and enthusiasm? and why, especially, in that European corner and not in others? Among economic and socio-political diagnosis linked, mostly, to immediacy factors - economic recession, rigidities of the old nation-state framework, fragility of the European Union power— there has been a total absence of references to deep psychological vectors. Behind the outbreak of movements for conquering long dreamed horizons of national sovereignty, there are ingredients that require a dissection from the psychobiology of political behaviour. In this essay, I explore ingredients of the ethno-cultural border and its associated frictions with the aim to deepen the understanding of such secessionist outbreak. My point of departure will be the following: when human communities with strong territorial and cultural ties resort, with obstinacy and over different historical periods, to ignite animosities and disputes with close neighbours, evolved psychobiological vectors are at work. Through an incursion into the research frontiers of the psychobiology of gregariousness, ethnocentrism and xenophobia I uncover springs of nationalisms rooted on identity traits. Now there are sufficient data ranging from genetics of prosocial and ethnocentric tendencies to the social psychology of intergroup conflict, as well as the neuroimaging and neuroendocrinology of ingroup/outgroup biases, to sustain a fruitful exploration. I will marshal findings that provide scalpels

to dissect: 1. Psychological traits and propensities at enduring barriers among neighbouring communities that permit to raise recurrent ethno-national frictions, whatever the political framework and the historical situation; 2. The essential ingredients and pathways that facilitate the eruption of factionalisms and segregation movements even in affluent and advanced societies. The key focus will be the secular stake “Catalonia vs. Spain” which I know best, besides having achieved international resonance in recent years. My purpose, however, is generalist and I devote occasional visits to similar conflicts in other places.

Keywords: *Secessionism, Intergroup conflict, Ethnic conflict, Gregariousness, Parochialism, Ethnocentrism, Xenophobia, Social Brain, Neuroimaging, Ingroup love, Outgroup hate, Propaganda, Political power, Catalonia, Spain, European Union.*

Preface
Ballots for secession in Europe.

Against all prediction, nationalistic movements rooted on strong ethno-cultural traits are labouring in fully open and democratic societies, as an optimal fuel to ignite secession conflicts. Contemporary Spain is a perfect example of that: after forty years of devolution rules that provided wide autonomy to its regions, old litigations between some provinces and central State have not been solved. The big umbrella of the European Union is not doing better at all. The European unification experiment looked as a perfect frame to dilute secessionisms or regional demands for special recognition, but the current scenario looks quite the opposite: national confrontations have reappeared in aggravated forms and neither the economic downturns or the accompanying social unrest offer solid bases for truly convincing analytical dissections of this issue.

The secessionist tensions recently lived in Scotland or Catalonia have been prominent, presenting challenges which have been contemplated by their close neighbours, the British and the Spaniards, and by distant observers as well, with undisguised surprise and annoyance. The conflicts brought about by those secessionist claims are not, however, a specifically European problem but a global issue with oscillating manifestations everywhere. The curious thing about Catalan or Scottish separatist impulses, however, is that they erupted with unusual vigour and excitement in free, rich and advanced societies, and without intolerable abuses from central governments or deep social fractures that could justify them. That makes them very peculiar phenomena, with the

only precedent of Quebec separatism in Canada. But in my view, that uniqueness, the fully open and relatively comfortable context does not remove these disputes, arising within the European mosaic, from typical ignition fronts of the most enduring and primal ethnic conflicts.

The undeniable novelty is the massive and urgent claim to go to the polls as a civilian procedure to elucidate an irreversible segregation from highly intertwined and centuries' old political unions. Despite the variety of interpretations which have been dedicated to both Catalan and Scottish outbreaks, the dominant feeling has been bewilderment: why did it happen? why now and with such a display of urgency and enthusiasm? and why, especially, in those European places and not in others? Among the bulk of economic and socio-political analysis linked, mostly, to immediacy factors –economic crisis, rigidities of the old nation-state frameworks, ambiguities and chronic fragility of the European Union– there is an almost total absence of references to deep psychological vectors.

When such confusion appears, it is a common temptation to resort to psychopathological pseudo-explanations: transient delusions or maladaptive reveries that would penetrate the collective mind of some communities abruptly and inexplicably. That argumentative resource is common, although no one provides solid data about the operation and effects of such anomalous ravings in need, presumably, of urgent psychiatric intervention. Meanwhile and with so great a distraction, focus is diverted and the exploration of core elements of normative group psychology is omitted. Behind the germination and outbreak of collective movements for conquering long dreamed horizons of national freedom, there are ingredients that require a detailed dissection from the psychobiology of political behaviour. The analysis of evolved propensities for coalitional combativeness which probably derive from an ancient history of competition and fights

between groups. In this essay, I will explore the ethno-cultural border and its associated frictions with the aim to deepen the understanding of a normative phenomenon and to rule out also the useless tendency to apply nebulous psychopathological mediation.

My point of departure will be the following: when human communities with strong territorial and cultural ties resort, with obstinacy and over different historical periods, to strengthen intragroup cohesion and coalitional forces for using them to start animosities and disputes with their neighbours, evolved psychobiological vectors at the service of intergroup competition are at work. Through an incursion into the research frontiers of the psychobiology of gregariousness, ethnocentrism and xenophobia, I will try to uncover the primary springs of contemporary nationalisms rooted on identity traits. Now there are sufficient data ranging from genetics of prosocial and ethnocentric tendencies to the social psychology of intergroup conflict, and through the neuroimaging and neuroendocrinology of ingroup/outgroup biases and affects to warrant fruitful explorations. I will marshal a collection of cohering findings which will provide scalpels to dissect: 1. The attributes and traits at these enduring barriers among communities that permit to raise recurrent ethno-national problems, whatever the political framework and the historical situation; 2. The essential ingredients and pathways that facilitate the ignition of factionalisms and segregation movements even in affluent and advanced societies.

The key focus of my scrutiny will be the secular stake “*Catalonia vs. Spain*” which I know best, besides having achieved international resonance in recent years with the frantic boiling of secessionism demands. My purpose, however, is generalist and I will devote occasional visits to similar conflicts, among neighbours, in other places. The book is dedicated to diving into the psychobiology of evolved attributes of social behaviour at these

ethno-cultural hiatus, which are related to the proclivity to trigger severe intergroup conflicts. For this goal the stubborn, persistent and, occasionally ominous Catalan problem comes in handy. As it has acquired recently threatening tones for a segment of the citizens who live on the North-eastern corner of the Iberian Peninsula, it is an excellent testing site to confront the diagnostic tools which I intend to apply.

After a brief introduction, the first two chapters (2-3) are devoted to describe the recent wave of Catalanian secessionism using a selection of sociometrical figures coming from official surveys and electoral results. Chapters 4-5 offer an overview of the neurobiology of gregarious propensities in humans, through a detailed discussion of relevant findings about social conformity and obedience to peer pressure, as well as aggregation phenomena within social networks. Whenever possible these effects are linked to the brain mechanisms that may mediate them, using neuroscience findings. Chapter 6 describes peculiarities of the reach and indoctrination power of the media in Catalanian society, using again sociometrical data from official surveys. Chapter 7 discusses several social psychology experiments about the power of contextual pressure through using symbolic signs as national flags, in different countries. Chapter 8 describes the properties of both sides of parochialism: helping ingroup members and derogate outgroup members. It does so through the analysis of behavioural experiments with *kibbutzim* in Israel, and of neuroimaging studies with army officers and soccer fans in Switzerland, which have permitted to map the neural circuits which are behind such robust and opposing tendencies. The role played by several neurohormones inducing these parochial traits to help comrades and harm enemies, are also discussed. Chapter 8 describes the roots and varieties of ethnic conflicts through the world and their links to contemporary struggles for secession in advanced democracies. The last three Chapters (9-11) return to Catalanian social land-

scape to discuss: 1. The role of leaders, celebrities and local soccer fandom; 2. The paucity of response by Spanish intellectuals and the curious and long-lasting paralysis of the central government; 3. The useless recurrence to the pseudo-explanations of (absent) collective psychopathologies, for these secession movements. The Epilogue and Postscript (12-13) offer a general overview and recapitulation.

It may be helpful to enumerate, at the outset, the ingredients of the diagnosis that I am going to elaborate and work on throughout the essay. The basic frame of vectors for this interpretive incursion to the wave of secessionism in Catalonia is the following:

1. The secessionist agitation in Catalonia has offered extraordinary features, but it is a fully normative phenomenon within political disputes between neighboring ethno-cultures. There is no madness or lunacy at all within the recent Catalan movement for independence.
2. Although it tends to present itself as a spontaneous and reactive mobilization in the face of reiterative exactions and deep grievances by the central Spanish power, Catalan secessionism is a movement conceived and directed by local elites, widely interconnected with the Regional government.
3. These ruling elites needed a broad base and outstanding persuasive abilities to trigger, expand and maintain a restrained and enduring collective rebellion like the one lived in Catalonia in the last decade.
4. In communities with an old cultural tradition and strongly rooted in a territory, as is the case, propensities towards ethnocentrism and gregariousness are always latent and operative.

5. If these common psychological features at the inter-group frontier are supplemented with persuasive propaganda to accentuate chauvinist tendencies and an activism subsidized by a tenacious provincial power, such combination can result in abrupt episodes of demand for “national” recognition or secession claims.
6. To analyze and discern the role of these psychological features amid a raging conflict, the research agendas of Social Psychology and Neuroscience of political behavior are inexcusable and they have been used as prevailing criteria in the present analysis.
7. In Catalonia, there has been an upsurge of political passion that has grown and seduced almost half of its population. A passion nourished by the vision of an immaculate horizon built and inhabited with the parade of virtues that adorns a community who tends to venerates itself.
8. At the same time, the domestic political front was increasingly polarized and an internal frontier that had been apparently sealed was excavated. The pre-existent ethno-cultural hiatus between native Catalan citizens plus the assimilated ones, and that formed by the successive migratory waves of the twentieth century, not completely assimilated, has been deepened.
9. The consequence of all this is a persistent and ominous tie between the options of disengaging or not from Spain, which maintains those two halves of Catalan population on an expectant and tense mood while observing with apprehension their respective forces. A stubborn tie that no one knows how it will work out.
10. A prudent, patient, calm and, in many respects, surprising “wait and see” attitude has prevailed during this hectic and challenging period, both by the Spanish government and the European institutions [see footnote p. 189].

My aim is to address an audience eager to confront an essay of some depth about political psychology. The book derives from a lecture given first at Barcelona and Madrid, at the spring 2014, repeated afterwards at other sites across Spain and within a Seminar at the European Parliament, Brussels, the 26th of April 2016. I've sought to maintain the direct style of these lectures, making available a string of findings which can be a bit demanding. I'll jump often from tips of social chronicle or from the typically oscillating data of political surveys to complex neural explorations and studies of cognitive functions which can sometimes be intimidating. But I have tried not to overwhelm and above all, never to bore.

Chapter 1

A spring lecture in Madrid.

On the evening of May 20, 2014, I gave a lecture in Madrid that was entitled: “*The secessionist communion: psychobiology of nationalistic gregariousness*”. It was to be held at the Fine Arts Circle but the impending European elections had unleashed a fierce competition for downtown places and it was transferred to the Alcazar Theatre, one hundred meters further up Alcala St., heading towards Sol Square, at the very centre of Spain capital city. UPYD¹ summoned as a sponsor of a series of cultural events to give substance, so they said, to political debates and rallies. The publicity of the event, on the street, was null: only two men were located on the sidewalk next to a banner with the party’s logo and handing out pamphlets to evening bystanders. At the appointed time about seventy people had gathered and were seated in a coquettish room with an air of a dancing cabaret, on a penthouse above the theatre. Lagging persons were standing in the background and the organization decided to start with exquisite timeliness.

The ceremony was presented by Ms. Teresa Giménez-Barbat, a cultural activist and candidate for the European Parliament who concurred in a good position on the UPYD electoral list, with prospects of reaching a seat in Brussels.² The idea of livening up the political campaign with lectures and discussions

1. UPYD: “Unión, Progreso y Democracia”, a liberal Spanish party founded by Basque intellectuals and politicians that introduced a potential third option between the hegemonic main right-wing and left-wing Spanish parties, at the start of this century. It was later on substituted in that function by younger parties that emerged with great force.

2. These expectations were unmet, initially, because UPYD only got four EU seats. At the end of 2015, however, Ms. Giménez-Barbat got a seat at the EU Parliament substituting colleagues who returned to Spanish politics.

on topics at the frontier between science and society was hers. I willingly agreed to participate because I value her task at “*Third Culture*” [<http://www.terceracultura.net/tc/>], a platform for dissemination of scientific thought that brings together a handful of passionate activists who cultivate links between science, arts and humanities.

I had given that lecture two months before at Bellaterra Campus, as a part of the “*Brain Awareness Week*”, invited by my colleagues at the Institute of Neurosciences of the Autonomous University of Barcelona (UAB). The organizers, anticipating a great interest given the subject and the growing political tension within Catalonia, reserved the noblest and widest conference room of the Medical School and assigned to it a perfect time around noon. Although the event was announced for days on the front page of the UAB website and got adequate diffusion from the Press Office of the University, the turnout was low: the audience did not reach forty people and most were researchers from the Institute of Neurosciences, usual attendants to the biweekly seminars. People from the rest of the Campus were scarce. It became hence an academic internal seminar with zero impact.

At Madrid, I began cautiously because I detected a mixed audience and the talk was rather serious and heavily loaded with images and graphics to be displayed on the screen arranged in a corner at the back of the stage. I warned everybody from the start to be prepared to go through a torrent of data for an hour. Just after five or six minutes and still at the introductory part, I quickly walked towards the screen to signal and highlight a statistic when I realized, too late, that the stage culminated in an unannounced side step and losing walk, I fell hitting against the floor and disappearing out of sight of spectators. In trying to stand up I saw the eyes of stupor of several people who had rushed to help me. I calmed them down as I checked if my

chassis seemed intact (although in pain), and returned to the stage getting a standing ovation from an audience that feared, for a moment, that the performance had finished there.

From there I presented the stream of studies that form the nerve of this essay. I noticed that everyone (or almost) followed with interest, there were even demands to seek clarifications on data and graphics and, at the end, the debate was lively and relevant. We closed still in full discussion at 9:30 p.m., because that was the agreed schedule. The organizers took me to dinner at an Asturian restaurant with premises in the nearby Prado St., and we were served a vegetable stew and hake in green sauce. I tried to recover myself from the session and the whack, listening to other fellows who had went out very talkative from the ceremony: debating with Ms. Giménez-Barbat and the journalist Arcadi Espada were several youth and seniors members of UPYD, university colleagues Ricardo Moreno, mathematician and philosopher at the Madrid Complutense and Ramon Colom, a psychologist at the Autonomous University of Madrid. We paid the bill to neck, I felt that my lecture had attracted little consensus among these guests and headed for the hotel, in Alcalá St. again. As I undressed to get into the shower I checked that the fall had left various marks and an open injury on the right leg with bleeding and swelling on the anterior part of the tibia. I walked in pain and limping about three weeks afterwards because of the bruising, and the wound left a trace at the skin that seems indelible.

Early next morning an insistent phone call took me out of the bath while still drowsy. A producer from the morning magazine of *Catalunya Radio* at Barcelona (a program followed by hundreds of thousands of listeners) wanted to know what studies had proved that Catalan secessionism might be linked to a biological abnormality, as it had appeared in press releases summarizing my lecture at Madrid, the night before, with the

consequent turmoil in social networks. I was offered a quick phone conversation of a minute or a minute and a half at most, to explain myself answering questions from the magazine conductor Ms. Mónica Terribas. I told the producer that it is my policy not to participate ever in short radio “spots” and much less on a complex issue. I offered to keep an in-depth interview (fifteen minutes was enough, I insisted), the next day in Barcelona or whenever they wanted. She replied that she had to enquire about that and promised to phone me back. By mid-afternoon, then back at home in Sant Cugat village, she called again to insist on the question of clarifying what kind of studies supported the existence of “brain defects” linked to secessionism. I patiently explained her that this was ridiculous, a clumsy misrepresentation of what was discussed at the Madrid lecture where the topic had been the biology of gregariousness using multiple examples in addition to political rallies (some from football fandom, using the tension between followers of Real and Atletico, in Madrid, who had crucial matches these days), and I asked about the interview. She answered that she needed to consult it again and she’ll be back soon. She hung up and I never knew anything else.

It must be said that I collaborated on a regular basis with *Catalunya Radio*. It was a “domestic” conversation, so to speak. The next day, in the afternoon, I went to the station headquarters to record one of the programs that were broadcast daily at night. Nobody told me anything but I felt inquisitive looks on all offices and corridors where I walked. After the festive recording (a whole hour talking about “nakedness”: it was an entertainment program entirely dedicated to sex habits), the conductor, Ms. Maria Pau Janer, asked me a few minutes to talk alone. We seated on an empty recording studio and looking at me with a face of great concern she asked if it was true that I had explained at a lecture in

Madrid that Catalan secessionism could be linked to mental problems. She did not believe such nonsense but as I had the perverse habit of surprising her, she wanted me to clarify. I reassured her and she encouraged me, forcefully, to formulate lawsuits against the disseminators of hoax and the smear campaign that had been unleashed. I replied that I had no intention of doing so and that the fire in the social networks will subside.

I am not a user of social networks. I did not follow, therefore, the tone and content of the pearls that circulated these days although some echoes always end up coming to you through merciful souls who can barely disguise the glee at the flogging of others, while they appear to show affect and proximity. Two days later in a full session of the Senate of my University, the director of the Institute of Neurosciences-UAB informed me that considering the turn that the matter had taken they had been forced to issue a note, in the web, indicating that the Institute had no bearing on the content of the lecture that Dr. Tobeña had given at Bellaterra, two months earlier, on the same topic. The most pyrotechnic contribution, however, to the sacramental incineration was signed by a bellicose inquisitor: Mr. Vicenç Partal, editor of *Vilaweb* [<http://www.vilaweb.cat/>] and columnist in newspapers of secessionist affiliation. That agitator aired in his column “*El Punt-Avui*” [22th. May 2014], the folly of an alleged connection between the expansion of Catalan secessionism and a “*neurological disorder*” (sic), discussed, apparently, in the Madrid lecture. He concluded inviting the readers to imagine “*Tobeña as a rival of Dr. Mengele dedicated to dive into dark biological explanations for social phenomena*”. That is unmitigated sensationalism with scavenger tones, of course, but should not be considered as an anecdote. It reveals the stigmatizing atmosphere that settled in, within Catalonia, practiced by multiple “enlightened” pens

with the aim to silence any dissent or critique to the sacred “secessionist movement.” I refer to this just for the records: as another case among multiple registered.³

3. Several months later, during the “crescendo” of September 2014, the writer Javier Cercas denounced a threatening “inquisitorial pointing” coming from the same newspaper “*El Punt-Avui*” (“*Coses que mai he dit*”, 16th September 2014), for which he had written in the past. For years, however, this newspaper has acted as one of the belligerent pro-secessionist batteries [see p. 67]. The most blatant case of attempted lynching occurred shortly afterwards with Dr. Joaquim Brugué, a political scientist from my University, when he resigned as a member of the Control Authority for the “*Consultation about independence*” organized by the Regional Government and suspended by the Spanish High Constitutional Court, claiming a lack of democratic guarantees (“*The lynching of dissident*”, *El País*, 10th August 2014). Weeks later, the Senate of the University of Girona discussed a request by a number of their members to withdraw the distinction of “*Honoris Causa*”, previously awarded to the jurist Dr. Encarna Roca, member of the High Constitutional Court, by having aligned herself with their colleagues in the suspension of the Consultation prepared by the Catalan Government. The petition was finally rejected. During the following years further stigmatization attempts have happened involving local artists and writers. When a Seminar at the EU Parliament, Brussels, 26th April 2016, included the lecture which was the basis of this book [see p. 15], several members of the Parliament, from Catalan secessionist parties, tried unsuccessfully to suspend it.

Chapter 2

An inexplicable secessionist agitation.

“It sounds artificial this secessionist fever. The dissemination started when a right-wing government was in power in Spain and the urgency to escape from that was understandable; when there was a deep economic downturn; when the Catalanian Government anticipated the austerity measures adopted by the Central Government and citizens suffered, thus, a double punishment. These reasons have been forgotten, because during the last two years there has been no other topic of debate than secession. It looks as if Catalans had been intoxicated with narcotics or hypnotized in a way that makes the rest of their problems and abuses non-existent. A gigantic smoke screen to mask the fact that the parties that govern in Catalonia are acting with the same extremism and ferocity in their austerity measures as the conservative one which governs in Madrid”.

Javier Marías

“If I was a Catalan”, *El País-Semanal*, 28th September 2014.

“¿Do we suffer transient foolishness or are we fool?”

Joan Boada Masoliver

El País-Cataluña, 10th September 2014, p. 2.

My aim in that Madrid talk was to bring some light to explain the eruption of an overwhelming and fervent communion around a secessionist horizon, which had broken out in Catalonia quite suddenly. I attempted to provide additional barometers to decipher the emergence of a movement that caught by surprise and in total perplexity platoons of analysts, who despite launching a torrent of interpretations were essentially blind or disoriented.⁴ Although secessionism had been forged

4. The Spanish main newspapers have entire sections devoted to the analysis of the “*Catalan rebellion*”, with columns covering the period 2012-2015. They have generated collections (i.e. “*El País*”: “*El desafío*

over decades, the outbreak of the claim for independence and the undisputed conquest of the street has several major stations: the successive monster demonstrations held on the National Day of September 11th, between 2012 and 2016 were undisputable milestones. The first was an impressive procession that surpassed all forecasts, with hundreds of thousands of people of all ages who had arrived in buses and trains to Barcelona from all over the region, joining the usual marches and tributes on that celebration day that closes the Catalan summer. It became the most massive demonstration in the city since the start of Spain's contemporary democracy forty years earlier. The novelty was that the dominant claim was the demand for the "*right to decide*" the future of the region. Secessionist flags and banners were, moreover, majoritarian and the most chanted cry was, even then, that of "independence".

The second and third became egregious propaganda exercises of worldwide resonance by means of two Guinness records: in 2013, the largest human chain ever assembled ("*La Via Catalana*") was successfully completed joining the nearly four hundred kilometers separating the northern French border with the south Valencian boundary of the region. Meandering strings of people filled villages, cities, roads and highways, with their arms

soberanista" available at http://politica.elpais.com/tag/referendum_autodeterminacion_cataluna_2014/a/; with a selection available as a book: "*Cataluña: derecho a discutir*", El País-Libros, 2014). The amount of contributions is huge: I suspect that all available analysts, academics and political writers have expressed their views on the issue. All of them from the humanities and social studies: the usual orchestra of political scientists, sociologists and economists accompanied by writers, artists and philosophers. Besides using the opportunity to align themselves on the partisan fronts of Spanish politics, the common denominator has been uneasiness and perplexity in front of the secessionist wave. On the eve of the Catalan regional elections of September 2015, the flow of interpretations became torrential.

entwined and dressed in shirts with the Catalan colour strips and waving secessionist “*stellate*” flags. In 2014 a processional mosaic was completed with a human flood wearing the colours of the Catalan flag, with rows of nine kilometers filling a monumental “V” at the confluence of two major avenues of Barcelona (*The “V” Catalan*), that required a coordinated action of about nine hundred thousand people wearing the appropriate, red or yellow, shirts. An attire that the participants had acquired previously, paying a fee (a large proportion of them, at least). These two huge “performances” had continuity in the following years, with new choreographies of a gigantic magnitude in main Barcelona avenues. All of them were magnificent and succeeded to create a splendid chromatic impact that the international media eagerly covered and commented on front news.

Secessionist civil organizations that organized and lead these huge liturgies could show, over successive calls, that they could mobilize troops of about one million and make them display disciplined parades in a festive and peaceful manner. Having invested, moreover, each one of the faithful participants a modest quota that showed their faith and strength in the joyful communion. These pilgrimages of crowds full of transcendent fervour which are characteristic of people who walk in unison towards a promised land, acquired a major political character when the President of the Catalan Government (Mr. A. Mas, leader of a previously moderate nationalist party), made an opportunistic manoeuvre calculating that he could be leading the claim assuming their full demands. In an election called in a hurry, late on 2012, shortly after the first of these marches with the aim to harness their effusive wave, he lost electoral support and the majority at the Parliament, becoming a prisoner of the secessionist groups that had fed the fervour of citizens. From that moment, the regional government became a “hostage” of secessionist parties and associations and started to take a cascade of steps to try to hold a referendum on self-determination

at the end of 2014.⁵ In this way, the longing of a festive and ecstatic illusion became a long and increasingly bitter struggle between the central government and the regional government (13) which have led to a serious conflict with a deep impact overall around Spain and with growing international resonance.

That pulse became chronic and has remained stonily entrenched after a new call to regional elections on 27th September 2015 that were held to try to resolve it. The electoral campaign opened (without any sign of self-consciousness) with the fourth consecutive monster procession in Barcelona, when about a million of faithful secessionists gathered to complete another sensational choreography to give breath to the great coalition (*"Junts pel Sí"*), which aspired to sweep over all the contenders.⁶

Conjectures about the secessionist eruption.

At the Madrid talk (p. 17) I began offering a summary of the hypotheses (see Table I), which had been advanced to try to explain the so-called "*Catalan revolt*", although indicating that I did not harbour, for my part, the intention of providing another line to the list. I only wanted to provide tools to discern the ingredients of a remarkable political phenomenon that could and should be dissected from the perspective of social psychology.

5. The 9th November 2014, a simulated referendum for independence was held (a "participative consultation", was called), but with null effects since it had been previously suspended by the Spanish High Constitutional Court (see below).

6. This secessionist coalition (*"Junts pel Sí"*) won the elections without reaching, however, the majority of seats at the Regional Parliament, and losing the plebiscite for independence since the sum of all votes in favour of secession was 47,8% (see below). The 10th January 2016, after months of internal litigations, the first Regional Government entirely formed by secessionist organizations was formed.

TABLE I. *Conjectures about the origin of recent eruption of Catalan secessionism.*

- **Emotional:** Mistrust, antipathy and contempt between Catalans and the rest of Spaniards.
- **Economical:** Parasitic taxation and lack of public investments in Catalonia (a notion baptized as the “Spanish sacking”).
- **Political:** Hunger of undisputed power by Catalan leaders; Cuts to the Home Rule (the “Statute for Autonomy of 2006”).
- **Propagandistic:** Intoxication by local media heavily dependent from the Regional Government
- **Pedagogic:** Sectarian education of kids and teenagers at Catalan schools.
- **Soccer:** Emulation of the big success and world victories of Barcelona FC team.
- **Social networks:** Ultrafast dissemination of ethno-national and xenophobic enthusiasm.
- **Secessionist context:** Referendum for Independence in Scotland, 2014.
- **Opportunity:** Spain’s extreme fragility in the middle of a profound European economic crises.

Other explanatory vectors have been advanced with better or worse fortune, but that was the list I considered comprehensive at that time. Note, incidentally, that the “apathetic, detached and legalistic” reaction of the central government to the “*Catalan revolt*” did not appear in it. This behaviour by Madrid government has garnered an enormous criticism from its opponents since the problem took increasingly pressing and threatening attributes.

Likely, these conjectures carry some ingredients of diagnostic accuracy but my task was not embracing those which may seem more accurate. That is the business of those engaged in endless partisan boxing, but in objective incursions it is compulsory to move away from that. I concluded the introductory part of the Madrid talk proposing a main factor derived from that list that, on my view, could summarize these vectors:

***“THE EXTREME FRAGILITY OF A BANKRUPT
SPAIN OPENED AN OPPORTUNITY TO CONQUER
AN UNDISPUTED POWER BY THE LOCAL ELITES
LINKED TO THE REGIONAL GOVERNMENT;
WIDE SEGMENTS OF CATALAN MIDDLE CLASSES
AND PROFESSIONALS FOLLOWED IN AND FROM
THIS ERUPTED A SECESSIONIST WAVE WITH
EXPECTATIONS OF VICTORY”***

The difficult task consists in establishing a workable hierarchy of these explanatory factors and to weight their relative influence in an approximate way. And to discern as well if these vectors are enough to explain the origin of the secessionist wave because there are three main crucial questions needing an answer:

- ¿*Why Catalonia?*..., ¿and not Galizia, Baviera, Flanders, Wales, Corsica or Sicily, to use just some examples of old European cultures and territories?.
- ¿*Why at that time?*
- ¿*Why in the form of an eruptive surge, with great social agitation?*

Of these three questions, the one which requires a dissection from Social Psychology is the last one: *¿why secessionism in Catalonia jumped, in a few years, from being a minority option – separatists never were above 20-25% in surveys before 2008, and secessionist parties got voting scores much further down –, to reach percentages quite near or above the social majority from 2012 onwards?*

See, by way of illustration, the evolution of opinion on this matter of representative samples of Catalan citizens, along successive *Barometers* released by the “*Centre d’Estudis d’Opinió*” (CEO, dependent from the Regional Government), between 2010 and 2015 [Figure 1 and Table II]. In January 2010, those who wanted independence did not reach 20%; in October 2011, they had progressed to 30% and since October 2012 they were above 45% already, thus signalling the start of the breakaway pulse. These results were corroborated by CIS surveys, (the Sociometrical Institute dependent from the Spanish central government), which in early 2013 gave to the “*feelings of belonging exclusively or predominantly Catalan*” a formidable 50.9%, and the segment of those citizens who would like the possibility of declaring an independent state reached a 40.6% [Table III]. Most notable in this scenario, however, is the point that almost half of these secessionists recognized that they had opted for that position or come to this conviction in recent years. That is, there was a clear and explicit recognition of a very recent addition to the independence wagon by a quarter, at least, of the surveyed citizens.

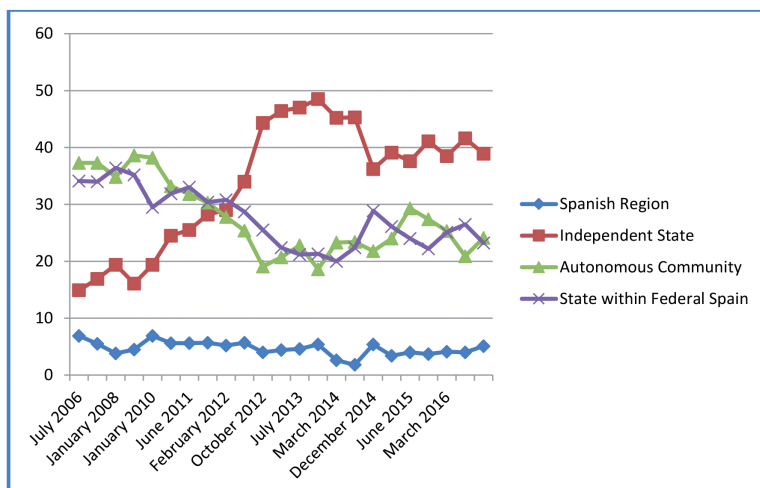


FIGURE 1. Preferences of Catalan citizens (in percentages) concerning the status of the region along the last decade. Derived from C.E.O. Surveys (Barometer of Political Opinion, 39, November 2016), the official polling agency of the Catalanian Regional Government. Data gathered from personal interviews to representative samples of 1500-2000 citizens, depending on each survey. The series starts at 2006 with preferences showing a rather stable pattern till 2010, when the secessionist segment started a gradual increase for two years followed by an abrupt eruption from October 2012 that peaked around the start of 2014. From December of that year there was a small decline which has stabilized the secessionist preference at about 40% of surveyed people (last survey, 18th. November 2016). *Autonomous Community: current Catalanian status within Spain, meaning a highly-decentralized region with Home Rule.* <http://ceo.gencat.cat/ceop/AppJava/pages/estudis/categories/fitxaEstudi.html?colId=3;6008&last-Title=Bar%F2metre+d%27Opini%F3+Pol%EDtica%3BBar%F2metre+d%27Opini%F3+Pol%EDtica.+3a+onada+2016>.

TABLE II: C.E.O. Barometers: surveys of representative samples of 1500-2000 citizens. A: *Barometer of Public Opinion*, 32, 1st Wave - Spring 2014; B: *Barometer of Public Opinion*, 33, 2nd. Wave - Autumn 2014; C: CEO Barometers December 2014 and CEO Barometers, October 2015-March 2017.

¿Are you a secessionist? (Spring 2014)

Yes, all my life	22,5 %
Yes, from the last year	24,6 %
No, I'm not.	48,4 %
No answer	4,4 %

B. ¿Are you a secessionist?: (Autumn 2014)

Yes, all my life	28,2 %
Yes, from the last year	20,9 %
No, I'm not	48,5 %
No answer	2,3 %

C. ...more specifically, do you want an independent Catalonia? (Survey: December 2014)

Yes	44,5 %
No	45,3 %
Don't know	7,5 %
Don't answer	2,8 %

(Surveys: Octob., Novber. 2015; December 2016; March 2017)

Yes	46,7 %	46,6 %	45,3 %	44,3 %
No	47,8 %	48,2 %	46,8 %	48,5 %
Don't know	3,9 %	3,6 %	4,6 %	5,6 %
Don't answer	1,7 %	1,6 %	3,2 %	1,6 %

Tabla III: CIS, *Estudio 2970: postelectoral Cataluña*, December 2012-February 2013 (N=1873 persons).

What of the following statements express better your sentiments?

You feel only Spaniard	6%
You feel more Spaniard than Catalan	5%
You feel equally Spaniard and Catalan	34,5%
You feel more Catalan than Spaniard	25,8%
You feel only Catalan	25,1%
Don't know/don't answer	3,5%

Which of the following territorial organization you'll prefer for Spain?

Central State with no autonomy for the regions	9,1%
Autonomous Regions with less power and competences than now	3,4%
Autonomous Regions as they are now	17,6%
Autonomous Regions with more power and competences than now	25,6%
Recognition of the right to decide full independence to the Regions	40,6%
Don't know/don't answer	3,6%

If instead of using biased estimations coming from surveys by official agencies, we depart from the election results the landscape offers similar figures. I did that, at those spring talks at Bellaterra and Madrid (p. 17), using the final tally of votes obtained by political parties in the regional elections held in Catalonia at the end of November 2012. There was a record turnout on that occasion as citizens detected the importance of the election (70% of the census): the total sum of valid votes was 3,657,450, invalid

votes were 85,000 and there were 1,600,000 abstentions. The ballots that favoured formations which had secession on their immediate or distant program, gave a total of 1,800,000 votes, in round numbers, and those who voted for parties opposed to that course of action were 1,750,000. A clear, neat and stubborn draw between supporters and opponents of secession, that would be repeated (that was my guess) by picking abstainers who probably would concur to the longed referendum on self-determination, by dividing themselves to either side in roughly equal proportions.

So, it was possible to conclude, at that time: spring of 2014, that Catalan citizenry who wanted independence from Spain could reach the margins of 50% of the entire social body. I advanced back then, cautiously, that perhaps half of the five million citizens with the right to vote could be on the secessionist side.

These numbers have considerable margins of oscillation, in one way or another, depending on many circumstances, although the scene seemed already crystallized despite the tensions and events experienced later. In the “simulated” and para-legal referendum organized by the Catalan government on a long-awaited Sunday, the 9th November of 2014, with ballot boxes distributed throughout the secondary schools of the region and in 17 capitals of the world, voted unequivocally in favour of independence 1.861.753 people, 80.76% of participants (a total of 2.305.000 citizens in round numbers). That was a turnout of 37-38% of the estimated census of potential voters in a call opened for people over 16 years old and for foreign residents. The definitive final count, once closed the post-voting extension, until 25th Nov. 2014, gave a figure of 1.897.244 votes in favour of independence (80.9% of the final total of participants: 2.344.828, at the end, hovering around 38% of the electorate). The rest of Catalan citizens (a solid majority) declined to attend such ceremony devoid of legal effects.

Although lacking full democratic guarantees and keeping suspicions about count reliability, that onerous macro-survey with propagandistic intentions to boost assertiveness among secessionist forces confirmed the existence, until then merely estimated, of a huge bag of one million eight hundred thousand of secessionists, representing a 35% of the regular census. A crowd that could approach or overcome, perhaps, 45% of voters in an electoral process with a high turnout. That is, there was a very active and huge minority who knew and knows well about its chance of becoming a majority. The ceiling for these pro-secession and anti-secession segments in a fully legal, agreed and binding referendum on self-determination, with clear and dichotomous options, is an enigma but all the data pointed to a neat social division into two halves close in size [161].

The results of the regional elections of September 27th, 2015, came simply to confirm a scenario that had crystallized two years earlier, at least. Compared with the elections of 2012 the turnout jumped still more, up to 77.4% of the electorate (4.115.807 of votes cast, of a total of 5.352.786 potential voters: a historical record on such regional call). Abstentions were 1.119.106 (22.56%) and the sum of blank and null votes were 47.873 votes (1.16% of total). That large turnout was probably the result of an election raised openly as a plebiscite for or against secession.

This was the tactic of the Regional Government and the great secessionist coalition ("*Junts pel Sí*"), encompassing the main nationalist parties that had held the power or supported it along with civil secessionist associations. They obtained a total of 1.620.973 votes (39.54%). If we add to that the 336.365 votes (8.2%) obtained by a radical secessionist formation (CUP, Popular Unity, far left), makes **a total reach of 1.957.348 votes in favour of secession (47.6% of all votes)**. The sum, on the other hand, of all the votes that went to **non-secessionist formations got a total of 2.110.586 votes (51.28% of all votes)**. The esti-

mations I had used two years before were thus fully confirmed as well as the estimated percentage of secessionists exceeding 45% of votes in a scenario of big turnout. If support for secession is expressed in terms of the whole census it gives 36.6% of voters in favour of independence for Catalonia.

When I gave those talks at Bellaterra and Madrid, the spring of 2014 (p. 17), I had neither the outcome figures of the paralegal referendum of November 9th 2014, nor the official election results of 27th September 2015, but I could establish accurate estimates of the size of secessionist and non secessionist segments. As I write this, these numbers are solid and accepted by everyone. It is time, therefore, to examine with some detail, as I did in these talks, the persuasive gears which “dragged” the secessionist convoy that was launched from the heart of Catalan society with an ambitious and forceful impulse. To do so, I will venture first into the psychobiology of gregariousness starting with known but rather subtle aspects.

Chapter 3

Neurobiology of gregariousness.

“Herding is a form of convergent social behaviour that can be broadly defined as the alignment of the thoughts or behaviours of individuals in a group (herd) through local interaction and without centralized coordination. We suggest that herding has a broad application, from intellectual fashion to mob violence; and that understanding herding is particularly pertinent in an increasingly interconnected world”.

Raafat RR, Chater N, Frith Ch.

Herding in humans, *Trends in Cognitive Sciences*, 2009;
13 (10): 420-428.

“Exalted by communion, comforted by the warmth of the crowd, uniformed in red and yellow, assured by the certainty of our immaculate benignity, convinced that Devil is in a malefic entity called Spain that defeated us, killed us, oppressed us, depredate us, humiliate and mistreat us and that is guilty of all of our disgraces and sufferings; dumbfounded by hymns and flags, hypnotized by the repetition of slogans and claims, blindly trusting this “tomorrow” which will be Paradise we joyfully walk in files following the one that plays the flute”.

Laura Freixas

“Catalonia and magic thinking”, *El País, Opinión*,
27th December 2014. p. 29,

I have underlined already the stunning aesthetic quality and the impressive logistic skills demonstrated by organizers of the gigantic mass demonstrations⁷ of secessionism in Catalonia, in

7. Six major choreographies on the period 2012-2017. Once culminated, the participants and organizers typically exhibit such a joy and euphoric plenitude that these huge gatherings (“aplecs” in Catalan language) will probably be converted on a durable tradition, every 11th. September. They will become a big touristic attraction in Barcelona, at the end of summer, creating an opportunity to raise substantial merchandising earnings for local firms (shirts, hats, sneakers, umbrellas, flags and all kind of souvenirs).

recent years. The repeated “*11th September performances*” on the period 2012-2016, became world “*hits*” on media coverage due to their fantastic chromatic attractiveness. They were preceded by much more modest but equally colourful and demanding group exercises which enlivened the festivals of towns, neighbourhoods, fraternities and sororities, across the whole region. Such tests and their pictorial iteration through social networks constituted true preludes for the yearly culmination at the Barcelona huge procession. Catalan secessionism has, therefore, a well-earned place in the pictorial history of the most formidable and fervent world concentrations competing with the massive gatherings of Muslim pilgrims in Mecca, with Catholic crowds at the Esplanade of St. Peter’s Basilica, to get the blessing of the Roman Pope, or the rock, soccer or erotic festivals that young Germans usually celebrate on the main avenue at Berlin’s Tiergarten.

The taste for choral sceneries with sharp chromatic contrasts is proverbial in Catalonia. The composition of rhythmic and elegant communion exercises is an old tradition during fairs and major festivities on the main squares of villages and towns. “*Castells*” competitions devoted to build incredibly high and ephemeral human towers require a synchronous will and a strenuous and suffocating effort by hundreds of bodies fused within a tight basement (“*pinya*”), under the vibrant heat of summer mid-days. The ritual dance for great celebrations, the “*sardana*”, also demands an interlaced string of tens, hundreds or thousands of dancers culminating ripples in tune with the rhythm marked by the drummer and flutes of the “*cobles*”. No wonder, therefore, that they have succeeded with monster liturgies with stunning accuracy: the “*castells*” clubs, the “*sardanist*” societies (“*colles*”) and other brotherhoods of diverse nature have worked as seeds and training areas of the main processions of secessionism. We have enough base therefore to approach the issue from the psychology of social influence and gregariousness tendencies.

The analysis of gregarious dragging and communion has a long and venerable tradition, in social studies, which started with the attempts to describe the “contagious” interactions in economic markets with classical approaches that go from Adam Smith to John M. Keynes. And it has also recruited distinguished psychological periscopes not always particularly thoughtful and incisive, with Sigmund Freud and Gordon Allport as prominent players. The potential connection of human herding propensities with biological mechanisms has remained, however, quite unexplored until recently. Chris Frith and colleagues [114] at the University College and the Centre for Neuroimaging, Institute of Neurology, at the heart of London’s Bloomsbury, have led the exploration of links between seminal findings of experimental social psychology and the intricacies opened by Cognitive Neuroscience. Once modern neuroimaging methods allowed indirect but feasible accesses to the human brain at rest and while working on different types of tasks, the route to explore the neural effects of social influence was opened.

Social conformity.

Asch Experiments: lines.

The departure point are the studies of Solomon Asch [10], at the fifties of last century, about conformity, obedience and social submission. It is instructive to describe those elegant lab experiments with a bit of detail. Asch assembled groups of seven to nine people and seated them in two rows of chairs or around a large table to undergo simple “visual discrimination” tasks consisting on estimating and comparing lengths of lines. As shown in Figure 2, there were two cardboards in the lectern: one contained the “standard line” and the other had three contrasting lines (1, 2, 3), which must be compared with the first one. One of those three

lines was identical to the standard, while the other two were clearly different: one longer and the other shorter, generally, although there were other variants as well. The participants had to indicate which of the three comparison lines was like the standard.

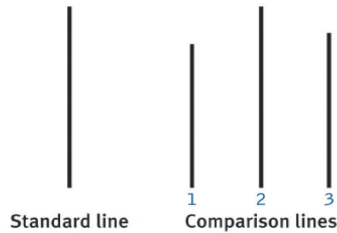


FIGURE 2. An example of “*stimuli lines*” to be compared during the tasks by participants at Asch experiments. In this session, there were 7 participants and the real subject was the second closer to the experimenter/teacher (free, from Google Images).

Of all participants, only one of them was the true subject who was put to the test, while the rest followed indications previously trained by the investigators. They were seated in rows of chairs or around a big table [see Figure 2] so that the subject was always the penultimate to respond in each trial. That is, he had to listen five or seven opinions prior to giving his own which was followed by the last one closing each trial. 18 trials were scheduled to compare lines of different lengths, so that in 6 of them all participants responded correctly, but in the other 12 trials (the critical tests) the rest of participants gave blatantly

incorrect responses: they selected the longest line in six trials and the shortest one in another six. That is, the subject was placed at the position of being in a radical solitude in front of most opinions who were ostentatiously wrong, and he had to express his discordant view publicly and loudly. This is an embarrassing situation devised for measuring the independence or submission of one individual in front of pressure from a group that holds an erroneous perceptual criterion, thus creating a minority of “one subject” against a wrong and unanimous majority. A control condition was created as well where true participants had to solve the same tasks but alone: no people around. In these circumstances, less than 1% made mistakes. So, these tests could indeed reflect the phenomena of social influence or pressure.

Global findings were the following:

- **4% of subjects followed, in all trials, the erroneous criteria of the majority, giving 12 wrong responses to the critical tests.**
- **27% of subjects conformed to the wrong majoritarian opinion between eight and eleven times.**
- **45% of subjects conformed to the wrong majoritarian criteria between one and seven trials.**
- **24% of subjects rejected all influence and gave correct responses to the 18 trials (12 to the critical tests and 6 without social discrepancy).**

Global conformity average (social submission) was 33%, for the whole series of experiments in these circumstances. So, there was a tiny minority (less than 5%) who fully conformed to social pressure; a considerable segment (almost one third of the subjects) who easily followed an erroneous majority; a big fraction who conformed occasionally and, finally, a quarter of

subjects kept their independent view in front of wrong social pressure, showing a strong determination. Figure 3 illustrates that in the 12 critical tests (when the group adopted views blatantly wrong), correct estimations were still predominant within the more than one hundred subjects studied, across these trials. The space between the line for the experimental group and the line for the controls (100% correct), depicts the magnitude of social influence.

Those are global results although the experiments were carried out in three different Colleges, with young males of an age around 20 years old and from very different social origins. There were no differences between these three groups that could be assigned to distinctive propensities to be influenced by an arbitrary and wrong majority.

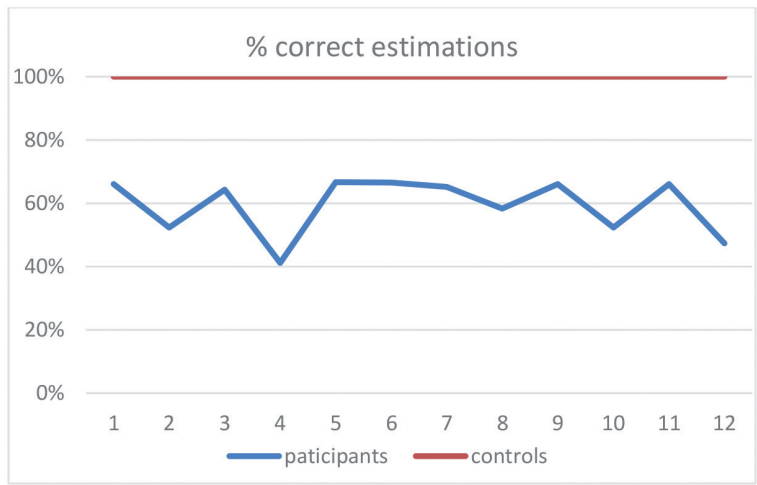


FIGURE 3. Percentages of total correct answers in visual tasks at the Asch original experiment, with the whole number of participants. N controls=37; N participants=123 [modified from 10].

At the end of the experiment, the subjects had to detail the reasons of yielding or not yielding to the influence of the majority and their reactions throughout the tests. Almost all of them reported that they felt doubts and uncertainty when perceiving the discrepancy between his view and that of others, but what really distinguished between firmness or being submissive to the arbitrariness of others, was the confidence in their own judgment and consistency in the answers. The bulk of the docile and obedient emphasized that while it was clear that their criteria was different, they felt that perhaps they were wrong while the others were right. In other cases, they simply said they did not want to be taken as “stupid”, so they conformed to the general view to avoid conflicts. A small proportion insisted that they really saw the lines as stated by the opinion (wrong) of the rest of the group. Conformity arises therefore from very different kind of assessments: the desire to avoid social disapproval or ridicule are among them, but also a real change of perceptual criteria.

In further variations of the experiment it was found, for example, that by increasing the number of members of the wrong majority augmented the tendency to conform. Conversely, if individual subjects could communicate their decisions privately, social compliance decreased to below 20%. It is true that these experiments were carried out on peculiar lab circumstances, although Asch obtained a consistent pattern of findings in further experiments. Fragmenting subjects in groups such as those who displayed docile and conformable decisions, those prone to be influenced often and those with strong and independent criteria led to a similar pattern of findings.

Nevertheless, Asch contributions still meet with an automatic reaction of disbelief, despite the repetition and reproduction of these findings in different countries and cultures [78, 88]. Something like “*Well, that happened with young American students but it is doubtful that mature people from other parts of the world,*

would behave in a similar way". So, they are devalued, by referring them to a story perhaps plausible among "naive" or "disciplined" young guys from USA. Hence fresh results from neuroimaging studies performed half a century later, under similar conditions and with normative people are a perfect complement.

Berns experiments: geometric forms.

These studies [23] were held in Atlanta at the Neuroimaging Center of the Faculty of Medicine of Emory University and the participants were adults of 26 years old, on average (between 20 and 41): a similar number of men and women from typical social strata and ethnic origins who visited, as patients' companions, the diagnostic units of the University Hospital. Each participant who agreed to go through testing on a MRI scanner, was cited along with five other unknown individuals of similar ages, and they had the opportunity to socialize for half an hour dedicated to various tasks in lap computers at the rooms adjacent to the radiology equipment. Personal data and photographs of the faces of all participants were obtained on these sessions, though the five strangers were in fact actors trained by the researchers. The intention was to create, for the real subjects, a credible setting of interacting with a group of "colleagues", so that they could then issue verdicts as an external opinion to try to influence the judgments of the subject to be examined at MRI.

The task to be performed by the real subjects, once placed in the MRI equipment was a problem of visual discrimination, as in Asch experiments, but a bit more demanding than comparing the length of different lines: it consisted in diagnosing whether a series of three-dimensional figures which were rotated in the space, were the same object or not. Figure 4 shows examples of the task as well as the sequence of steps to be observed, by each subject, once ac-

customized to the situation inside the crypt of the MRI equipment. These perceptual tasks have a certain degree of difficulty and always induce errors during the “baseline” condition: that is, when the subjects decided on their own and without inputs from the group of colleagues. In such basal circumstances, there was a 13.8% of errors [see Figure 5]. This basal rate of mistakes did not vary when colleagues or lap computers provided correct verdicts on the similarity or difference of geometric objects.

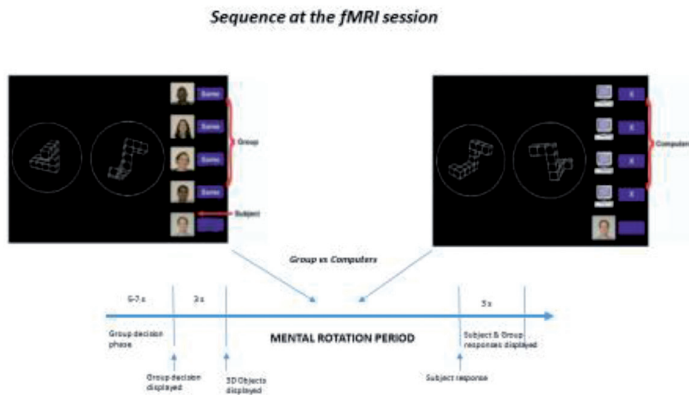


FIGURE 4. An example of the pairs of 3D geometric objects that subjects had to compare, the timeline and the conditions settings on “Berns experiments”. For each pair of forms, they had to tell if they were identical though rotated objects, or if they were completely different objects. The sequence always started with the opinion of the group of “colleagues” with a maximal delay of 12 seconds for the subject inside the fMRI machine. There were different conditions: a. the subject had to decide after knowing an unanimous opinion from the group of colleagues (all “correct” or “non-correct”, half of the times), as showed on the left screen in the Figure; b. the subject had to decide without knowing the opinion of the group (an “X” appeared on the screens, besides the faces of colleagues and that was used as the basal condition); c. the subject had to decide after an unanimous decision taken by an algorithm on computers (lap icons only, with half of verdicts “correct” and half “non-correct” as it can be seen on the right screen in the Figure [modified from 23].

On the contrary, when these colleagues (their faces, in fact: see Figure 4) provided erroneous opinions unanimously, the error rate of subjects climbed to 41%, and when these unanimous wrong appreciations came from computers, subjects' erroneous decisions still went up to 32%. Therefore, both a unanimous wrong opinion of a group of people or one from "cute" artefacts (also wrong) was capable of inducing obedience and conformity in receptors bringing them to commit a high rate of errors, much higher than when they worked alone on the same task (Figure 5).

It is easy, therefore, to lead people down the wrong path: the only requirement is to be surrounded by a common and erroneous opinion (either from people or from computers who are firm and consistent in their error). Apparently, there are many individuals who do not need more "social pressure" than that.

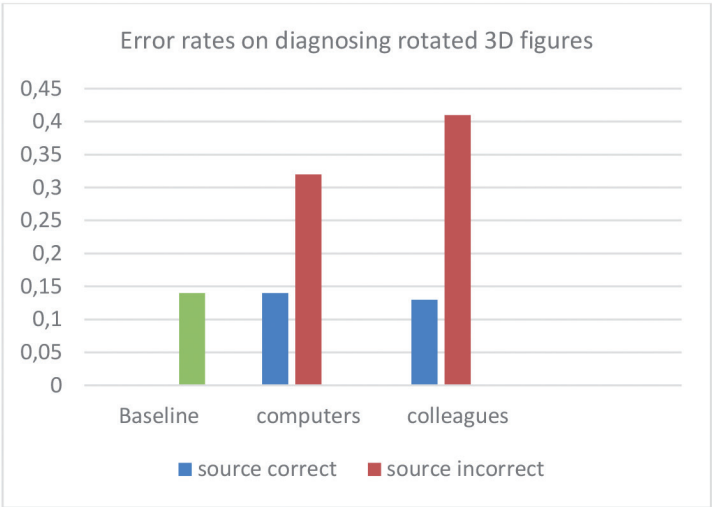


FIGURE 5. Errors in the task of detecting similitudes/differences on pairs of rotated geometric forms (*Berns Experiments*), depending on the social influence by a group of humans or computers [modified from 23].

When the fMRI session finished and the experimental conditions were fully disclosed, the subjects were inquired about why they had followed group opinions instead of keeping their own. In those who admitted that this occurred, in about 80% of the trials they stated that they had really seen the figure as perceived by the group. 58.6% indicated that when they felt uncertain about their appreciations they went for the group option (a percentage that went down to 44.8%, when the group were computers). 3.4% said that despite being sure about their criteria they changed their opinion for the one of the group (same proportion for computers).

The neural activity derived from the fMRI signals during the effort of mental rotation when contrasting the similarity or difference between these pairs of geometric objects (along 12 seconds, at every trial), gave changes that could be assigned to widely distributed circuits across the brain. It was a challenging visuospatial rotation task and the regions more relevant were cortical zones of the occipital and parietal lobules of the brain, near the back vertex of the head. There was also an additional activity on the superior part of the frontal lobes, closer to the top of the front, related to the efforts to contrast and decide.

The crucial challenge was, however, to detect specific differences in neural activity when information about social influence was entered: comparing the trials which carried peer opinions to those where the subject attempted to solve the tests without external influence. And particularly when such outside information was incorrect and able to induce errors of appreciation. That is, differences attributable to social conformity or obedience. The activity at one site, in both cerebral hemispheres, reflected just that: on the cortical region where parietal and occipital lobes converge (just below the upper posterior parts of the skull), a neural signature appeared for erroneous visual appreciations induced by the entry of group opinions.

The most discriminative area was in the intra-parietal gyrus, particularly in the right hemisphere.

These findings suggest that the suspicion already advanced by Asch [10], that group influence could lead, sometimes, to a change of criteria resulting from a real change of perception was confirmed. These brain regions of the parietal cortex are routinely involved in the final elaboration of visual percepts on anyone: in the characterization and recognition of objects as such. This peculiar activity linked to wrong peers' entries indicates that a perceptual change occurs that allows, in turn, the change in opinion and decision. Simply put, the unanimous and erroneous view from a group of colleagues makes the world to be seen differently and there is a measurable neural trace, on subject's brains, of that radical change.

On the other hand, when looking for specific neural signatures of firm and independent judgments - that is, when subjects maintained their opinion despite the discordant group entries -, a site for that was also detected. In this case, the added effort corresponded to two small regions located deep into the brain: the amygdala and caudate, especially in the right hemisphere. This suggests not only an extra effort but a bit of suffering for maintaining a point of view alone, in front of a common and wrong view, in the opposite direction. Both the amygdala and caudate are involved in the subtle modulation of valence, positive or negative, of affective states and it can be suspected, therefore, that such increased activity associated with maintaining firmness and independence in solitude, reflects an emotional cost that could be spared by going with the herd.

These findings from the neuroimaging lab of Gregory Berns [23,113] in Georgia, which reproduced the seminal Asch studies, are relevant although it can always be objected that they refer only to the restricted area of visual estimates of geometric forms. And that to discern the real vectors of independent judgment or the

susceptibility to be moved by group influence other approaches and measures are required. Hence the relevance of further studies that have expanded the spectrum of tasks to tackle.

Klucharev experiments: women faces.

Vasily Klucharev focused his studies about the neural mechanisms of social influence on estimates of the attractiveness of women faces [92, 93, 94, 128]. This is another visual diagnostic task though more related to everyday social interactions and a more plausible link, in principle, with the drifts caused by peer pressure. The basic protocol was to present hundreds of photographs in a screen, within the fMRI equipment, of women faces and participants (European women) had to evaluate them on a scale of attractiveness appearing below each portrait, which went from “1” (not attractive) to” 8 “(attractive), as shown in Figure 6.

After issuing each verdict they could see the score that the same face had received in an extensive survey of European women and while they appreciated such difference of opinion, their brains were scanned to catch the neural “signature” of the experience of discrepancy (or agreement) with the social norm. That is, a specific brain activity pattern that may reflect the inner feeling of discrepancy (or full concordance) with the common aesthetic criteria in their culture.

After a short period of rest, once finished the fMRI session, these evaluations were repeated for the full sequence of women portraits (the “behavioural session”, see Figure 6), and measures were taken then of the verdict changes that could be assigned to social influence. The results indicated that there was a clear turn towards the majoritarian criteria both in the positive and negative directions: that is, when the subjects had to adjust their opinion towards either more favourable or more detrimental scores of

Sequences of fMRI and Behavioral sessions

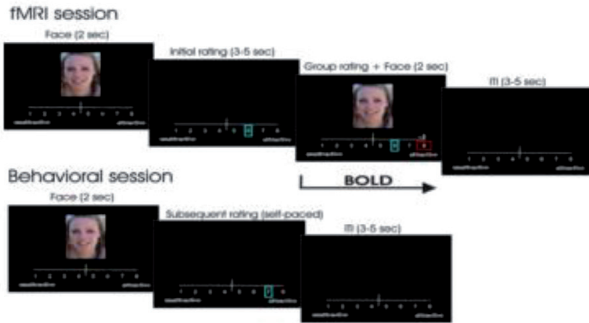


FIGURE 6. Presentation sequences of hundreds of women faces in “*Klucharev experiments*” during fMRI and behavioural sessions. The task consisted in evaluating their attractiveness under social influence or not, using the scale shown on the inferior part of the screen: blue mark= subject’s initial scores; red mark= group ratings. BOLD: fMRI measuring period; ITI: inter trial intervals [modified from 92].

the attractiveness of unknown women faces. Brain activity signals captured while participants perceived, on their own, such discrepancy with the majoritarian aesthetic criteria indicated an added work for areas devoted to monitor potential errors (the anterior cingulate). This was the most substantial finding although there was also a decrease of activity in regions which typically process pleasure feelings.

That is, the feeling of being in a minority position induced an inner conflict which was reflected as a neural signature indicative of “error and uneasiness”, that resulted then in a drive to move towards the common criteria. These effects of an increased activity in the anterior part of the cingulate cortex and a decrease in the nucleus accumbens, were robust. That signal of an “unwelcome mistake” provoked by being in a minority was more pronounced in conformists than in non-conformists, especially the “unpleasantness” linked to neural deactivations detected at

the accumbens (pleasure area). The results were unclear, however, when another group of women had to make similar diagnoses under the influence of verdicts issued by a computer program. This finding stresses the relevance of the pressure of social opinion, and not of artificial algorithms, to induce substantial turns towards the view of the majority. There were no specific changes in neural activity, due to social influence, in brain areas dedicated to distinguish and recognize faces. So, in this task a genuine turn of the perceptual view can be discarded.

These induced changes on aesthetic criteria gained strength when evoked signals derived from cortical electroencephalography (EEG), were linked specifically to the experience of having a minority discrepancy and to the subsequent tendency to conformity [93]. An enhanced electrical negativity in the early components of EEG-evoked potentials, recorded from the scalp, arose in synchrony with the inner feeling of error when subject's judgments on attractiveness clashed with the majority. This early electrical oscillation underlined the instant of the inner conflict but the conformist tendency was associated with variations in later stages of these evoked potentials.

Finally, Klucharev team could show that the effects of social pressure can be mitigated somewhat by manipulating brain activity from outside [94]. They applied transcranial magnetic stimulation before asking other women (Dutch, in this case) to emit verdicts about the beauty of female faces in an identical protocol of the previous studies [Figure 6]: first evaluating alone, second scoring again but knowing in advance the prevailing view and finishing, after a while, with another repetition (not announced) to measure social compliance. All in lap terminals and without taking measurements of neural activity. Silencing the posterior regions of medial frontal lobe through targeted stimulation with magnetic waves, caused a decrease in the tendency to follow mainstream opinions, both for favourable and unfavourable ver-

dicts. These transiently inactivated regions thanks to the application of innocuous wave trains, corresponded to the cingulate zones where they had previously detected the electrical signature of “discrepancy errors”. The same train of magnetic waves applied to other parts of the brain did not mitigate at all the propensity to social conformism, a fact that reinforces the specificity of that brain location to drive “conformist” or “docile” impulses.

The role of these regions to monitor errors and discrepancies and to promote changes in criteria, seeking to cling to the prevailing norm, has been detected in other studies where dissent or submission to the norm was measured against the opinion expressed by critics of musical pieces of diverse sign. Chris Frith team in London obtained concordant data in studies where they used fMRI measures of brain activity while subjects contrasted the value of musical pieces, selected by themselves, with the value assigned to them by recognized critics [28]. Variations of neural activity located in the ventral striatum (accumbens), the cingulate and in related parts of the pre-frontal and temporal lobes appeared again, which were linked specifically to the experience of discrepancy with prestigious referees. When measuring, on the other hand, estimates of the thickness of gray matter in these same regions the only area whose volume size co-varied, positively and consistently, with the tendency to social conformity was a lateral portion of the orbitofrontal cortex, in both hemispheres. This is an area that is relatively close to those indicated above, but situated a bit further to the cerebral outer edges [29].

So, a good amount of data illustrates the involvement of specific brain areas in processing the experience of being in the uncomfortable position of a divergent minority and that of adopting conformist changes of criteria when common norm differs. And there are still other neural signatures for the experience of staying firm and unmoved in a non-conformist opinion. All cases

of social influence discussed till here were perceptual estimates related to simple objects (line lengths), much more complex scenarios (the attractiveness of women faces) or the relative value of musical fragments. The studies of social conformity and obedience were then taken to explore further routines, and there are suggestive findings regarding changes evoked by the surrounding social opinion on the memory of personal events.

Experiments on distorted memories.

The recreated qualities, fragility and lack of accuracy of episodic memories are well known attributes of human recollection. Evocative and retrieval processes are susceptible to the changing influences of many types of inputs. The malleability of human memories induced by surrounding social entrances has been widely studied [123], but the neural mechanisms of such plasticity had not been explored until Yadin Dudai at the Weizmann Institute in Tel Aviv, in collaboration with a Neuroimaging team at University College London, culminated a seminal search [49].

The study was carried out in Israel and set out to detect changes induced by social pressure on personal recollections of a documentary that participants had watched recently. The experiment consisted of four phases over two weeks. The first day 30 individuals (18 men and 12 women, average age of 28 years old) saw, in groups of five, a thirty minutes' movie about police methods of detection, interrogation and expulsion of illegal immigrants. After three days, they were referred to the lab and were subjected to tests of accuracy and confidence in their recall of several contents of the documentary, through a long series of questions. Four days later (a week after viewing the film), they returned to the laboratory to undergo a functional (fMRI) scan as they answered the same memory test, but a manipulation by

social pressure was introduced. On various scenes for which the subjects had shown great accuracy and confidence in their evocation, the questions were accompanied on the screen by false answers of the four companions (with photographs of their faces) who had seen the film with them. That is, the subjects had to answer a question about a scene for which they had shown a perfect memory, but this time their four companions offered unanimously wrong recollections creating thus a discrepancy with a social majority. To avoid suspicion, these trials with flagrant “errors of memory” from colleagues were intercalated with other trials in which the four companions gave fully correct answers and others, finally, where there was no input from them and an “X” appeared on screen, meaning that they had been unable to decide. When the scanning session finished 80 trials had been presented with a “wrong answer” manipulation, 25 trials without manipulation and another 25 trials devoid of social influence.

A week later (15 days from the vision of the documentary), subjects were required back to the lab where they were told openly about the manipulation they had suffered the previous week. They were then asked to answer again the same series of recall questions about the documentary, trying to refer to their memory of the first day and forgetting, as much as possible, what they had said the second day. In the end, they filled several questionnaires and the full aim of the investigation was debriefed. After eliminating the subjects who had moved too much during the scanning, causing signal artefacts, and the few who had hinted suspicions, 20 subjects remained for analyses of their brain activity while they tried to evoke the scenes of the film.

Evocative errors under the influence of colleagues’ wrong recall reached an impressive 68,3 %, whereas without manipulation errors were only 15,5 % of all remembering [Figure 7]. This was so despite that social manipulation was only introduced when the memories were precise and subjects had expressed total

confidence in their evocations. A week later and once the manipulation had been disclosed there were 59,2% of correct memories at the test, but 40,8% of recalls contained repeated mistakes. That is, a good amount of the false memories previously implanted through social pressure persisted.

The fMRI measures indicated that the social influence which distorted precise recollections, also modified the neural representation of these evocations. Multiple comparisons were undertaken for the whole brain activity and for a restricted network of temporal lobe circuits implicated in the routines of consolidating and retrieving memory traces. Results indicated that there was a specific neural signature for the persistence of false memories implanted by social pressure: an increased activity at points of the left amygdala and an increased connectivity between that part of the amygdala and the more anterior parts of left and right hippocampus.

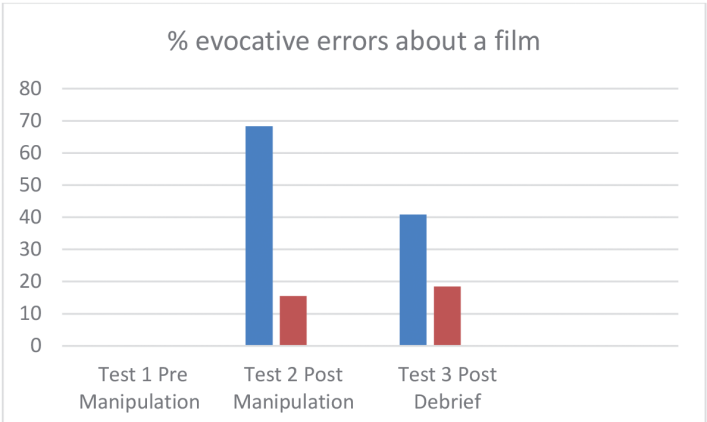


FIGURE 7. Social manipulation of memories brought evocative errors up to 68,3 % whereas without social manipulation errors were only 15,5 %. A week later, once the manipulation for social conformity was disclosed there were 59,2% of correct evocations but 40,8% were mistakes again: persistent false memories. Only the memories which were precise and held with total confidence were manipulated [modified from 49].

Amygdala participation did not depend on the emotional content of the task because another experiment, with other subjects, allowed to dismiss that. It is noteworthy that hippocampal activity was what distinguished best between transient and enduring false memories (those representing inner conformity, since recollections had been fixed). Adjacent regions were also involved in remembering but without showing the same degree of specificity. An increased activity was detected as well in regions which apparently processed the conflict of being in a dissenting discrepancy or error, although they were not crucial for fixing the false memory. The effects were assigned with certainty to social pressure because in another experiment where the “wrong” recall came from computers, that neural signature lost specificity (compliance with the glaring error appeared again, but only reached 45,3%). Thus, both amygdala and hippocampus are behind the genuine distortions of memory induced by peer’s influence.

Only very cautious deductions were drawn from these spectacular results. The authors pointed out that although it is legitimate to conclude that such memory distortions induced by social pressure can easily lead to harmful manipulations (for example, on political campaigns or through advertising persuasion), they might also serve for adaptive adjustments to the environment and hence their facility to appear. Maybe that preparedness comes from the fact that, often, the vision and memories of a close group of colleagues or those of a surrounding community are better than individual opinions [96]. A fact that leads us, in any case, to jump from the studies of social conformity in isolated individuals to phenomena linked to pressure and dragging of many people.

Chapter 4

Claims and confort within the herd.

“Much more impressive than the magnitude of “Catalan V” demonstration was that streets of Barcelona appeared empty that day, there was almost nobody who did not wear a red or yellow shirt and such uniformity created the feeling that it was foolish to go out for reasons other than participating in the massive gathering....; There were no banners and no other flags, except for a few Scottish ones and citizens wearing an original dress were rare. Everything was so meticulously organized that instead of a taken city it seemed a hired city. At 17:14 o'clock, the symbolic hour when the gathering culminated, the gigantic and choreographic flag was drawn by a perfect and static procession in the middle of an empty city. Afterwards the participants made an enormous wave with their hands and bodies and the performance finished”.

Javier Pérez-Andújar “*The leisure park of Catalan secessionism*”,
El País, 12th September 2014.

“... Catalan journalists and politicians usually think that reality consists in the North Korean-like festivals of 11th. September demonstrations”.

Guillem Martínez,
El País-Cataluña, 12th September 2014. p. 4.

Across history, human groups have organized their living in a great variety of communities ranging from hunting and gathering bands that remind, in our time, the dawn of our evolutionary existence, to nomadic tribes or long-settled villages, culminating in the vast technical and organizational stratification of cities, nations, empires and other complex forms of political alliances. All of them have rules governing community habits which are capable to induce gregarious effects. The rites of devotional practices that reunite crowds of parishioners to perform liturgies in perfect synchrony and with a fervent spirit are one of the most

common forms of herding [3, 130, 143]. Such gregarious rites work, however, along explicit group boundaries and culminate their attributes at the communal border.

In the heavily computerized and technological societies we live the phenomena of social influence and pressure can transcend, however, the most obvious community barriers and spread with unusual ease. The automatic opinion runaway caused by (almost) unnoticed social inputs have begun to be studied, on a large scale, taking advantage of the opportunity offered by networking communications systems. Classifications by popularity of web platforms of very diverse nature have become an inevitable metric register in many areas: from market analysis to studies of advertising dissemination and penetration, opinion polls, tourism packages or even routine and everyday personal decisions. We navigate now in a world where prestige or popularity rankings and instant polls surround us always, trying to influence any choice or decision to make.

A trio of Israeli and American researchers [107] decided to study the effects of social influence in that environment and set up an experiment through active manipulation on a website of comments about news and leisure activities that operates in a similar way as *Reddit.com*, *Digg.com* or others. Such places provide access to their registered members to hang signed short comments on news or entertainment articles that have appeared elsewhere along the links to get access to the original content. These critical reviews fiercely compete to reach highlighted places in the web homepage through an automated ranking procedure that depends, in turn, on the scores given by other community members. Often these dialogues generate strings of comments that exceed dozens and hundreds of “posts”. Each of these replicas can be scored by users so that they can point up (agree) or point down (disagree), clicking on indicative arrows, so that the score achieved by each commentary is obtained by subtracting the aug-

menting and decreasing evaluations, and the total score comes from the net sum of all replicas. There are a few restrictions, however: these short reviews do not appear ordered by popularity to prevent visiting biases; users do not see the score associated with each “post” until they have entered it; they can only cast one vote; they cannot rate the posts published by themselves and finally they cannot see the evolution of popularity or know, in no way, the identity of voters.

During five months, between December 2010 and May 2011, 101.282 comments posted on the target-web were subjected to three types of intervention applied fully at random: a few comments were positively upgraded, others were degraded in parallel and the majority, the controls, were left untouched. From those 101.282 comments, 4.049 (4%) received a boost up a single point, at the time of publication; 1.942 (2%) were demoted by one point, and the rest received no manipulation oscillating freely. That disproportion between upgraded and degraded posts reflects the usual positive and negative scores that occur in the web. Those thousands of posts were seen, in total, more than 10 million times during the five months’ period and received 308.515 additional upward or downward ratings. Hence the estimation of herding effects exerted by a rather trivial and unsuspected influence (assigning, randomly, one point up or down at the start) was feasible. A clear upward drift was seen that surpassed corrective trends and the strong and spontaneous oscillations displayed by control comments. There was not, however, a degrading drift that surfaced on top of control’s oscillations. The positively induced trend prevailed from the start and reached a 25% of increase in final popularity scores, compared to controls, during the period. Such upwards bias was also clearly detected in those comments that reached outstanding levels of valuation.

Among the seven thematic areas which had more visits, three showed robust herding trends: posts about business, politics and

cultural events. Although the positive drift was also noticeable on comments about general news, economy, entertainment and clothing and fashion, it did not reach enough statistical power to be registered as a consistent effect. “Friends” factor (the web also allowed markings as “like” or “don’t like”, applied to comments) tended to strengthen those upward drags while “enemies” failed to slide them down consistently in any sense. The total amount of responses and the density of dialogues within comments was not affected, overall, although rating magnitudes were affected in a positive sense. After applying all statistical contrasts, a clear upward herding effect appeared which was easily engineered and seemed to reflect a genuine shift of opinion. Degrading moves were also detected although they were overturned by powerful countervailing reactions. The results showed, therefore, that upward herding accumulated firmly while downward dragging was attenuated or fully erased by compensatory corrections.

Strict societies versus liberal-tolerant societies.

All of this illustrates the ease to be driven and shaped by social influence through automatic processes that can surpass individual variabilities [98]. That is, pressures which overcome the differences that distinguish between nodal or highly influential individuals, those with a strong ability to induce and spread influence by themselves, and more ordinary persons with greater susceptibility to be shaped and driven by social moves and moods. The first ones have little or very small propensity to be directed or influenced by others whereas the latter, however, combine their proclivity to be moved with little ability, in turn, to exert influence by themselves [9].

One might assume as well that these distinctive herding effects should depend on the everyday stiffness or tolerant ways

which characterizes different human societies. Cultures with lax and permissive norms and uses should be less sensitive to opinion herding, while countries and communities with rigid rules and strong traits of social intolerance towards autonomous behaviour, should show much more proclivity towards gregarious influence.

Keep in mind however that these studies about social influence within the web have been carried out at sites fully open but whose users are mostly Westerners. Thus, the findings may reflect only the “minimum impact” of herding phenomena that could reach much higher sizes in closed environments. In any case, a thorough analysis of the susceptibility to social influence depending on the specific rules on each community is pending. There are studies, however, establishing cross-cultural comparisons of social tolerance versus social rigidity among dozens of countries on all continents [62], using simple but reliable measures of tolerance vs. rigidity. Those measures show a consistent negative relationship between the degree of social tolerance and several community parameters: the amount of demographic pressure, the availability of financial resources, the number of external threats, the reiteration of conflicts with neighbours, the incidence of pathogens, the existence of an institutionalized religion and the control of the media. This is a vast and potentially flourishing field in need of systematic exploration.

The drums and chants of the troops.

Hitherto the subtle findings on alignments due to social aggregation of opinions within the web. There are, however, much more straightforward and corporeal alignments which have been practiced for millennia with a formidable herding effectiveness. Music is usually the essential inductor. Choral songs and dances have served as a communal glue at all stages of cultural evolu-

tion and the nuclear components of their congregational function are now being scrutinized. Humans are, apparently, the only primates able to synchronize their voices and movements during dances, songs and parades; and the ability to join and participate in musical rhythms, in groups, appears at an early age in children [160]. Although the observations on the cohesive power of synchronicity of movement and voices are very old, there was no solid data to ensure that active participation in these ritual practices strengthened the willingness to be loyal and cooperative, and increased the tendency to make sacrifices for the good of neighbours or comrades.

That deficiency has been corrected by several studies. At Stanford, Scott Wiltermuth and Chip Heath mounted a series of experiments to elucidate the presumed link between the synchrony of movements and voices with the tendency to be cooperative [153]. The first one showed that the simple act of walking in formation, in a circuit across a University campus, in groups of three and following the pace set by an instructor, increased cooperation in a later task, performed individually, where final yields depended on the options (monetary bets) chosen by other members of the group. In addition to this greater cooperation, those who had walked in formation, when compared with participants who had just walked around campus, without pacing, were more attuned to their peers and expressed greater confidence in them, later, using relevant scales. There were no global changes of well-being or happiness between walkers and marchers, so the euphoric effects of motoric synchrony and the state of group excitement induced by the march did not occur in this circumstance.

Departing from these findings they devised two additional and a bit more complex studies, with over a hundred participants on each one. They combined, in both experiments, the composition of a synchronous and joint series of movements as participants chanted a song, whereas the comparison subjects

had to make similar movements but without exercises of body synchrony or choral singing. The choreographic task consisted in a synchronized displacement of plastic cups between two distant shelves at the gym where the tests were performed, while chanting verses of "*Oh, Canada*", a song chosen because it was strange to USA subjects. In the first study, they measured cooperation through the same dilemma of payment options (bets) as in the previous study of walking through the campus, while in the second one the subjects had to invest in a public goods game with multiple runs. In both cases, the cooperative tendency was measured by the confidence on others elections, investing money in them, and it was possible to increase earnings in the end, if everyone cooperated by investing similarly.

The well synchronized choreography led to more cooperative behaviour in both studies. Several groups were set up to create four different conditions and this allowed to establish that body synchronization was the crucial ingredient: the song by itself did not add any cooperative potency. In both cases, performers of synchronic exercises gave higher scores and reported greater trust in their comrades, while participants without choreographic movements lagged. Again, there were no differences on happiness or wellbeing and a noticeable euphoric action was thus discarded. Therefore, without creating euphoria or detectable agitation it was proved that the synchrony of movements increased the willingness to cooperate and invest in colleagues, and accentuated the feelings of proximity and trust between them. Gregarious motoric coordination provides apparently, a kind of guarantee against defection.

A group of Dutch and German researchers directed by Christian Keysers at Amsterdam Neuroscience Institute, decided to elucidate the neural basis of the prosocial bias due to the joint and synchronic performance of a musical rhythm [95]. They worked with women without experience of musical practice who

were trained to run a simple drumming rhythm of ten notes, with the index fingers of each hand hitting buttons on a panel. It was the same keyboard that later would be available lying inside a fMRI equipment, where they were required to play the same rhythm while their brains were scanned. The drumming had been practiced on several sessions following the rhythm of a seasoned drummer playing a bongo. Afterwards they made drumming exercises accompanied by experimenters who were drumming with their hands on the keyboard of a computer, and they learned to distinguish between strikes on synchronous mode and asynchronous mode, with them. During those exercises measures of speed and musical performance were obtained. Inside the fMRI machine the participants had to go through various sequences of rhythm playing, in synchrony or asynchrony with one of the experimenters who played on a keyboard in the control room, as well as another different task consisting on a game with chances to win real money by making choices among three cards that appeared on a screen with different monetary values.

After the fMRI session, the participants were immediately taken to a room where they were to fill, alone, a series of paper and pencil questionnaires. Inside the room there was only a table and suddenly the same experimenter with whom they had exercised in synchronous or asynchronous ways, during the scans, appeared carrying a chair and a pot with pens. Upon entering the room, she stumbled and pens (eight) fell to the ground. While the experimenter left the chair on its place and the pot on the table, the spontaneous behaviour of participants helping to collect the scattered pens, either returning them to the experimenter or depositing them on the pot was recorded. That was the direct measure of pro-sociality (the number of pencils collected and the time to react), which was later tested in relation to the performing of percussion rhythms. As some of the participants had been striking the keyboard in synchrony and others asynchronously,

with the experimenter, it was possible to compare both conditions.

The results showed that participants who easily learned the rhythmic drumming showed an increased activity in the caudate nucleus of the brain, in both hemispheres, during synchronous percussion. The same striatum region in the depths of the brain showed an increased activity during the subsequent monetary task, an enhancement related with the profits earned. Moreover, the activity at the caudate during efficient synchronous percussion was also associated with the number of pencils collected in the “needing help” situation that was forged, as described, after the scan. That is, the greater the neural activity in that area the higher the spontaneous cooperation. Finally, more pens were collected (between 5 and 6) when the stumbling experimenter had been drumming in synchrony with participants, whereas in asynchronous percussions only 1- 2 pens were collected.

Therefore, that region of the brain pleasure systems showed comparable increases of activity during both monetary gains and rhythmic percussions. This suggests a convergent function: namely, that the execution of synchronous rhythms ignites the circuits of pleasure and the tendency to show cooperation and generosity, as well as greater rapport with the stumbling experimenter when the previous joint drumming was synchronous. Changes in neural processing were detected in many other regions of the brain, of course, either responsible for motor performance or auditory perception, but none of them showed variations in relation to the distinction between synchronous or asynchronous percussion, nor links to subsequent pro-social behaviours. Those findings open a promising path even though this was a seminal work with few subjects.

These results connect also with other approaches that had already highlighted the nuclear role of music in the rites of the devotional practices [3, 89]. In all religious worship music is

an essential component of community rituals in the form of chants, prayers and group dances, and it is often the crucial factor because it incorporates repetitive patterns and sequences which facilitate synchrony. Such rhythms promote tuning between sound and movement patterns on one side and oscillations of physiological responses, on the other. So, breathing oscillations, heart rate variations, the electrical activity of the cerebral cortex as measured by the electroencephalographic waves and other neuro-hormonal parameters tend to accommodate to musical rhythms, inducing moods that are usually pleasant and energizing [95,143]. There is cohering evidence that the practice of ritualized prayer can promote cooperative and generous conduct [130] and the brain areas that modulate these moods, associated with prayer, coincide with those detected by Keyzers' team during a simple synchronous percussion [95]. No wonder, then, that music works as a major vector of congregational rituals in both religious and political demonstrations: it is a basic component of training procedures intended to foster motivation, ambition and euphoric states. Gregarious dragging effects appear, hence, automatically [37].

Chapter 5

The “media” regiment.⁸

“Catalan nationalists always complain that Spain does not understand Catalonia. The true story, however, is that day after day and for many years the main Catalan media have devoted enormous efforts to reach just the opposite outcome. To convince the citizenry that trying to understand fellow Spaniards is useless and to nourish apprehension, hostility and even hate against them. The trench that has been excavated during these thirty years of building an affective gap between Spain and Catalonia, a cliff that is reaching a peak during current weeks, is not a natural and spontaneous distance but a deliberate and intentionally induced lack of appreciation”

Francesc de Carreras, An induced lack of appreciation,
El País, 1th October 2014. p. 10,

The bulk of findings discussed till here illustrated some examples of automatic herding and biasing effects due to social influence. Passive accommodation to the mood or criteria of the surroundings by way of inadvertent drifts or docility to the preferences and rites of the majority, without any need to define targets or costly efforts by the issuers of influence. These effects of smooth alignment towards the prevailing social attitudes and preferences are taken always into account by advertisers, though they would never let the fate of a specific campaign or that of one product to depend only on them. In politics, less still, of course, because

8. Parts of this and the following chapter were used at Tobena A (2017) Secessionist urges in Catalonia: media indoctrination and social pressure effects, **Psychology**, 8, 77-96. doi: 10.4236/psych.2017.81006., which appeared after the Spanish version of this book was published (Tobena A (2016) *La pasión secesionista: psicobiología del independentismo*, Barcelona: ED Libros).

the goods that are being sold to very large clienteles are mostly symbolic and presented as verbal promises.

Hence the reluctance to accept that despite the massive following of the secessionist pulse in Catalonia, the rather eruptive outbreak of this movement could have depended upon a passive gregarious drift. From mere accommodation or adscription to a barely noticeable trend. On the contrary, everyone takes for granted that if automatic compliance and social obedience had a role, it must have been necessarily trivial in comparison to staggering and sobering indoctrination efforts, the outcome of a systematic, relentless and pervasive instruction effort. The crucial factor for inducing the agitation and urgency for self-determination has been the persistent and monotonous work of local media. The harsh and unidirectional political advertising provided by multiple information platforms at the service of the regional power, in an emulation of the asphyxiating bubbles imposed by authoritarian regimes. This is a common claim among partisan analysts from the capital of Spain and many other commentators who have tried to keep fair criteria. In short, the real engine of the secessionist campaign would have been the merciless preaching by a media directly controlled or under the influence of the Regional Government through direct or indirect subsidies and various kinds of admonitions.

Nevertheless, this denunciation even if correct is quickly and easily dismantled because nobody is free of such allegations, since sectarian propaganda is routinely used by all parts. The rule in Spanish politics is that the media under direct or remote control from political parties apply notorious and systematic bias with the aim to indoctrinate audiences. This is not only an accepted but an expected behavior. Voices from the secessionist field proclaim, with heated indignation, that massive indoctrination is impossible in Catalonia because there is free press and citizens have full access to all kind of (biased) media and that the

powerful and influential TV channels, broadcasting stations and internet networks depend, in most cases, from firms and lobbies which are foreign to Catalanian interests. The usual response to the accusation of “intoxication” by the regional media is to affirm that there is more pluralism in Catalan media than in the uniform chorus of centralist voices on Spanish media. These debates avoid all contrast of empirical data and prefer to engage in rounds of sterile attacks and counterattacks.

This confusing state of affairs does not eliminate the need to examine the data since there is available evidence on this issue which is readily accessible and not particularly difficult to interpret. Without needing to go to arcane sources there are official surveys which offer clarifying scenarios. The same surveys which I have used previously from CEO (the agency for Opinion Polls of Catalanian Government) and the CIS studies (the Spain’s main official polling agency) provide, with strict regularity, estimations of patterns of use of the media which can be used as approximate descriptions of consumption trends by Catalan citizens.

These findings can be summarized as follows considering that the scores reflect mean figures on the last surveys, though proportions have been rather similar during the last five years (**CEO Barometers 2013-2015; CIS 2013-2015**):

1. For “*Preferred TV channel to follow political and general news*”: **53% of responders bestowed TV3 an unchallenged lead** (TV3 is the public TV station dependent from the Regional Government). Adding to this the audiences who prefer other local TV channels, this gives a figure of **60% of citizens who prefer to follow political news from Catalan channels**. On this issue, the sum for **the Spanish TV channels does not reach a 33% of followers**.

2. For “*Preferred Broadcasting station to follow political and general news*”: **62% of radio followers** preferred either ***Catalunya Ràdio*** (station dependent from Regional Government) or ***RAC1*** (private station: Godó-Vanguardia Group), both leading with a huge advantage the radio audiences in Catalonia. **Catalan is the only language used, by both. All Spanish stations reach a meager 25% of radio followers.**
3. For “*Preferred Newspaper to follow political and general news*”: “***La Vanguardia***” and “***El Periódico***” (Barcelona newspapers with regional scope and with differential daily editions in Spanish and Catalan languages – this last predominant), alternate the lead and they reach, summed, a quota of **57%** of readers. “***El Punt-Avui***” and “***Ara***”, two secessionist newspapers added to several local ones exceed a score of **20%** of readers. The proportion of **readers of Spanish newspapers does not reach a humble 10% of people.**
4. For “*Preferred webs, blogs or social media*”: despite the absence of comparable data from official CEO surveys, the scores are probably more biased towards pro-secessionist sources because the webs and blogs launched by the secessionist media and organizations have been particularly successful and very active on social networks.⁹

These figures for consumers of news and political information depict the routine operation of a “**regional bubble**”: a **big**

9. Crameri, K. *Goodbye Spain?: the question of independence for Catalonia*, Eastbourne (UK): Sussex Academic Press, 2014; and Crameri, K. *Political power and civil counterpower: the complex dynamics of the Catalan independence movement, Nationalism and ethnic politics*; 2015, 21: 104-120.

and encapsulating umbrella which concentrates the contents of the daily news and the discussion of current political affairs through local media, reaching a **60% of Catalan citizens with an active interest in politics**. Another **20% of Catalans prefer, on the contrary, to follow news and politics from Spanish media**. And there is still **a nontrivial rest of another 20% of aloof citizenry**, with no interest in politics and who does not follow those topics with regularity.

To summarize, the major segment of the informed Catalan citizenry who follow domestic, national and international news does so through local or regional platforms: those directly dependent from the Regional Administration and those which work in areas under its control with obvious possibilities to be patronized, subsidized or marginalized. The opportunities for either helping allies or being detrimental to opponents are substantial indeed.

In addition to that, the media are the social institution which receives the maximum score of trust by public opinion in Catalonia: they get a mean total of **5,24 points (on a scale from 1 to 10, of trust)** and preside, from the top, the values given to a wide spectrum of institutions on this measure [see Table IV]. This is a curious result because journalists are not well valued on parallel measures when they are compared with other professionals. Spanish citizenry is not so indulgent with their media: using a similar evaluation procedure the figure attains only a total of **4,5** points and descends several steps on the value ladder at the corresponding CIS studies.¹⁰

10. At the CEO Barometer July 2016, Catalan media continued on top steps of the trust ladder (note=4,94), surpassed only by two new additions to the scale, Universities and Town Halls, and also by Catalan Police. Available at <http://ceo.gencat.cat/ceop/AppJava/pages/home/fitxaEstudi.html?colId=5868&lastTitle=Bar%F2metre+d%27Opini%F3+Pol%EDtica.+2a+onada+2016>

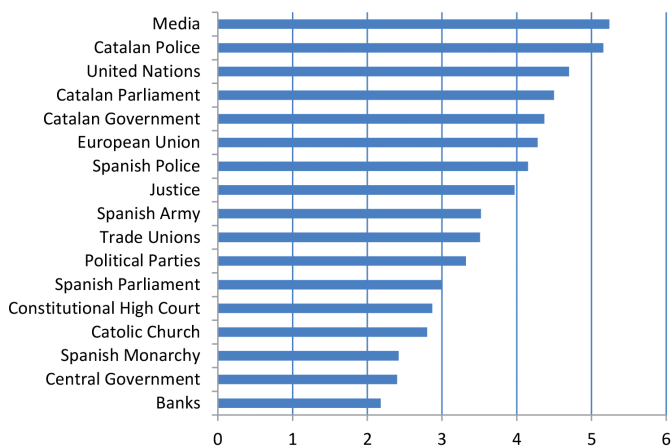


TABLE IV. *Trust of Catalan citizenry in their Institutions.* Responses to the question: “Please indicate your degree of trust (from 1 = None, to 10 = Maximum) in the following Institutions”, N=2000 persons, direct interviews [CEO, 33, Barometer of political opinion, October 2014]. The order was identical at the CEO Barometer of October 2015.

Catalan citizens who answer surveys not only prefer to follow news and politics from their regional and local media, neglecting other sources, but they cherish their media and put them at the summit of trust. It is important to underline the attribute of “citizens who complete surveys” because the data from CEO polling agency have an acknowledged sampling bias: there is an over-representation of responders coming from some social segments – professionals, middle classes and low-middle classes with stable jobs –, and the results do not reflect a fair display of opinions of the whole population. This induces a subsequent double biasing effect: these people are the preferred source to detect oscillations of “public opinion” and they are, as well, the main propagators of informed and educated opinion in their areas of influence. So, all things considered, the encapsulation works through optimal paths for indoctrination because most clients are satisfied with

the products they consume and with the role and influence of Catalan media.¹¹

It is also remarkable that these citizens award the Regional Government with a trust score of **4,4** points which almost doubles the note (**2,4**) granted to Spanish Monarchy and the Central Government. This outstanding contrast between the evaluations of the regional power versus the State is truly diagnostic of a deep opinion trend. To summarize, for these social segments the work of the media they usually follow is very valued, the policies of Catalan Government not so much though they get almost an approval and the origin of all problems and difficulties come from the State core: the Central Administration and the Crown. Apparently, all trouble in Catalonia comes from the parasitic habits of Madrid high bureaucracy and the exploitative profits that Spanish elites derive from their proximity and promiscuity to real power.

This scenario reflects, in fact, a story of reciprocal appreciation and positive affect between Catalan middle classes and the journalistic and entertainment platforms which nourish their leisure and thinking (“*our guys*” or “*our celebrities*”, as they say). It must be recognized, however, that despite their strong tendencies to reduce scope, exaggerate local virtues and amplify the infinite number of neighbors’ sins the professionals of Catalan leading media elaborate their products with high technical standards and “cool” sophistication in design and performance. And this includes news, documentaries and debates, in all communicative

11. Another CEO survey established that radio, TV and printed press were still the leading sources for obtaining information about the current secessionist debate: 96,2% of responders said they got that from TV and radio, 76,3% from printed press and 71,5% from social networks (the total figure adding percentages of *facebook*, *twitter* and other sources). [CEO-Xarxes socials i política catalana, November 2015]. Available at: <http://ceo.gencat.cat/ceop/AppJava/pages/home/fitxaEstudi.html?colId=5670&lastTitle=X-arxes+socials+i+pol%EDtica+catalana.+2015>.

formats. That penchant for stylish and elegant qualities contribute to their success because local media products compete quite well and often beat productions coming from Madrid or from other parts of Spain and Latin America.

Let me offer examples. News programs at TV3 typically beat in visual appeal and choreographic versatility those of the main Spanish channels; local TV movies and series often have a much more stylish and cosmopolitan atmosphere than those produced in Madrid; live TV sports and broadcastings have a surprising agility, complexity and creativity; the radio voices denote great freshness and humorous skills. Even newspapers have adopted very seductive and appealing graphics and chromatic styles to approach the traits and virtues of frivolous magazines. In short, it is very tempting to consume all of them whatever they say or promote. The content matters little or very little. Highly enjoyable entertainment TV formulas have had a resounding success, during decades, creating a loyal and enthusiastic clientele and becoming the best instruments for political persuasion. In fact, much of the outsourced production of television shows for the main private Spanish channels is created and recorded in Barcelona studios and outstanding Catalan professionals are routinely hired at Madrid to lead primetime programs in all communication fronts. Although it is undeniable that local television and radio stations show a strong tendency to shameless parochialism and sectarianism, they have been able to compensate that with a constant dedication to attractive formats and “cool” designs. Dedication that has allowed them to lead consistently their market. That is the apparent “mystery” hidden behind their pre-eminence.

A second ingredient that has been very relevant to cultivate the secessionist fever is the Spaniards' hunger for TV and radio “*tertulias*” (daily debates between a selection of popular individuals, at different hours along the day and at night). That is, heated discussions about political events of the day between rival com-

mentators, a formula that has become the most common forum for the digestion of informed opinion in today's Spain, including Catalonia. It is a renovation of the rather lazy chats between gentlemen at their Clubs or the hasty ones over a morning coffee between clerks and workers, but now among learned people (apparently) recruited by the media. They accompany the Spaniards in their daily commuting or working trips and monopolize important segments of TV-radio slots. They have so many fans that they have displaced entertainment shows on "prime time" and have created a line of professionals with outstanding verbal skills for heated contests who come, mainly, from journalism but also from Economics and the ranks of the social sciences academies. Some of these prominent figures of television and radio debates have taken the leap from these entertainment rings to political leadership, with overwhelming success.

In Catalonia prevails the same pattern for these shows with the particularity that most participants are either openly in favour of secession or behave as spokesmen of the Regional Government policies, disseminating monotonous and stubborn messages. That is the usual spectrum at these domestic forums. In football terms, all fans of the Barça FC team with few exceptions. From time to time a discordant voice appears. The proportions are so biased, however, that these rare discrepant voices are always in a flagrant minority against allied litigators. This ensures a purely cosmetic appearance of "plurality". Thus, the political scene is presented as a ring where these dissenting voices are awkward and unconvincing. Unanimity is reinforced through systematic complaints, allocating all evils and misfortunes on central administration policies and deviating the focus from local responsibilities. All this has worked as an additional and highly effective pathway for indoctrination.

The systematic but subtle bias to present all economic troubles and society faults and hardship as the result of foreign (Span-

ish) factors changed towards an overwhelming propaganda when the secessionist challenge became also a tense pulse between the Regional Government and the Central Government, from Autumn 2012 onwards [5]. The tools to influence and manipulate opinion dropped then all veils and the tactic changed towards brutal overcrowding of all informative flows, always and from all sources, with the apparent aim of creating an unstoppable wave to reach complete social obedience. As a good part of the task had already been completed previously, the pre-convinced social segments behaved with a remarkable cohesion and wit. A solid, impressive and very creative mass movement was created. On crucial months of summer-autumn 2014, when the rush to claim a binding referendum to decide about secession was maximal, the dedication of local *media* at feeding and amplifying the secessionist activism reached such levels that the Unions from the main Regional TV-Broadcasting channel (TV3) formally protested denouncing a permanent transgression of informative impartiality.¹² The merciless insistence on heralding the slogans and announcements of the secessionist organizations and the iteration of Regional Government claims, trespassed the tolerance of professionals who worked on the public media to the point of demanding a “*stop the hate speech*” with banners exhibited at the entrances of TV3 headquarters.

Doctrinal intoxication by public media and by some private corporations openly aligned with secessionism has been practiced in Catalonia with such dedication and persistence that the agnostic citizenry (in relation to secession), has been pushed to routinely breath in the middle of a perennial cloud of propaganda [5, 6, 47], accompanied, in addition, by an overwhelming exhibition of symbols of the secessionist movement on all public corners across the whole region.

12. Sacristán J El sindicato de TV3 denuncia parcialidad, *El Economista.es*, Barcelona 9th September 2014.

Chapter 6

Perennial stellate flags.

“First fundamental lesson after the simulated referendum of 9th November 2014: secessionism in Catalonia embraces, with precision, a fraction of the citizenry that is close to two million persons. Nevertheless, this large minority controls in an almost exclusive way a good amount of the social life of the region, starting with the media and finishing by the overwhelming exhibition of their claims and slogans, and their stubborn attempts to present their part as the whole reality. They are the real Catalonia; the rest of the citizenry are enemies to be frightened and paralyzed”.

Gregorio Morán, Miraculous ballot boxes,
La Vanguardia, Sabatinas Intempestivas, 15th November 2014, p. 30.

Urban and rural landscapes have been enriched in Catalonia by the surge of a colorful forest of secessionist flags and banners waving from balconies, windows and poles in all corners of the region. Since 11th September 2012, the flag of four red and yellow strips with a five points star, the “*estelada*”, dominates in streets, squares and crossroads, and also highlights many sites on the whole countryside from outstanding points at nearby hills. Obeying a simple slogan born in secessionist webs that reads “*hang the “estelada” on the balcony and do not remove it until independence*” [Figure 8], the public space has been adorned since then with this “*Cuban-like*” version of Catalanian flag.¹³

13. The “*estelada*” (stellate) is not the official Catalanian flag though its presence is now dominant and uncontested everywhere in official and private places. The addition of a star to the traditional four yellow-red strips of Aragon-Catalonia flag heralds the secessionism movement and was inspired by Cuban War of Independence, at the end of XIX century.



FIGURE 8. *A banner from Catalan secessionist webs.* The slogan says: “Hang the stellate flag on the balcony and leave it there till Independence”.

By midmorning of 9th November 2014, the “crucial” day fixed for holding the coveted referendum of self-determination, circumventing the suspension ordered by the Spanish High Court and transmuting the consultation into an amazing and gigantic parody, the President of the Regional Government, Mr. A. Mas, was proudly heading to put his “vote for the future of Catalonia”, on a poll station in a school at downtown Barcelona. He was talking to a known comedian, Mr. J. Évole when he paused for a moment looking at the balconies, and said: “I see many flags today”. Mr. Évole, quickly, replied: “Are you sure..., they’ve hanging for years!!”, “No.., corrected the politician,.. I see many more today “, turning conversation towards another matter. This short interchange displayed the mental inner workings of both characters. They had been taking, or so it seemed, an approximate count of the surrounding flags, probably without acknowledging it. They were walking through the center of the city after having finished a long and friendly conversation, in front of TV cameras which were still following them, at the private rooms

of the official residence of the Presidency, besides the Generalitat Palace. Mr. Mas had invited Mr. Évole to an intimate chat and the comedian was delighted and exhibiting less mordant than in his denouncing reports in which he uses a deliberately naive and (falsely) ingenuous approach.

It is perfectly normal for a politician and a journalist to scan the open signs of civic agitation, though I suspect that in that brief exchange in the middle of a walk emerged more than mere curiosity about obvious traces of public symbolic enthusiasms. Their comments denoted the shared habit of scanning and scoring to get inner estimates of the relative magnitude and persistence in flags displaying. I suspect that this kind of scrutiny on the density and relevance of the secessionist flag presence in public places, has not been unusual among Catalan citizens. The contextual pressure of this symbol through the “*perennial stellates*” campaign has not receded in years. It increased, in fact, by the addition of hundreds of municipalities when they decided to use the secessionist flag as their “official” symbol by installing it not only in the mainmast of town halls facades but in many corners of their populations. The circulatory roundabouts which are now the doors of villages everywhere are a preferred place: in many of them glittering masts were erected in their center, where magnificent “stellate” flags wave caressing the daily life of residents and blessing visitors as well. Be they, these visitors, natives or foreign people who are continuously reminded, in this way, where they have arrived and what political environment awaits to them.

It is common to consider flags as banal urban signs or home decor items devoid of any meaning. Exposure to them is so regular in all kind of contexts that it is hard to accept that they continue to function as a vector of political influence. Since they were incorporated as a kitsch decorative element to undergarments and clothing it seems as if that kind of popular consumption has stolen them any value as symbols of communal affiliation. It

is a mistake, however, to see them as negligible icons and suffice it to note its pervasive use on solemn occasions by the estates or other recognized powers. I suspect, in fact, that flags never had the relevance they have today, in a society characterized by a relentless competition which needs visible and obvious marks. Big industrial companies or business corporations have created their flags and banners to proclaim territory and they proudly wave them from the main headquarters, in iconic buildings, to their branches everywhere. As a national emblem or brand, flags convey a vast representational field: the accumulated mosaic of features, customs and values of a recognized community or State. Hence, their representational value persists despite the apparent degradation by irreverent uses.

Some of the best studies about flag influence on attitudes and political behavior come from Israel, a country where the exhibition of national emblems is imposing. In a series of elegant and creative experiments Ran Hassin demonstrated that flags waving in the environment had appreciable effects although the contact with them was ultra-short or even unnoticed [70,71]. The first one was carried out with Israelis who, while taking a verbal task on a screen, received several flashes with pictures of their national flag with a duration so short (16 milliseconds), that they could not have access to them. That is, flashed flags fell below the perceptual threshold for recognition and could not therefore be “seen” despite entering the brain. Subliminal pictures of non-flag drawings were also flashed and the effects of these entries on political attitudes were registered [Figure 9]. Under the (unconscious) influence of the Israeli flag individuals veered towards intransigent positions on hot issues concerning the endless litigation with the Palestinians. That clear tilt did not happen with non-flag images. This unconscious shift in political positioning led to enquire if something similar could happen on voting intentions and behavior. The same procedure was re-

peated with other subjects by measuring preferences before the 2006 *Knesset* elections, followed later by a cross-examination of the voting options. Those who had got subliminal priming with Israeli flags showed a bias for nationalist and right-wing formations and, a few weeks later, they voted for them more frequently. These findings were confirmed in Italy, with local citizens, before the general elections to the Parliament at 2008, and in Russia elections, at 2009, with concordant results: receiving inadvertent priming with their respective national flags, while conducting a routine laboratory task, led to a decanting of the vote towards more conservative parties or those with programs of national unity, in both countries [71]. The effects, therefore, are not restricted to the peculiar circumstances of the troubled Middle East.

The experimental stimulus, the Israeli flag:



The control stimulus, a "scrambled" Israeli flag:



FIGURE 9. Stimuli used as “primers” through subliminal flashing in Ran Hassin experiments [from 70,71].

In studies with Palestinians with Israeli citizenship he found the expected opposite results: ultra-short entries with Zionist flags tilted their voting intentions towards options distanced from Israeli conservative positions. Hassin team could show, in addition, that that kind of subliminal flashing with national flags as “primers”, increased social prejudices that conservative ideologies usually convey. When USA white participants received these ultra-quick flashes with USA flags their anti-black prejudices were increased and the same happened with Israeli citizens, in their prejudices against Palestinians. These effects sizes were obtained through a test of implicit responses specifically devised to detect prejudices.

Flag influence on USA elections was also scrutinized when Barack Obama appeared with tremendous force during the presidential race of 2008 [32]. Several hundreds of individuals were recruited to answer questionnaires, via Internet, to win a small gift. After completing the test, two hundred subjects who came from States where polls gave a clear advantage to Obama’s candidacy over that of John McCain, indicated their voting intention two weeks in advance of election. In half of them the answer sheets had a small American flag printed in color on the upper left margin, so that it entered their brains consciously but inadvertently, while they were answering the questionnaire. In the other half, the sheets were devoid of that. A week after the election, they were contacted again and had to refer their actual vote. The presence of such miniature flags, caused a shift toward Republicans in voting intentions and in the friendliness and warmth toward the Republican ticket. That shift was then reflected on the actual vote: McCain-Palin ticket reached a 27.2% of votes in those who had been primed with the flag, while in non-exposed ones the Republican ticket only got 16.5% of votes. Such increase over 10% of the actual vote continued eight months later.

Two years afterwards these results were replicated in a context where the Democratic Party had the majority in both USA Chambers. This time, participants had to complete a visual discrimination task which involved priming with the American flag: in front of a series of white and black pictures of urban landscapes they should estimate whether they corresponded to morning, midday or evening pictures. Some of the photos had flags flying on poles or balconies, while identical others did not have these flags. The task was to guess based on light and shadows, the moment of day the photo was taken. The results showed that there were shifts toward conservative and pro-Republican positions in subjects who had watched the images with flags. These shifts were similar for individuals who had earlier expressed sympathy either for Democrats or Republicans. Carter et al [32] interpreted that as an example of the effect of the national emblem in uniting opinions about the symbol of common citizenship, thus fostering cohesion towards patriotism. It is, in short, a nontrivial effect that springs from minimum additional flashing or priming despite a routine of a daily living surrounded by flags.¹⁴

A colleague from my university at Barcelona, the UAB, a computational physicist, sent me a message the day after the lecture I gave at the Neurosciences Institute, at Bellaterra Campus, about this book [see page 17], to underline his political discrepancies but he also took the opportunity to recognize that the talk had been enlightening in several respects. He highlighted the issue of flags and commented, half joking and half seriously, that from that moment onwards he would insist on his gatherings with other pro-secessionist activists to promote the “*perennial stellate*” campaign, despite he had always been deeply sceptical

14. Some of these findings with flag-priming (those with US flags in pictures, only), did not replicate in an independent series of studies (Klein RA et al (2014) Investigating variation in replicability, *Social Psychology*, 45, 3, 142-152).

on that issue. With the data discussed at the conference he had no doubts that it was important to strengthen pressure with flags insisting in deploying them in all corners of the country.

It is always a bit surprising that smart people are often totally blind to the obvious. Any observer of advertising techniques knows that there is nothing better to shape and disseminate social influence than saturation of attention and perceptual fields. If minimum exposures have clear, sizable and enduring effects, as we have seen, the repeated and systematic occupation of the scenarios along which everyday life happens and evolves must leave heavy marks. It all depends on converting emblems and logos on defining elements of the routine landscapes, on inevitable attributes of a domestic geography that the brain must process, day by day, moment by moment, passively but tenaciously. Stage designers at plays, films and TV series know very well that and when they try to recreate an urban setting where the presence of a pressing political doctrine is invasive, they typically resort to the profusion of flags. We diagnose then, in a blink, that the film will recreate a Nazi, Communist or Fascist context by the ominous presence of flags in the set. No need even to have a look at the costumes or dialogue: images of urban geography in total silence are enough. That is precisely the impregnating symbolic environment which has prevailed in many villages and in affluent neighbourhoods of Catalan cities for years. Only in inner downtowns or peripheral neighbourhoods where working classes predominate or foreign communities from various migratory waves live, the secessionist flags are absent. In the rest of the region the campaign of “*perennial stel-lates*” gives the Catalan landscape a Cuban chromatic style that clearly outperforms the “redness” of Eastern Europe cities before the fall of the Berlin Wall, to name just one example. In small rural communities that contextual pressure reaches North Korean magnitudes, while in the districts of middle and upper

classes at cities such blessing with hanging flags and banners is a bit less imposing.

The crouched and expectant segment

“Ethnic and nationalist conflicts are not the result of uncertainty, misunderstanding or poverty. They are usually triggered by naked grabs for power aimed at subordinating one group by another, with power-hungry leaders supported by deeply bigoted public opinion and with the organizational muscle to implement their plans”

Stuart J. Kaufman. *Nationalist passions*,
Ithaca, NY, Cornell University Press, 2015.

The intensity of the indoctrination applied by the alliance of local media, secessionist activism and Regional Government can be explained, likely, by the never recognized but strong suspicion that the real obstacle for secession was at home. These actors were perfectly aware of the size and relevance of the Catalan citizenry with familial or affective links with Spain and contemplated with apprehension their potential reactions, although this population has remained silent and expectant all along recent secessionist deployments and moves. There are, in fact, around three million of citizens with capacity to intervene in politics who have not been convinced to jump into the secessionist adventure despite the stubborn campaign that they have had to endure. They are very heterogeneous though they predominate in towns that make up the big industrial rings of Barcelona and Tarragona's conurbations, as well as in many other suburban neighborhoods and villages across the network of medium-sized cities and towns scattered in the whole region. They have remained stoically restrained, without expressing themselves loudly or emphatically through demonstrations or by exhibition of signs (the Spanish flag is almost absent in Catalonia), and this may have increased

the feeling that they constitute a fragmented, submissive and negligible part of the citizenry. They do not have anything like strong parties or a common leadership and they are politically under-represented in Catalan Parliament because they have typically failed to appear in the successive electoral contests at the regional level. They commonly vote intermingled with the rest of the Catalan citizenry at Spanish general elections, but typically express a meager interest in Catalan regional elections.¹⁵ But they have not bought the glittering promises of secessionism despite the apostolate, lures and bribes received. They are waiting still and noiseless, scanning the horizon and trying to live as if there were no environmental pressures. As it is yet possible to organize the routines of daily life avoiding promiscuities with the suffocating cloud that the secessionist feed, they trade and work while they await crouched and expectant.¹⁶

This is probably one of the most important drivers of secessionism urgencies. For pro-independence forces, it is decisive to keep these people silent, demobilized and resigned while the “*window of opportunity for secession*” endures and remains open. The social fracture has not yet approached the threshold of a po-

15. Riba C. Voto dual y abstención diferencial. Un estudio sobre el comportamiento electoral en Cataluña, *Revista Española de Investigaciones Sociológicas*, 2000; 91: 58-88; Fernández-i-Marín X, López J. Marco cultural sobre el comportamiento electoral en Cataluña, *Revista Española de Investigaciones Sociológicas*, 2010; 23: 31-57; Riera P. Differential abstention in a Spain with Autonomies: significant traits and explanatory mechanisms, *Revista Internacional de Sociología*, 2012; 70 (3): 615-642.

16. During the highly charged weeks that preceded the second, illegal, referendum of self-determination, at 1st October 2017, this citizenry segment finally reacted. A description of their demonstrations, electoral behaviour and changing moods can be found at Tobeña A (2018) Entrenched Catalonia: a secessionist venture trapped on an ethnopolitical draw, *Psychology*, 9, 460-471 and Oller JM, Satorra A and Tobeña A (2019). Secessionists vs. Unionists in Catalonia: mood, emotional profiles and beliefs about secession perspectives in two confronted communities. *Psychology*, 10, 336-357

tential conflict despite a perfectly visible horizon where a part of the citizenry gains and the rest loses in the event of secession. The borders where the forces of one side finish and the adversarial lines start are well defined, however: flags and all kind of banners and slogans have been erected to mark territories at every condominium and neighborhood. It is time, now, to discuss attributes of these group boundaries.

Chapter 7

Parochial and xenophobic brains.

“E Pluribus Unum” (American unofficial motto) ...

“The process of converting pluribus (diverse people) into unum (a nation) is a miracle that occurs in every successful nation of the Earth. Nations decline or divide when they stop performing this miracle....”

Jonathan Haidt.

The righteous mind: why good people are divided by politics and religion,
New York: Pantheon Books, 2012.

In men and women, the tendency to help and cooperate arises spontaneously. Not everyone is generous, fraternal and compassionate but the willingness to help others in need is common. It is also a common rule that such benevolence is practiced much more readily within the family and with neighbours, colleagues or known people. Generosity and fraternity are distributed with selective criteria: relatives and friends come first, acquaintances are usually second and there is still a reserve of goodwill and indulgence for peers and compatriots. Beyond that extended circle humans can sometimes offer support, protection or sacrificed commitments to complete strangers, though not so easily or frequently. Help is less practiced with foreigners because humans carry a legacy of living within close-knit tribes and clans which is still reflected in our preferences and apprehensions today. We tend to restrict the extension of costly investments or demanding cooperative behaviours to a reduced network of known people. Those, in short, from whom it is plausible to get direct or indirect information about their value and reputation as potential beneficiaries of our aid.

Strangers can be helped and are indeed helped in many ways, of course, but we must jump above a bit of inner reluctance or overpass an ingrained resistance. There are plenty of findings coming from the laboratories of Experimental Psychology and Economics showing the influence of intragroup preferences and biases in modulating altruistic tendencies, either by using measures of attitudes or by exchanges of real money or goods in games [4,38,67,76]. This preference is called “intra-group favouritism” or “parochialism” and the studies devoted to it have produced consistent advances in recent decades. The starting point was the ease and swiftness with which humans create group boundaries.

Arbitrary groupishness.

Studies using the “*minimal group*” paradigm have shown that humans present a powerful, systematic and apparently automatic tendency to divide the social world between “friends” and “foes”: those who are “with us” versus those who are “against us”. A clear and quick gap between “ingroup” and “outgroup” traits appears when unknown individuals, at the laboratory, are divided in two halves using fully artificial criteria (hence the “*minimal group*” notion). This is what happened, for instance, when the criterion to ascribe participants to either one side or the other side of divided groups, was set from outspoken preferences for Klee paintings versus Kandinsky on a pioneering study in this field [136,137]. That artificial split can be reproduced by dividing people per their preferences for green or yellow colours, for bread or rice, for holidays at the sea or in the mountains, for their fondness for thrillers as opposed to music, or any other completely banal “doctrinal” preference. There is a solid body of data derived from the experimental approach that H. Tajfel began at the University of Cambridge [79].

Any border between groups induced from a strictly arbitrary distinctive label generates automatic distances on perceptual and emotional attachments. These distances across the border are not irrelevant at all: members assigned to each side of the frontier tend to judge their new comrades as more cordial, honest, reliable and intelligent than the others [136,144]. It may seem odd, but it works like that. People divided in this way are also more willing to share goods or resources, with their newly acquired comrades when playing on a cooperative game [12,79]. All without talking or interacting: the biases arise just by realizing that you are at the same side on one of these arbitrary “groupings” based on petty preferences about artistic, gastronomic or film tastes. They are subtle distances, though systematic and reproducible. And it might be relevant that five years old infants already show this curious proclivity to automatic pro-group bias [160].

This ingroup bias includes other relevant traits: it promotes, for example, the appearance of an added sense of “social identity”, of belonging to a special band that helps uniting individuals to undertake further endeavours. Personal identity expands, including elements of group characterization. The processes mediating such automatic accentuation of intergroup differences and the minimization of intragroup distances contribute to the spontaneous emergence of a new “social identity” [136]. If these transient groups formed with irrelevant tags and for recreational purposes display swift and clear cut cognitive and behavioural boundaries, when group separations are build up from relevant signals to interact and compete in the real world it can be envisaged that subsequent effects of group insulation (both perceptual and emotional), will be much more conspicuous.

That is, when social markings are associated with elements such as shared territory (homeland, country, nation); a recognizable voice (language/dialect area); race or ethnicity (gradients of physical attributes) or religion (the scope of shared beliefs and

rituals), which are all reverberating traits of recurring group hiatuses, the automatic drift towards generating deep perceptual and emotional borders is hardly resistible. An example is the strong human propensity to use stereotypes and prejudices in the characterization of neighbours everywhere: those schematic and grossly simplified descriptions which degrade neighbouring groups [26,27,75]. Crude categorization and abusive generalization are the basis of these “*minimum doctrines*” that communities often share in all corners of the planet, when portraying attributes of neighbouring groups. Kids do that with their rivals at school, street cliques do the same to the bands next block, like their elders with people of neighbouring towns, countries or rival enterprises. Data on the proclivity to stereotype by infants of very early ages are also demonstrative of that [80]. Neighbour outgroup nicknames usually carry stigmas of all types. The ease by which attention, perceptual and emotional intergroup segregations appear has been well proven and these processes feed the gears of intra-group favouritism [50,124].

Kibbutzim with parochial biases.

There are people, however, ready to show vast and unrestricted or bounded cooperative behaviours; that is, people able to jump over nepotism or the most common kinds of parochialism. In principle, such virtuosi should emerge from those who have been educated in communities with firm cooperative values and a lifetime dedicated to solidify collectivism principles. Researchers from the Hebrew University of Jerusalem and Ben-Gurion, at Beer Sheva, thought that Israeli *kibbutzim* might be, for that reason, ideals subjects to test the potency, universality and limitations of intra-group favouritism. Members of *kibbutz* communities live and interact sharing all their income, goods and assets,

regardless of their professional skills and occupations. Another crucial element of this way of life is its voluntary nature: you choose to live as *kibbutzim* though you can leave, freely, returning at your ease to the mainstream Israeli society where competitive and selfish values are stark. Richard Bradley and Ruffle Sosis thus decided to launch a field study conducted in the everyday conditions of *kibbutz* life, but with careful attention to rigor and methodology details, to elucidate this issue [120,130].

To conduct the experiment, they selected four *kibbutz* in central and southern Israel, highly collectivized, and contacted by letter to ordinary citizens from seven cities, in the neighbourhood regions, with a variety of backgrounds like those of the *kibbutz*. *Kibbutzim* subjects in addition to responding to different questionnaires, had to participate in one-shot dilemmas of a public goods game, with binding decisions involving real money: duets formed between *kibbutzim-kibbutzim* (101 pairs in total) in a version of the game, were compared with duets formed by *kibbutzim-ordinary citizens* (61 pairs in total). Before starting, participants had obtained permits from the *kibbutz* to be visited and addressed by a University research team. The game, therefore, was always between pairs of participants. They were briefed that they had 100 *shekels* in an envelope at their disposal, and each of them should decide how much money to get, from this, for their pockets and how much they would leave for the other member of the duo. Both participants had to decide this exactly at the same time without knowing the other's decision: it was, therefore, a blind choice. If the sum of the quantities to be removed on both sides, exceeded the total amount available (100 *shekels*), they lost everything. But if the sum did not reach that amount, each one was left with the sum retired and the rest till one hundred, was multiplied by 1.5 and divided equally among them.

Those were the rules and precautions were taken to warrant, on each trial, that they had been well understood and correctly

followed. The day of the experiment twenty interviewers arrived at *Kibbutz* to address participants in their homes or apartments (never in the community halls). They ensured (by cross-mobile calls), that they entered the houses of each duet at the same time. After brief introductions, they requested a room for completing the questionnaires and proceed to do the economic game. Various pre-game exercises, with demonstrative papers instead of money, were completed. Finally, they went for the real game and once a decision was made (by the first member of the duet who got that), the researcher called the fellow investigator in charge of the other participant to report that they had a decision, without revealing it. They waited for the reverse call to receive the other party decision (hidden also). Only then the amounts to be removed were communicated and if there was a remnant available (from the total of 100 *shekels*), it was multiplied by 1.5 and the total divided in half to complement the respective gains. The game ended at this point with the corresponding balance for each member of the pair.

The cooperative nature of the dilemma of having a common but limited resource to derive benefits, was well understood because there was no case in which the added sum exceeded the total “availability” amount (100 *shekels*). The sum of removed amounts was always lower than 100. Members of each pair were also asked to guess how much they suspected their partners will withdraw, so an estimate about the expected reciprocity was obtained. The *kibbutzim* took 29,6 (+/- 17) *shekels* on average, when playing with fellow *kibbutzim* (the most common choice was 35 *shekels*); and they withdrew, however, 35,2 (+/- 14) *shekels*, on average, when they played with ordinary Israeli citizens (the most common figure was 40 *shekels*). Israeli ordinary citizens, meanwhile, took 35,6 (+/- 16) *shekels* on average, when playing with *kibbutzim*. The first of these differences, that distance of 5-6 *shekels* surplus that *kibbutzim* left in the common stock when they played

against other *kibbutzim*, with respect to playing with ordinary citizens was very powerful in statistical terms. In contrast, the second figure, that 0,5 *shekels* barely separated the *kibbutzim* from the other citizens when they played against each other.

Therefore, these results show that *kibbutzim* are as parochial as the rest of citizens. They aim to give priority to their own rather than to their unknown compatriots from outside the *kibbutz*, in a cooperative dilemma. This is reinforced also because when guessing, in the game, about what quantity partners will withdraw the *kibbutzim* approached the value of 40 shekels for other *kibbutzim*, whereas both ordinary citizens and *kibbutzim* came to the value of 50 shekels, as the most likely when playing in pairs, without distinction between them. Age, educational level and professional occupation did not influence these elections, in any way, and neither did the type of *kibbutz* or the city neighbourhood. However, time lived in a *kibbutz* had relevance: those born there were clearly less cooperative than those who entered *kibbutz* as adults.

Those are rather shocking findings since the *kibbutzim*, from the pioneering days at the dawn of the State of Israel, have dedicated superior efforts than the rest of their fellow citizens to community goals benefiting the entire Israeli population and not only the enterprises of each *kibbutz*. Even today, despite large oscillations that these collectivist colonies have lived through, the *kibbutzim* are still over-represented in the army and in health and education posts or non-governmental organizations. However, these results show that the tendency towards intra-group favouritism is also prevalent among them and that it is even higher in those who have grown up in the *kibbutz* itself. Thus, the decisive ingredient for a highly generous behaviour do not arise from being reared within a community enforcing strong cooperative values [2,33], but from the firm egalitarian convictions that distinguish those who enter, voluntarily, on a collectivist lifestyle later in their lives.

Brain circuits for parochialism.

The essence of parochialism can be distilled in two main traits: enhancing the value of living and cooperating within ethnic, territorial or doctrinarian ingroups and the indifference, mistrust or even hostility towards foreigners or simply the out-group members [26, 50,99]. This double proclivity towards intra-group favouritism and apprehension and even hate for outgroups has been demonstrated in many studies at the laboratory and during routine living interactions in all sorts of cultures and contexts [77].

In economic games between pairs of strangers when there was a third person who acted as judge punishing abusive behaviour (“third party punishing games”), held with participants from tribes of Papua-New Guinea, there was a strong bias towards being less punitive to members of the same language communities. Punishments from judges to flagrant violations of fair treatment, during economic transactions, were far more ominous for abusive individuals using other language variants than when such unfairness came from individuals of the same tribal community [22]. That is, judges tended to favour those perceived as comrades, imposing minor punishments to similar or more serious offenses. There are even theoretical models in which the successful evolution of a group or culture, with its characteristic profiles and customs, depends on hostility towards the neighbouring groups they must compete to endure [50].

The team of neuro-economists led by Ernst Fehr at the University of Zurich, has made decisive contributions to the attributes and constraints of altruistic behaviour in contexts of individual or group competition. They have managed to outline the neural circuitry behind parochialism or intra-group favouritism, using these “third party punishing games” [17,18]

that is, economical games who have an intervening judge. They took advantage of the fact that in the instruction period of potential candidates for Swiss Army officers, they are randomly assigned to companies deployed on different places to complete their training over four weeks. They live, attend courses, exercise and socialize almost within a closed college, during this period, which ends up forming strong links between them. The economic games were held in two phases: the first one, between the third and fourth week of the instruction at the companies and the second, at the radiology MRI laboratories in Zurich, in sessions scheduled for no more than five days after finishing the stay in army facilities. All transactions between subjects during these economic games were anonymous and one-shot. The aspiring officers who acted as judges and underwent scan sessions (functional, fMRI) were 16 at the end. All participants in the transactions and these 16 “judges” received their final emoluments in Swiss francs, based on their decisions and performance during the games. Points were used, in fact, which had their monetary equivalence at the end, so that for every 10 points earned at the game, about two US dollars were really earned. They could read and reread the instructions and get full answers to their queries during various exercises before the actual game.

The procedure followed this plan: “A” and “B” were the two players and “C” the subject who acted as a disciplinary judge, “A” and “B” received 20 points each at the start of playing. They had to decide, simultaneously and by clicking the corresponding key on their terminal, if these points were retained or passed to their contender. The points offered to contenders were automatically doubled. That is, transferring points amounted to cooperate whereas retaining them indicated desertion. If both players invested their capital in full, their reciprocal cooperation managed to double the initial investment reaching 40 points each.

If they retained the whole capital fearing a potential desertion, they stayed where they were at first, 20 points each. But if “A” invested his 20 points in “B”, and “B”, however, none on “A”, the result was that “A” was left with nothing and “B” had reached 60 points. The same was true, in reverse. Therefore, in a one-shot and non-reversible trial the expected dominant strategy was retention of capital for fear of being left penniless in each interaction.

The 16 “C” subjects who acted as judges in the fMRI session could punish “A” and “B” contenders, in view of their behaviour, by assigning penalty points. These judges received 10 points at the beginning and if they decided to apply punishments to the contenders, each penalty represented a loss of 3 points for the sanctioned player and a point lost by the judge (the cost of making the punishment). The amounts paid to each participant at the end of all trials reflected, with precision, the final amount resulting from their choices along all interactions with different individuals. There was no deception or manipulation. As intra and extra-group comparisons were needed the fMRI session included three conditions: a. both contenders and the judge were comrades from the same company; b. the punishable player and the judge were from the same company, while the other player was from a different company; c. the punishable player came from a different company than the judge and the other player, who were comrades. Therefore, the conditions “a” and “b” enabled to study intra-group punishment while condition “c” enabled to test punishments applied to outgroup individuals.

The results indicated, first, that judges behaved with a clear and unequivocal favouritism to their comrades. Sanctions came when defections that prevented gains from cooperation occurred. In these circumstances, judges doubled by far the amount of penalties imposed on players that belonged to other companies,

compared to those applied when defectors were from their own companies. A clear double standard was used: abusive and harmful behaviour from an outsider was severely punished, whereas penalties were highly softened, however, when similar misbehaviour came from a comrade. By measuring the neural workings mediating these differential transfers of penalties in judges' minds, a selective map appeared of the brain circuits needed for sanctioning.

While inflicting severe punishments to outgroup reprehensible conduct specific territories of the orbito-frontal and prefrontal cortex and caudate nucleus were activated, all of that more pronounced in the right cerebral hemisphere, in a coordinated effort of the whole punishment system. The most severe the punishment, the more powerful was the coordinated activation of the regions of that system. However, when softening the sanction applicable to selfish and shameless comrades, an activation of the brain regions which are part of the circuitry involved in mentalizing tasks was required: areas of the temporo-parietal junction in both hemispheres and of the medial prefrontal cortex. The better the synchrony between these areas workings, the greater the smoothness of penalties applied. Finally, in weighing the links between these two brain systems, the "punitive" regions and the "interpretative and comprehensive" zones, it was found that "mentalizing" circuits were capable of commanding and shape the activity of the "sanctioning" regions, especially in the interconnectivity between the temporo-parietal junction and the orbito-frontal cortex. This is a first step towards the specification of brain regions involved in mediating punitive double standards, which combine intra-group favouritism and forgiveness with harsh sanctions applied to the very same offenses when they came from outgroup individuals. A rich harvest of findings for an experiment carried out in quite specific and restricted conditions.

These findings corroborate, in fact, many laboratory studies and field observations obtained with different participants and in various places that had detected the double directional biases conveyed by parochialism, although the neural networks mediating them had not been elucidated. Neuro-economics research at the University of Zurich has also produced stunning results from the laboratory of Tania Singer [73], which complement those of Ernst Fehr. In this case, the cooperative behaviours to be studied were not fair or unfair monetary transactions but the disposition and speed to help to relieve the physical pain that someone is suffering. Distinguishing between the suffering of comrades versus the suffering of foreigners (outgroup individuals).

Participants who underwent the fMRI scans to analyze their patterns of neural responses to the physical suffering of others, were 16 men who had interacted, previously, with different individuals of similar ages. Group frontier, in this case, was belonging to the opposing fandom bands of two football teams from Zurich region, both playing at the Swiss Soccer First League. In the first part of the experiment, without scanning, these 16 participants had to compete, with a comrade, against two opponents in a football computer game, besides indicating the intensity and dedication of his attachment as a fan. Later, and once inside the MRI scanner they received a few electric shocks of low, medium or severe intensity applied to the back of their hands and they had the opportunity, also, to watch as these same painful shocks were applied, either to a comrade or to one of the rivals with whom they had just played, both sitting next to the scanner. Finally, they had to fill in questionnaires to indicate how they felt concerned by the suffering of others. In a second session of fMRI brain scanning, these 16 participants watched from their position inside the scanner, the administration of painful shocks either to comrades or to rivals but they did not receive them in any case.

In this second stage, however, they could choose between three different options: a. help the victims by accepting to receive half of the intensity of each shock themselves; b. obviate the scene and watch an entertainment video of a football game; c. contemplate the suffering throughout the entire procedure, while doing nothing.

Figure 10 shows the total choices of these individuals while they witnessed the pain inflicted to contenders or comrades. They could opt, as stated, between generosity through sacrifice (accepting part of the pain themselves); abandon the scene (selecting an entertainment video) or morbid curiosity (contemplate the other's pain and suffering). Generosity clearly predominated (68% of choices), above both escapism (25%) and morbid curiosity (7%), though such brilliant and magnanimous distance was restricted to comrades' pain. For rival's pain, generosity diminished till 45%, escapism increased up to 30% and morbid curiosity reached a 25% of choices.

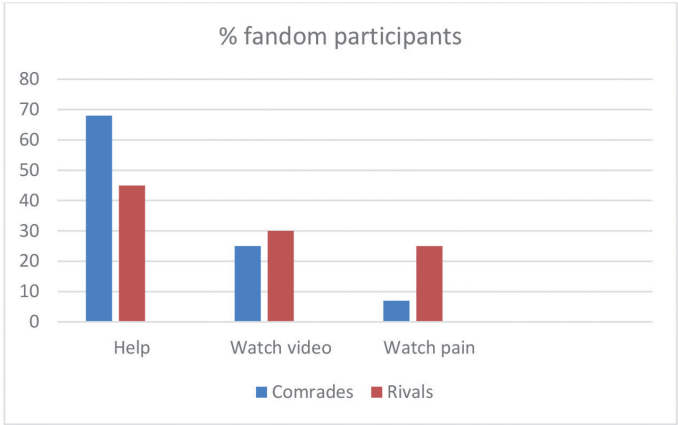


FIGURE 10. Choices made by participants (%) selecting between: help others in pain (accepting part of that pain themselves); a leisure activity (watch a soccer videogame) or morbid curiosity (watch other's pain induced by electric shocks), either to comrades (fans of the same football team) or rivals (fans of an adversarial team) [modified from 73].

That is, one in four subjects chose to contemplate the torture of opponents and by adding to morbid curiosity the percentages of escapism they clearly won out, over generosity, on that condition. The frontier of soccer rivalry defines, therefore, important differences in attitudes and behaviour: for comrades, there is a quick help available to alleviate much of the pain, while for the sufferings of rivals most participants preferred to ignore them or watch their punishment. These differences were corroborated by estimates made by these subjects, at the end of the experiment, about the degree of concern regarding the pain and sufferings experienced by others: it was clearly superior for comrades than for rivals.

These differences in treatment and attitudes to the suffering of allies versus opponents should have correspondence within the brain regions that deal with pain perception and empathic reactions towards other's sufferings. When subjects observed the pain of others the more anterior regions of the insular cortex were activated with a specificity which was much higher than in any other region of the brain. This helps to validate the present findings, since many previous inquiries had established the importance of that region for the empathic experience of contemplating other's suffering. Moreover, the degree of activation of the insular cortex, at the left hemisphere was different when contemplating the pain of comrades versus the rivals, with a greater emphasis on the former. That is, the "empathic" insula reacted differently to the pain of others, depending on the side of the sufferer: maximal activations when victims were from ingroup comrades and some activation towards outgroup pains, but clearly less.

This local neural activation could predict the willingness to help in the second fMRI session: the higher the insular activation the more likely was the stoic acceptance to share pain by enduring a part of the electric shocks delivered. It predicted also the anxiety and concern for other's sufferings. In no other area of the

brain was obtained that tilt of selective worry and concern, depending on the frontier side, when looking at genuine suffering of others. Another brain area, the nucleus accumbens showed a reverse trend: its activation was linked with a lower propensity to help and less empathic reactions towards other's suffering, especially when the opinion about these rivals was clearly negative. In fact, the activation of the accumbens did not distinguish between the suffering of comrades and rivals but it did when considering the negative impression about rivals. Always in the direction of antipathy: an accentuated accumbens signal was associated with less concern and less tendency to assist unwanted rivals. These findings are concordant with others from Tania Singer team [129] where they found, in men, that the desire to avenge contenders (in-group, this time) who had misbehaved during a previous monetary game, was accompanied by higher activations in the accumbens when they were given painful electric shocks. The accumbens is a reward processing area and this result was interpreted as the gratifying effect of achieving an accomplished revenge.

Neurohormones for ethnocentrism.

These findings about the neural substrates of in-group favouritism are consistent despite being preliminary. It is undeniable that they have situated the brain workings linked to in-group/outgroup preferences within plausible areas, but the strict restrictions of these lab experiments require a cautious perspective before generalizing. This front of inquiries would gain much in strength and predictive power, if besides the links between biased preferences and the brain areas which process them, there were some hints about specific neuro-hormonal mediation for such tilts along group frontiers. In this respect, the research program

carried out by the team of Carsten De Dreu, at the University of Amsterdam, has achieved substantial progress.

In 2010 they reported the first of a series of findings that have established a solid landscape. The main hormonal actor of this story is oxytocin, a substance that received huge attention in the last two decades because it has a decisive role in the modulation of enduring social ties, in human and other mammals as well, to the point of having earned the nickname of the hormone of “affection and trust” [48]. This molecule is an important peptide which is produced in the hypothalamus, a remote corner at the base of the brain and secreted by big sized neurons within the pituitary gland, thus entering the bloodstream to be distributed to different parts of the body. Oxytocine is an old acquaintance, in fact, of endocrinologists and obstetricians for their actions on the uterine wall and the secretory tissue of the mammary gland, inducing the labour contractions in the final stage of pregnancy and the milk excretion reflex to the suction at the nipples, two obviously crucial actions to ensure a viable offspring in mammals.

Oxytocine has molecular precursors that play equally critical roles in various stages of reproduction and breeding in the whole animal line. The recent wave of oxytocin popularity, however, as a substance able to mediate processes within the brain, only started in the nineties of the last century after fifty years of regular use in gynaecology mostly. The first steps to show its involvement in central neural processing came from the identification of specific receptors for oxytocine in the cell walls of neurons in different areas of the brain. From that point, studies proliferated to delineate “upstream” circuits from the hypothalamus to other brain areas and “downstream” towards the brain stem and spinal cord, in addition to the already well known peripheral effects of the hormone. De Dreu team took advantage from a series of previous studies which had demonstrated that nasal instillations with small doses of this hormone, induced increments of trustworthi-

ness and proximity towards strangers as well as increases in generosity to them, in a variety of economic games with real money.

Some of these pioneering studies came from Ernst Fehr laboratory of Neuroeconomics, at the University of Zurich [16,97,131]. The Amsterdam team of De Dreu used, on their first experiments [41], variants of a public goods game that required monetary contributions. Some of these contributions were for the in-group (the earnings had to be distributed equally, among participating comrades), and others were costly contributions to inter-group competition (mainly devoted to detract earnings from out-group rivals). Intranasal oxytocin doubled the monetary investments to the common in-group account but, it did not augment transfers devoted to cut the earnings of the outgroup. Figure 11 illustrates the size of these hormonal effects in comparison with inert instillations (placebo), in studies with double-blind conditions.

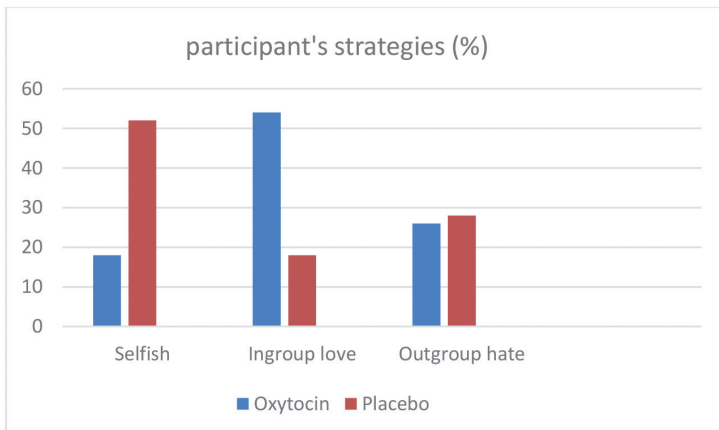


FIGURE 11. Investing strategies in a public goods game played by N=116 Dutch men (expressed as % participants): Selfish= keeping most of the capital; Ingroup-love= transferring money to comrades; Outgroup hate= investing in detracting capital to outgroup rivals. Oxytocin substantially increased cooperation with in-group comrades but did not influence outgroup hurting [modified from 42].

When conditions within the game accentuated the perceived threat to the plausible options for contenders, oxytocin intensified in-group biases. In another study [45] devoted to an economic competition between rival groups, participants were asked to select allies to be incorporate to their teams. They were shown pictures of faces of these potential allies whose features had been retouched to indicate either “high threat” (dominant and unreliable profiles) or “low threat” (benign and high reliable profiles). Those who had received intra-nasal instillations of oxytocin elected, as allies, the most threatening faces and indicated a clear preference for them. Therefore, oxytocin not only promotes selective intra-group cooperation but emphasizes defensive tactics to put them at the service of protection of comrades.

In the following series of studies [43,44], 280 Dutch men with a mean age of 21 years old, received 10 Euros for participating on a trial. They were told that the experiments will be testing the effects of a substance on several cognitive tasks. Once they arrived to the laboratory they were placed on a cubicle where there was a computer terminal, from which they could interact and complete the tasks without seeing or speaking to anyone. In a first run they had to respond quickly to Arabic or Germanic surnames (those of members of the out-groups), as compared to Dutch surnames, while associating to them positive or negative adjectives, alternatively, in an “ad-hoc” version of the Implicit Attitudes Test which measures automatic stereotyping. It is based on the known fact that it is easier and quick to assign favourable qualities to individuals from your own group, than to foreigners or people from rival outgroups; and vice-versa for the unfavourable attributes. Subjects who had received intra-nasal instillations of oxytocin, 40 minutes before starting the test, compared with those who had got a placebo instillation, stressed the in-group bias and the outgroup dislike, although this second effect was less intense. They responded more promptly and efficiently to

“positive-ingroup” than “positive-outgroup” inputs, and faster also to “negative-outgroup” than “negative-ingroup” inputs. Such stereotyping reached equivalent sizes for both Arabs and Germans surnames, thus corroborating the findings of multiple surveys that had indicated that these communities are perceived as threatening by contemporary Dutch individuals.

In subsequent studies [44] it was found that oxytocin can even induce the adoption of radical measures of sacrificing an individual (hypothetically, in a moral dilemma), to save more people, particularly when the victim was from a threatening outgroup. Those were, of course, fictitious situations where answers were required to respond to forceful moral dilemmas at the laboratory. When selecting for sacrifice people who, by their surnames, it could be guessed if they were Dutch compatriots or Arabic or Germanic citizens, oxytocin clearly emphasized the in-group bias [see Figure 12]. That is, both Arabs and Germans were much more “dispensable” in these situations, than Dutch people. Oxytocin strengthened the in-group bias especially by reducing the number of cases in which the sacrifice of a compatriot was accepted. Therefore, even in this case, the parochial enhancing effects of oxytocin went more for increasing in-group favouritism than for augmenting the aversion towards others (a tilt, this last one, which was only noticeable in some tasks).

Rounding out the issue, De Dreu team showed in a study carried out on another sample of young Dutch [46], that intranasal instillation of oxytocin intensified social conformity. That is, the subjects treated in that way accentuated the adjusting of their views to those prevailing in their group, in comparison with those receiving placebo instillations. The measures were aesthetic views about a collection of 45 neutral and bland graphics, on which members from the participant’s in-group or outgroup individuals expressed a judgment of value (on a scale ranging from “unattractive” to “most attractive”).

The groups, incidentally, were built fully at random, depending on the order of registration to participate in the experiment. When there was disagreement between the aesthetic views advanced by these “occasional comrades” and those of “rivals”, subjects under inhaled oxytocin assembled his aesthetic judgments along with their comrades whatever the direction, positive

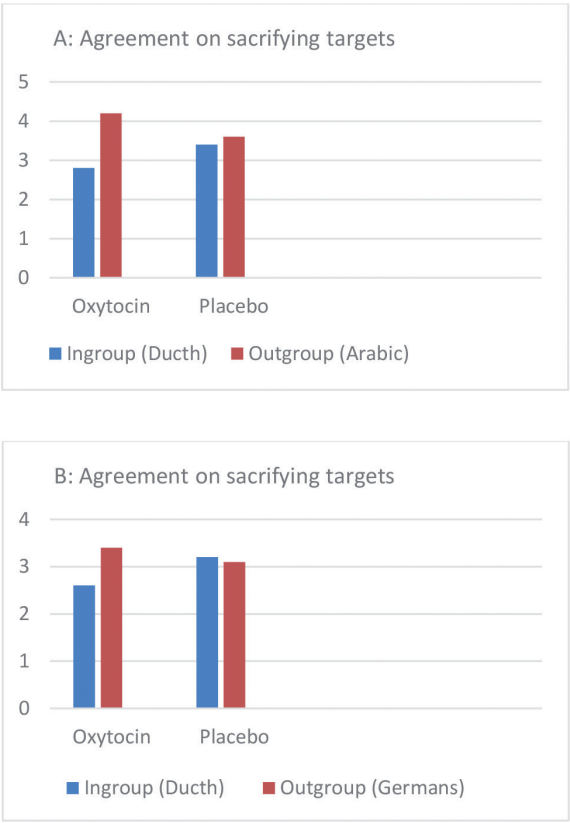


FIGURE 12. Acceptance of sacrificing Dutch compatriots versus Arabic (A) or German (B) citizens, in forced moral dilemmas where killing a victim saves a greater number of people. Numbers on the Y Axis indicate degree of acceptance of a deliberate sacrifice. Intranasal instillations of oxytocin enhanced the proclivity to eliminate foreigners much more than compatriots [modified from 44]

or negative, of the prevailing judgment on each drawing. This result allows us to reconnect here with topics already discussed at Chapter 3 [p. 37]: oxytocin works as a unique neuro-hormonal gear, a specific molecule which not only promotes herding in terms of support, sacrifice and favourable assessments of in-group attributes, but also in terms of adjusting compliance with the vision and judgment about the world. That is, increasing judgmental cohesion. Therefore, oxytocin can promote partisan and gregarious effects at once.

These are splendid findings that may, perhaps, contribute to attenuate the candid enthusiasm provoked by the notion of oxytocin as the neuro-hormone of trust, proximity and friendliness [162,164]; of generosity and universal care and affection. There are apparently disturbing shades for oxytocin actions, although the matter deserves further investigation because there are results obtained in a variety of tasks, by other teams, showing that it can enhance herding and promote also cooperation and trust [15,86,87,103,162]; cooperative tendencies that can go beyond the boundaries of own's political party in one case at least [105]. In a study of the De Dreu team in which the economic games included the possibility to act either on a "predator" mode (greedy) or "prey" mode (defensive), when trying to multiply or preserve monetary earnings, intranasal oxytocin did not alter defensive reactions although it attenuated, considerably, predatory choices by taking advantage of others. It led to those benign effects by stopping the neural weighting activity in the superior and anterior areas of the prefrontal cortex, as showed by the corresponding fMRI scan's measures [46].

Oxytocin, however, is not going to be an alone star within the universe of the neurochemical regulation of prosocial biases. Despite its potential relevance, other molecular companions will enter modulating the tendencies towards selective altruism or aversions around the inter-group border. Vasopressin,

another hypothalamic neuropeptide, secreted within the same cellular neighbourhood mediate social interactions although on this issue the clues are not as promising as those of oxytocin [11]. Several neuroregulators stand out, however, as plausible candidates because their effects on games involving economic interactions have produced changes on prosocial or antisocial tendencies. The optimized work of serotonin systems within the brain, for example, promote cooperative and generous behaviours in economic games and accentuate also caution about the damage that can be infringed on others in difficult moral choices [39,40,106,127]. In contrast, transient attenuation of serotonergic functioning can promote social conformity and even distrust on others faces [128]. There are also data [30] suggesting that a light augmentation of dopaminergic function may increase the tendency toward social conformity, measured as accommodation to others' aesthetic judgments about female faces, identical to those discussed on Chapter 3 [p. 49]. This agrees with the fact individuals who carry variants of an important gene for the proper functioning of brain catecholamine's [117] show accentuated generosity (donations for underprivileged people). Finally, sex hormones have also been studied in relation to the cooperating tendencies on economic and agonistic games, although with not always concordant results about the prosocial actions of testosterone [51,165]. There is, in this regard, a Finnish finding indicating that an androgen secreted in male sweat, androstadienone, which may participate in signalling sex-appeal and social status, promotes generosity to unknown males in different variants of one-shot economic games [84]. And these are only some examples among many others in quite active research fronts. It will be, however, compulsory to combine these data with findings coming from experimental situations where precise trade-offs between treatments given to comrades and rivals are established.

Neuroprejudices and neurostigmas.

“The ability to discern between “Us” and “Them” is fundamental in the human brain. Although this computation takes less than a second it gives way to the processes permitting social categories, prejudice, stereotypes, intergroup conflicts and, at the extreme, even wars and genocides”

Amodio D.

The neuroscience of prejudice and stereotyping,
Nature Reviews Neuroscience, 2014; 15: 670-682.

I suspect that, at this point, there should remain few doubts on the operation of dedicated neural gears and circuits at the service to prefer our own people (“Us”) as allies against unknown others (“Them”), and to show mistrust in front of strangers and foreigners. Despite the artificial and transient nature of distinctions between “Us” and “Them” in many laboratory situations, the automatisms for biased preferences and apprehensions emerge quickly at the intergroup boundaries. There is a formidable number of findings supporting that both for attitudes and behaviour, on measures of selective attention and perception as well as differential reactions which can be detected through fMRI brain scans [8].

Much of this work has been carried out on the boundaries and reactions along the racial border, comparing the automatic neural responses of black and white Americans individuals to faces and other physical traits related to skin colour. Substantial intergroup differentiation quickly occurs: biases towards preferential processing of physical traits or character attributes appear when tasks are done consciously and better still, when these tests involve procedures (i.e. presentation of stimuli) which preclude vigilant scrutiny. The intergroup biases are often linked to the magnitude of the favourable or unfavourable prejudices, when these tendencies are measured inadvertently. Other racial and ethnic distinctions beyond skin colour or fa-

cial features have also been explored, as well as the easy barriers induced by the distinctive surrounding voices (languages) in infants [80].

These automatisms are pre-conscious and extremely fast. The 170-negativity, a component of even-related EEG potentials which depicts the instantaneous detection of human faces typically at the occipital lobe of the brain, may reflect that. Using this measure, a preferential processing was demonstrated for faces from in-group allies even when the adscription of participants to the distinctive groups had been at random and following artificial criteria [115,116]. These findings cohere with others using fMRI scans in which “friendly faces” - from members of an artificial coalition built only for the occasion -, induced higher neural activity at the fusiform cortex than “foes” faces, neglecting even the differences on skin colour [147,148]. The automatic brain reactions to faces from comrades of a friendly coalition prevailed over those to physical traits, since neural activity induced by allied faces was higher than the one reflecting similarities vs. differences on racial facial traits.

The results are so consistent that they have permitted to draw provisional maps of the brain circuitry dedicated to the mediation of prejudices and stereotypes, at the intergroup frontier [Figure 13]; maps that include as well the circuits to hide (by inhibitory control) these spontaneous biases [8]. Most findings using cognitive or brain activity measurements have confirmed, moreover, that the effect which carries higher potency and automaticity is intra-group favouritism or ethnocentrism. That is a fact cohering with the bulk of tradition of social psychology studies on this issue [26]. Apprehension and the tendency to undervalue and discriminate against foreign groups appear very easily, but for the emergence of hostility or hatred against neighbours or doctrinal outgroups added mechanisms are necessary. Specific training is usually required to complement these auto-

matic trends: cultivation of hatred and aversions through social learning, emulation and indoctrination.

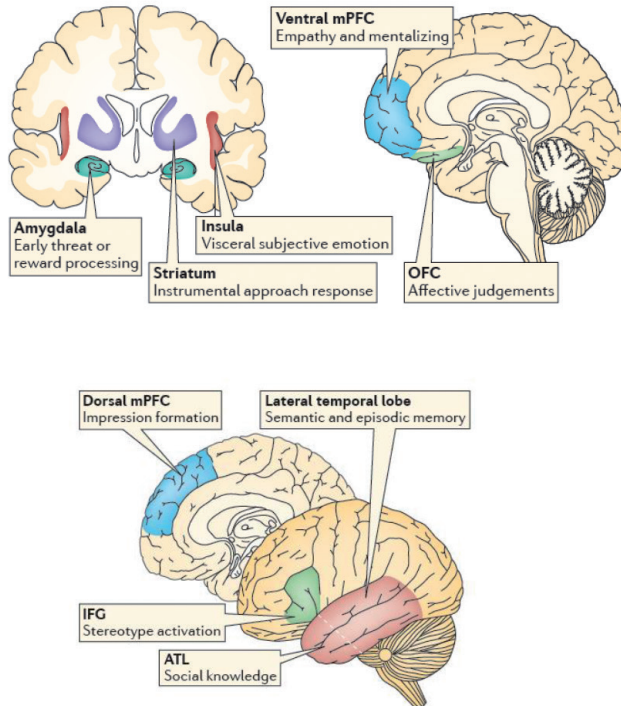


FIGURE 13. *Up: neural circuits for prejudices:* Regions which mediate prejudice reactions. The amygdala does the ultra-fast processing of social categorization signals, including physical group traits coded as threatening or friendly; the approaching responses depend on the striatum; the insula elaborates visceral and emotional reactions in front of allies and foreigners; judgement about strangers occur at the orbito-frontal cortex which is modulated, in turn, by pre-frontal medial cortex which participates in mentalizing and empathic tasks. ***Down: neural circuits for stereotypes.*** Regions mediating the elaboration of social stereotypes. Semantic information registered at the temporal lobe – at temporal pole (ATL), the one concerning social groups –is recruited by pre-frontal dorsal and medial cortex (mPFC), to produce impressions (stereotypes) that with the help of the frontal inferior cortex (IFG), promote behaviour guided by these stereotypes [modified from 8].

Beyond the details of molecular mechanisms and the neural circuitry that will be increasingly complex as progress accumulates, the important thing is to have detected substrates for these old and ingrained human predispositions. That is, for in-group favouritism and parochialism which are labouring, latently, at the service of ethnocentrism; and for the apprehension and hostility towards outgroups, which are responsible for fuelling xenophobic attitudes.

Chapter 8

***Ethnocentrism and identity enclaves.*¹⁷**

“Cleavages drive culture more than culture drives cleavages”

Donald Horowitz.
“The deadly ethnic riot”,
Berkeley: University of California Press, 2001. p. 50.

“¿What are the origins of a sentiment, nationalism, so powerful and often explosive, able to move a community with such intensity, to generate a strong willingness for sacrifice and driving people to kill or be killed?”

Gat A, Yacobson A.
Nations: the long history and deep roots of ethnicity and nationalism,
NY: Cambridge University Press, 2013.

“Spain is the European country with a higher probability of a civil conflict. During the period 2009-2012 there were internal conflicts in 31 countries in the world. For 24 of these countries, Afghanistan, Angola, Colombia, Iraq or India, for instance, our model gives a probability of civil conflict which is higher than 40%, whereas in Spain is only 7%, a much lower figure. However, within the European context, Spain has the highest score followed by the United Kingdom”

Joan Esteban,
El Mundo, 13th April 2013.

Citizens of the global era had come to believe that the strongholds of ethnic communities were a relic in the process of dying out. Societies based on strong ties of neighbourhood and closed intermarriage habits on specific territories would fade away swept by the irresistible push of modernity. The penetration of techno-

17. In this chapter I have used materials coming from my *“La etnicidad combativa”* [140, Chapter 6], with the necessary modifications and additions to incorporate new relevant findings.

logical interconnections and the enormous mobility of people taking advantage of fast and cheap transportation had to blow up the most recalcitrant obstinacy of these group precincts. Hence the rise in fashion of all kinds of ethnic products and the rush to indulge in experiences of “merger” or “fusion”, in all fields, because there was a strong suspicion that perhaps we were enjoying the last flashes of a rich cultural diversity in the process of an unstoppable decline.

That optimism full of global and harmonious tones is not new. It has been highlighted by illustrated elites, in different historical periods, in all cultures that succeeded to emerge from primitive tribes or small villages to become cities, states, empires or any other form of highly comprehensive, enormously diversified and porous political organizations. But these hopeful prospects have always ended up finding that bonds of ethnic ties and communion reappear under different forms and names, to thwart or at least mitigate the ideal of fully open and permeable societies. Often this drift toward identity-based political enclaves emerges with great enthusiasm at the heart of the most cosmopolitan and welcoming societies to finish (or menacing to finish) their whole architecture.

Nationalist glamour for archaic ethnocentrism

In our hyper-tech times these identity-based aggregations usually carry the marking of nationalism. Indeed, the current rise of nationalisms erected upon ethno-cultural or identity basis, in different corners of the world, is a blatant surprise for historians and political scientists because they had been declared dead under the dominion of the all-encompassing ideologies with strong philosophical roots, in post-industrial societies. The heyday of nationalism in the nineteenth century coincided with the

modernizing of nation-states in Europe and was regarded as a fleeting phenomenon. As a merely temporary artefact destined to be swept by waves of ideological sign that marked the biggest disputes of the twentieth century. But under the framework of big confrontations between capitalist, communist, fascist or anarchistic attempts to conform society the old vectors of identity-based communion were never erased.

Note that the collapse of Soviet Empire was accompanied by a fertile secessionism leading to the consolidation of a handful of new nation-states on the Eurasian continent, with a remnant of latent or fully open disputes which had not been settled still [85]. And at the very heart of Western Europe secessionist movements have erupted in countries so old and tight, apparently, as Britain, France or Italy. Spain is a special case because its recurrent internal tensions come from an unfinished crystallization detected long ago [7,60]. Such ethno-political tensions are commonplace, of course, in different parts of Asia and the Middle East; they are very frequent also in many of the Polynesian archipelagos and around the African continent, but it was widely assumed that they had been banished in Western societies. In fact, the only continent that is relatively free, for a while, of litigations linked to the generation of new political boundaries or to seal borders based on identities is America, except for Quebec and some sporadic and diffuse attempts by Latin American guerrillas.

Nationalism, secessionism, regionalism, provincialism, chauvinism, cantonalism, factionalism, tribalism or any other epithet that highlights the tendency to politically enshrine a society based on recognizable identity ties are all a boost for community activism. They represent engines that can be apparently silent but whose workings are hardly erasable [61]. The names assigned to these engines can vary along historical periods but they all portray different ways of labelling the tendency to build boundaries of political affiliation and organization that feed on an ethno-cul-

tural background. Most nationalism modalities are sophisticated variations of an old ethnocentrism whose foundations are built on lures of biological similarity and signs and symbols of cultural cohesion. Although modern and liberal nationalisms have been adorned with the attributes of integrative and free States open to promote and protect the various ethno-cultural traditions which coexist within them, at the core of each one of these open States there is a clear pre-eminence of one ethno-cultural tradition which dominates, with varying success, above the others (and above remote colonies when they exist). Hence the perennial tensions and the occasional internal conflicts [61].

Official anthropologist' surveys differentiate more than six thousand ethnic groups in the world, while international political organizations that shelter fully recognized countries barely have over two hundred official representatives and flags. This formidable numerical discrepancy shows that there is an inexhaustible broth for litigation about schisms based on attempts to empower ambitious ethno-cultural communities. It is arguable, perhaps, that Swiss Confederation invented long ago the right and modern formula to build a multi-ethnic state overcoming relevant tensions between the different Cantons. But Switzerland is an odd State, not easily repeatable because it is based on the formula of an enduring armistice on a duty free zone protected by high mountains. It enjoys neutrality but maintains military capabilities while specializing in being the refuge of capitals and assets coming from everywhere in the world. It remains to be seen whether the Swiss model is exportable abroad though perhaps the European Union will finish exercising that role as well, in the future, if it persists in its military non-definition and accentuates its penchant to attract international tourism.

The biggest error of a highly influential position among contemporary historians has been to present nationalism as a recent and fully changeable cultural artefact (7,60,81,82). As a

construct or device invented by the Enlightenment to advocate the building of the nation from consensual civil rights. Those principles that crystallized in the American Revolution and its successful reverberations in some European countries and then elsewhere across the West. Accordingly, nationalism did not exist before the eighteenth-century illustration. The world would not have known that social construction before that period. That's nonsense. It is equivalent to postulate that there was no religion in the world until scriptures emerged and religious institutions with clerics and rules were founded. Religion both as an individual experience and as a vehicle for collective action long predates the emergence of the different Churches. Similarly, nationalism as a shared sentiment and as a vehicle for collective action is also much older than the surge of movements, parties or other organizations that use that label to operate in modern politics. The error derives from confusing the conspicuous attributes of modern states – the army, the judiciary and a unified taxation system; flags, anthems, passports and other markings and registrations, in addition to the education in a unified official language and the influence of media propaganda - with the ages-old human proclivities to organize communities based on ethnic cultural adscription.

These symbolic, normative and persuasive tools of new (or not so new) icons suppose certainly a cluster of nontrivial consequences, but the layer on which they rest and are implanted is as old as the human past since inter-tribal coalitions and fusions started to appear at the distant Neolithic [24,61]. The differences of size and symbolic coding and the complexities of the regulatory systems and enforcement capacities should not have prevented the identification of vectors of continuity with the past. Keep in mind, for example, that references to the nation or to the people as the original nucleus of ethno-cultural tradition can be singled out in the records of most human groups. And the same for pa-

triotic songs promoting the willingness to incur in sacrifices for the interests of a shared tradition (the community of similar individuals). Just reading with a bit attention the sacred or profane chronicles of classical antiquity provides unending evidence for that. I suspect, ultimately, that there is no way to understand any of the vicissitudes of human history without referring to that vector of identity cohesion (“primitive” tribalism and patriotism connecting to “modern” nationalism), within the changing modes of political organization.

Nuclear identity signs

A territorial settlement, a shared language and a recognizable gradient of physical features accompanied by common habits and rites. Land, body morphology traits, a distinctive voice and religious or profane customs to fulfil the specific admixture of a commonality. Those are the core elements of every ethno-cultural tradition. The vicissitudes and achievements registered within group memories are used to erect the scripts to be locked and transmitted, then, as oral or written chronicles. That is, narratives that sets and garnish group’s lifetimes stripping the ambiguous nuances or unpleasant edges. But despite the importance of these chronicles for the long-lasting cohesion and endurance of communities they are only additions, an outfit weaved with the essential cords coming from the territory, speech, physical traits and shared customs (those of marrying and breeding habits, shared rites and transmission of assets and goods, especially).

Note that the first three elements (soil, physical features and speech) represent mapping traits of inescapable biological relevance. Durable territorial isolation (islands, regions bounded by mountains of difficult access, areas separated by deserts or lake systems) provides a unique habitat, a chance for stable settle-

ments, with populations that tend to mate and interact mostly among themselves thus creating a differentiated speech and common rituals. Geographic isolation is one of the key facilitators of biological differentiation (with plausible paths to speciation, even) and represents one of the inevitable prerequisites of cultural diversification. That is of course obvious, but the problem is to delineate biological from cultural ingredients and their complex interactions [31,34,61]. Molecular paleo-anthropologists and linguists have the essential keys for progress in this challenging enterprise.

Now it is possible to keep track of genes and polymorphic variations in non-coding regions of DNA that are informative to draw transitions or gradients between human groups and to establish connections between these populations with their ancestors in historic and prehistoric times. All this, while the itineraries of family names and other elements derivable from historical and archaeological records are mapped. And such data can be combined with the tracking of continuities and fractures in the evolution of the different languages. The results are certainly provisional but they have started to offer the first systematic chronicles of the fate of human populations [2,20,31,34,108,138], not just limited to the islands or remote valleys but covering entire continents [20,90,108,134]. Furthermore, the studies with gorillas or chimpanzee colonies in their habitats have established the existence of diverse cultural traditions defined by those nuclear criteria: a preferred settlement area, majoritarian inbreeding (though by no means exclusive), prototypical vocalizations and social and technological habits (traditions) clearly distinguishable. Without structured oral or written narratives, differentiated chimp “ethno-cultures” arise among these primates who dominate an area bringing together various subgroups that can cooperate or actively litigate depending on circumstances [24, 157].

It can be objected, immediately, that humans have jumped above territorial barriers thanks to technical innovations (domestication of animals or crafting boats, for example) or simply because of migration due to demographic pushes, resource depletion or war. Yes, indeed. Humans treasure a lengthy chronicle of migrations dating back to very ancient times that biologists now begin to corroborate (and refine), thanks to embedded counters that provide the pace of changes generated by the process of molecular replication [34,90]. The frequent invasions and ethnic displacements or intercross should have blurred any hint of regionally consignable markers derived by biological tracers in human communities. That's what preaches the most common discourse today: emphasizing the essential genetic similarity of all humans while promoting multiculturalism grounded in the festive and unrestrained interbreeding populations [151,152]. It's difficult to envision how this issue will evolve in today's societies but the data gathered by molecular anthropologists suggest that during history, there have been all kinds of end-results. From total sweep of local cultures by invaders who managed to impose not only their genes but their voices and habits, to very brief and light contacts with occupants' vanguards only or migratory small bags leaving a genetic or cultural heritage as insignificant that it becomes untraceable [25].

In some cases, the persistence of specific communities can be traced to ancient times, with genetic and cultural drifts that have followed not completely parallel rhythms. The case of the Basques in the trans-Pyrenean regions that define the steps between the European arm of the Asian continent and the Iberian Peninsula is paradigmatic: it has become not only a persistent source of headaches for the Spanish and French governments but a treasure for scholars of genomic screening [2,65]. But the Basques are not the only community for whom lineages, language features, customs and gene attributes can be traced going back over millennia. There are data from the study of the persistence of some DNA

oddities restricted to the Y chromosome (which determines the male line of descent), which allow to delineate adjusted chronicles of many communities on all continents [69,90]. Some of these records on gene continuities go back to very remote times (first colonization of the Americas or the Polynesian islands, for example), while others are much more recent.

The Jews have managed to endure as a community over the past five millennia spreading and settling subgroups in many corners of the planet, although without ever cutting links with their original Middle-East Palestinian soil [91]. They contributed to cultural traditions that led to the spread of major religious variants in the world, on one side, but engendered also traditions that have functioned as barriers (partial) for gene homogenization, on another side. This last characteristic allows now to diagnose the persistence and continuity of Jews communities through the ages [19,69,111,154]. Furthermore, data emerging from large-scale genetic mapping in Iceland, Sardinia and other islands confirm that few generations with restricted inbreeding may lead to drifts that result in detectable biological peculiarities. Singularities which are now extensively investigated to optimize the characterization of genes related to common diseases with an obvious interest for drug development [151]. The islands are a great receptacle for studying processes of biological evolution in conditions of relative isolation. That is, biological differentiation processes which are accompanied by cultural concretions. In line with this, once established that a handful of genes mediate features so crucial for social recognition such as skin pigmentation or hair colour and distribution [101], the feasibility of finding gene combinations inducing other distinctive attributes of the body seems higher. Morphology features which are susceptible to differential groupings based on territorial isolation or selective breeding habits resulting from segmentations in lines or castes, or other types of forced social stratification [2,65].

The power of ethnicity.

Basic identity signals that enshrine and maintain ethnic ties are not, therefore, an “ex-novo” invention. They are rooted in boundaries, ties and habits that have deep resonances in both biological evolvement processes and the realization of (biased) cultural vectors. In features, to say it shortly, that resist being fully tamed by the clusters of norms, values and principles that form the architecture of civil citizenship in modern societies.

In a grand work devoted to establishing the essential traits of ethnic groups, Donald Horowitz [83, p.43] the scholar who has uncovered more thoroughly the characteristics of the ethnic community as a system of enduring cleavages, states:

“Ethnic groups appear frequently to engender more loyalty from their members than competing group-types do and engage often in severe conflicts with other ethnic groups... To appreciate the special power of ethnic loyalty one must see ethnic groups as groups like all others but also as groups possessing qualities that no other groups possess in the same measure. The most important of these qualities is the strong sense of similarity, with roots in perceived genetic affinity, or early socialization, or both... Similarity engenders empathy and in extreme cases even obliterates the boundaries between one individual group member and another. There is ample evidence that people have affection for others whom they believe to be similar to themselves in tastes, attitudes and values... Ethnicity is a powerful affiliation both because similarity is valued and because genetic (or putatively genetic) origins and early socialization are potent sources of similarity or, in any case, of cues that signal similarity: appearance, customs, language, clothing, tastes and habits.... The hallmark of the ethnic group, even if relatively recently established, is the inter-generational character. Despite the variable porosity

of group boundaries, most people are born into the group in which they will die”.

Horowitz probably exaggerated by putting the maximum of loyalty on ethnic ties because it would not be surprising that the links between members of religious sects, activist cells or gangster clans could parallel or even exceed the duties of intra-ethnic loyalty [135,142]. But that is not a critical point because there are undeniable obligations within ethnic groups and their crucial attribute is the potentiality for conflict that they carry. And that's where Horowitz has solid data [see below]. Two elements stand out on his proposal about the uniqueness of ethnicity: the anchoring line of a common biological ancestry and a shared early upbringing. These are, in fact, the traits that distinguish families. Ethnic groups operate as extended families because they include attributes more relevant than the branches of the nearest or far-fetched relatives with which we must interact, from time to time, on special occasions or to celebrate the continuity of surnames. Ethnic families usually carry a distinctive voice and common habits that have been implemented very early in shared scenarios: “biocultural” products (language, rituals and customs) that have been secreted by a community of individuals within narrow or larger boundaries and with permeable separation from other neighbouring communities. The core facilitator and filter, at the same time, of these biocultural products is inbred mating: restricted and selective pairings within a community of founders and their successors. A community that can be extensive and encourage varying degrees of transgression of the inbreeding restriction, but keeping a gradient favourable to the survival of the original inclusive line.

It is amazing, in this respect, the tenacity with which some molecular biologists and geneticists have been trying, in recent times, to banish the notion of race [100, 149,151,152]. They

have intended to eliminate it, as a useless term, not only from scientific vocabulary but from all everyday use. Behind that was the belief that excluding a category considered as an illusion devoid of validity, will help to eradicate the discriminatory and racist tendencies so easily triggered in humans. Empirical findings accrued to support that were overwhelming and the unveiling of the human genome settled, apparently, the matter. All *sapiens sapiens* are virtually identical with respect to genetic instructions: we belong to a young species which has a remarkable homogeneity when compared with those of our closest primate relatives and there is always greater genetic variability within any human group than the variability between groups. There have been claims even demanding the exclusion of the notion of race in medical diagnostic scrutiny, because it is devoid of any biological meaning. Racial classifications were gross partitioning tools to simplify into a few categories, the rich tree of human morphological variability. An instrument whose utility must be considered highly unsatisfactory.

It must be noted, however, that these campaigns have not achieved the expected success. The notion of race is still used and racism proclivities remain apparently unchanged despite these meritorious efforts. Although the essential uniformity of our genetic legacy is fully accepted and it is obvious that racial classifications were a gross simplification [152], all this does not alter ingrained attitudes or habits. Probably because there are other ingredients in addition to genetic commonalities and scientists incur in naiveté or arrogance (or both), when they try to close the issue based on solid but insufficient findings. It is still active the suspicion that, on this issue, much more complex depictions will be required to discern the vectors which are behind the vast variety of biological features and their differential clustering. Everyone can see differentiation gradients in physical appearance where biologists insist there is strict genetic uniformity and co-

variations can be detected between these gradients and certain habits and behaviours, starting with linguistic distribution. Co-variations that molecular anthropologists are eager to study and describe [20,34]. Moreover, the same scientists who decry the concept of race emphasize ethnic clines when it comes to detect genic variations concentrated in certain areas (advances in the comprehensive genetic mapping on islands, quoted above, for instance): genetic differentiation gradients that fit a particular territorial distribution and contribute not only to the study of the biological history of population changes but allow the detection of genes and molecular targets which can be medically relevant. The development of individualized pharmaco-genetics or gene-based therapeutic interventions dependent on patient's origin and lineage profiles is a feasible scenario. That is, often the very same data which are used to support attempts to eradicate the concept of race are accrued to strengthen ethnic gradients and their biological peculiarities. No wonder, therefore, that these messages are perceived as contradictory.

The argument of arbitrariness and plasticity.

Much of what I have said in this section is usually regarded as absurd. It is common to apply the rule of arbitrariness to the incessant and seemingly elusive process of formation and breaking away of human groups and their changing denominations over time. A cursory look at any of the stories of the inhabited regions of the world seems to support, in principle, that position because the turnover of names to refer to people who have established their bases in each geographical area is enormous. In any case, it would be great to have detailed and reliable maps to record the itineraries of peoples in historical times, with annotations in parallel with the designations that they themselves have taken

and those awarded by neighbours, as well as rough estimates of the survival of these labels. I suspect we would find continuity vectors that could perhaps be related with gradients of differentiation/similarity that genetic population's studies are detecting.

I mean by this that although it is easy to dismiss any form of enduring and traceable segmentation using the blatant example that Italians only exist as such, from one hundred-fifty years ago, and that any Italic ethnocentrism and chauvinism cannot sink their roots in more than four or five generations, I'm not entirely sure that this portrays, adequately, the sympathies or antipathies that the natives from Italian peninsula have been showing over centuries. They ought to be enquiries on the durability of designations comparing continental zones in relation to nearby islands as case-controls, because such contrasts are often instructive in all areas of comparative biology. To continue with the example, in comparison with Neapolitans or Tuscans since when Sicilians and Sardinians are known as such?

Another version of the arbitrariness argument comes from the alleged flexibility in the political organization of human groups. Communities can persist without those attributes that we have identified as nuclear for ethnicity and thrive in their historical journeys. Language abandonment is paradigmatic, in this respect, and Irish case is perhaps the most quoted example: the success of secessionism in Ireland coincided with the adoption of the invading language, English, as the official vehicle of the new nation-state. Versatility is complete and what matters in the end is the artifice, that is, the construction and deployment of the State structures. The strength of modern state would make everything else expendable. But I'm not so sure that this conclusion is fully justified because Ireland retains still unique attributes: a clearly differentiated territorial settlement, selective breeding pairings (restricted mate crossings), an ancestry continuity that can be traced back to ancient times and customs/rituals of a quintessen-

tial Catholic stronghold surrounded by a largely Protestant archipelago. Maybe some of the nuclear attributes of ethno-cultures can be eliminated, but I suspect all of them cannot be ignored during the process of building a successful State. The colonial powers dominating in Africa, Middle East and parts of Asia tried to do that when they drew boundaries of convenience for post-colonial periods, in the last two centuries, and is obvious that it did not work well. Although it must be conceded that the instruments of the State (force and bureaucracy, primarily) achieve long-lasting and enforceable status quo, sometimes. Therefore, the unlimited versatility to build stable political systems is not proven despite the insistence on repeating that as an axiom.

Yet this does not mean to deny the plausibility to form higher order political groupings than those based on ethno-cultural basis. Empires chronicles are replete with examples of coexistence of many ethno-cultural traditions under the shelter and long arms of the coercive and administrative summit, though precise estimations are needed about whether internal conflicts outweighed peaceful periods, in those historical records [61]. In any case, current examples of coexistence under large political roofs are plenty, as was noted previously when signalling the disparity between extant ethnic groups and officially recognized countries. The US case is a particularly illustrative case of these comprehensive mergers departing from a formidable variety of ethnic ingredients. But it should not deserve an award as the definitive way of overcoming ethnocentric layers because US is an evolving experiment that departed from unique traits: a political “ex novo” creation in a conquered and sanitized territory: the result of an alliance between various groups of pioneers/founders installed in foreign land, sweeping through displacement or elimination of indigenous peoples. And at US still prevails, very clearly, one of those pioneer traditions – the Anglo-Saxon – above all others. So, it fulfils two nuclear requirements (a specified settlement ter-

ritory and shared speech), though it blatantly fails on another two criteria: the gradients of physical appearances and common rituals and customs (it's a multi-religious State). Similarly, the Hispanic or Lusitanian cultures across Latin Americas countries have resulted from the predominance of one ethno-cultural tradition amid very complex mixtures [61].

The first experiment based on pure artifice in building a state shelter, departing from a very ancient and complex ethno-cultural mosaic and without resorting to coercion from centralized military or policing forces, is currently being carried out in Europe with the ambitious goal of the Union. Progress, for the moment, is humble and rambling although efforts and hardship are soaring. And no small part of the resistances to the process of full European aggregation comes from the apprehensions and demands of the various ethno-cultural traditions that must live, coexist and attempt to thrive within it.

The ethnic frontier as inductor of intergroup conflicts

The ethno-cultural layer is, therefore, an inescapable frame to analyze group interactions within any type of political structure. If it is fully ignored as it was done with the founding principles of modern nation-states, it tends to recur in different forms (folk movements, secessionist organizations, religious groups, singularized lobbies) to continue with the struggle to prevail within the wider community scenarios. If the links with ethno-cultural basis are as crucial as I have been postulating, there should be recurring conflicts between groups across these ethnic-related fracture lines regardless of the type of society or mode of living. That is a prediction which follows directly from the above principle. If there is evidence that ethnic riots occur not only in primitive or poor societies, in economies dependent on seasonal agriculture

or hunting, but also on countries with advanced commercial, industrial and technological networks we might be coming ashore.

The most comprehensive review of ethnic conflicts was completed by Donald Horowitz [83] in his 2001 empirical treaty "*The deadly ethnic riots*", where he compiled and analyzed this unique type of violent explosions involving the annihilation of members of a group by hordes of another group. The data covered more than 150 of these events in about fifty countries, including all regions of the world, throughout the twentieth century. The clear majority of these episodes for which there is a reliable and consistent documentation correspond to the second half of the twentieth century. The compilation contained the riots between white and black communities in American cities, between Tamils and Sinhalese in Sri Lanka, between Roma and non-Roma in Romania, between Sikh and Hindu in India, between Ibos and Hausa in Nigeria; between Protestants and Catholics in Ulster, between Zulu and Xhosa in South Africa, between Hindus and black communities in British cities, between Hutus and Tutsis in Burundi, between Muslims and Christians in the Philippines or between Turks and Kurds in Iran. Horowitz used multiple sources in addition to newspaper reports: local files, police documents, accounts of interviews with leading participants, observers and victims. And these outbreaks of communal violence were compared with 50 episodes of ethnic tension where the altercation did not reach lethal consequences. The review included as well, by the way, the riots between Andalusians and North Africans in crop fields of Almeria (Spain) during the nineties of the previous century. Horowitz [83, p.1] began his vast description with the definition of its subject matter:

"A deadly ethnic riot is an intense, sudden although not necessarily wholly unplanned lethal attack by civilian members of one ethnic group on civilian members of another ethnic group, the victims chosen because of their group membership. So,

conceived, ethnic riots are synonymous with what are variously called communal, racial, religious, linguistic or tribal disturbances”.

This is the first paragraph of the essay. It is not irrelevant the point reminding that several denominations are used to refer to the phenomenon of ethnic riots. What the newspapers front pages or newscasts have described, on many occasions, as tribal, religious or linguistic conflicts depending on the region where they occur, it is subsumed into a single category for systematic study. For the simple reason that labelling depends on one outstanding feature of this phenomenon: the ethno-cultural frontier. To give some examples, the riots in Belgium between the Flemish and Walloons were usually labelled as linguistic; killings between the Balkan communities systematically received the epithet of ethnic; when those episodes of collective violence occur in areas of sub-Saharan Africa they are invariably catalogued as tribal; and if deadly fights happen in the Indian subcontinent they are almost always referred as religious conflicts. Unjustified and relentless biases of verbal labelling by hasty reporters on their chronicles.

The findings compiled by Horowitz show that ethnic unrest represents the most common form of collective violence in today's world and the one that results in more deaths. Figures indicate that the lethality of ethnic riots is only surpassed by conventional wars. That is, by the strife between organized and well armoured militias. Maybe that second place in killing capacity will be jeopardized during this century if the series of large-scale massacres by terrorism actions were to hold. The apocalyptic attacks of 9/11/01 in New York and Washington had replicas of big proportions in Bali, Saudi Arabia, Pakistan, India, Iraq, Afghanistan, Lebanon, Spain, Britain, Syria, France, Belgium and elsewhere, but only the updated balances of comparative lethality will tell. Meanwhile, Horowitz resumed the explanation of the defining elements of an ethnic altercation adding [83, p. 1-2]:

“Lethal ethnic riot is a passionate but a highly-patterned event. In the first instance, such an episode has at least an immediate cause. It is triggered by events – precipitants – that are regarded as sufficient to warrant violence. The ethnic riot is not a random phenomenon. Once the riot begins it takes an interpersonal and brutal form. Members of one ethnic group search members of another. The search is conducted with considerable care, for this is violence directed against an identifiable target group. When found, members of the target group are murdered and usually tortured and mutilated as well. Despite an atmosphere of sadistic gaiety that frequently surrounds the killings, this is no light hearted or ritualized test of strength – it is deadly serious...Such an episode has its own temporal and spatial rhythms, of accelerating and declining activity, of localized or radiating destruction...The ethnic riot has a structure and a natural history. In fact, violent events in general are structured by implicit rules governing provocation, initiation, choice of targets, intensity of violence and termination”.

That kind of explosive fights are the most telling manifestation of ethnic conflicts, the one which reveals in a more palpable way the lines of friction, the antipathies and hatreds that arise in neighbourhood litigations between groups with distinctive traditions. The next step was to proceed to differential diagnosis. Although there are multiple interconnections between ethnic riots and other forms of intergroup violence, Horowitz described the attributes that distinguish those killings from anti-government protests and rebellions, lynching mobs, pogroms, vendettas, gangster assaults, terrorist attacks and genocides. While acknowledging that hard to classify hybrid forms or drifts from one type to another occur quite often (it is common, for instance, that in the period of post-ethnic massacres identity-based terrorist organizations will continue the fight by other means), he framed his object of study to discern the essential vectors. His goal was

to formulate a viable guess about the function of that group strategy. In order to achieve this he undertook a punctilious analysis of the multitude of factors involved in the emergence of deadly ethnic riots: the background antecedents and justifications, the tactics and procedures, the selection of targets (people, buildings or other assets to destroy), the choosing of moments and circumstances ensuring maximum impunity, the rhythm and phases of the attacking waves, the destructive intensity and the atrocities committed, the leadership and followership, the role of religious organizations and law enforcement agencies, among others. All in the service of providing a thorough description of the origins and function of these violent explosions.

Purpose and function of ethnic killings.

"There are elemental features of human strategy that are common across time and space. These include deception and coalition formation, and the instrumental use of violence"

Lawrence Freedman.

Strategy: a history, New York: Oxford University Press, 2013.

There are two crucial ingredients behind the surge of ethnic riots: 1. Punishment or redressing real or invented wrongs coming from a neighbour group perceived as threat; offenses which had been rising with the consequent boost of reciprocal antipathy and hatred; 2. Homogenize a mixed society through actions directed to ensure the supremacy of one group irrefutably. The first of these two elements is an immediate inducer to arouse the cheering violence that should serve to damage and degrade the adversaries. The second is delayed and instrumental, although often is the most lasting result of ethnic confrontations.

Careful observations from these massacres indicate that injuring and murdering can be rewarding for attackers. Hence

the temptation to enlist and participate in such incidents despite their potential costs and disadvantages. The deadly euphoria and exaltation is the dominant mood in these destructive events and that alone can already explain the emergence of devastating outbreaks of aggression. Horowitz highlights the rewarding potential of successful violence: a kind of pleasure of great intensity that is often ignored or hidden. Persecution, cornering, beatings, dismemberments and incineration of victims whose only fault is their membership on the “hostile” group, along the sweeping destruction of properties inflam huge euphoric effects in some people. There is a mixture of anger and boundless enthusiasm in those orgies of brutality that can achieve real pleasurable climaxes. That excitement is quite common and can be compared, to some extent, with the excitement that accompanies vandalism battles between groups of teenagers or between fans of sports teams and with some euphoric run-ups used by the military for preparing combat, not only in primitive but in contemporary strife when direct action on the ground is required [157, 158, 159]. When an antipathy has grown because of real or purely imaginary threats, igniting a punitive and restorative expedition is much closer if conditions are right (i.e., when sensing an atmosphere of permissiveness towards outbreaks of violence, with signs that the police or authority figures will neglect their duties).

Aside from the euphoria by the mere acts of killing, denigrating and destroying the properties of members of a rival group who “deserve” an exemplary punishment, there is a second function of these riots that is not as visible or immediate but have a much stronger reverberation. The most common consequence of ethnic killings is homogenization of the population. Reduce the ethnic heterogeneity that had characterized the society at large. In all cases the most typical post-effect is flight and exile of many members of the attacked community to try to regroup elsewhere, accompanied by the marginalizing and submission of the rest.

Therefore, the group that perpetrated the successful attack often get a bonus of supremacy in that way, monopolizing areas of political and economic spheres of influence which were more widely spread before, in a society that becomes more homogeneous in population structure. There are, therefore, substantial gains for those who pursue punitive raids to terrorize, intimidate and subjugate members of a rival group [24,140,157].

These violent episodes convey passions, hostilities and hatreds that often arise among ethnic groups in contact, but also carry a significant burden of calculation. There are advantages to be reached in such contests and some individuals exploit that ostentatiously. It should be noted that not everyone is involved in these incidents and some participants could never have imagined that they would commit such atrocities. It is also common, however, to highlight leaders that immediately stand out for their cruelty and destructive actions, especially in disturbances arising from a less organized way. There are people who show such a taste for excessive violence that they gain a fierce reputation, reaching special pre-eminence among their people to the point of scaling up to high places at the new society and sometimes even earn the undisputed leadership. It is highly probable, therefore, that a process of self-selection occurs among individuals that enjoy fights and murdering when leading the attacking hordes.

Ethnic riots are, in the end, a primitive war phenomenon that reproduces many characteristic traits of any group confrontation, from the spontaneous and poorly organized fighting between rival bands of teenagers to sophisticated warship [36,140,141]. All of them require a conspicuous process of self-recruiting of volunteers ready to enrol and require, as well, filtering the most determined and smart candidates to lead as chiefs. That is, individuals who can combine courage and fighting cruelty with tactical flexibility and strategic calculation. People who know, therefore, how to combine their costly investments in a high-risk group action

with their own goals directed to optimize personal profits that these disturbances usually bring.

Decline of ethnic confrontations in the West.

Horowitz concluded his enquiry with a touch of hope because, across the studied period, the figures clearly showed that both frequency and severity of ethnic disturbances had declined in all Western countries. Using his own diagnosis [83]:

“Deadly ethnic riots in the US during the nineteenth and early twentieth centuries had all the characteristics of these outbursts: the indiscriminate hunting of any member of the targeted group - multiple murders including torture, mutilation and incineration of victims. But from the first half of the twentieth century there have not been disturbances with these characteristics. And what is true for the US is also true for other divided societies in North America and Western Europe. In Canada, Belgium, Corsica, Catalonia and the Basque Country there have not been ethnic riots. Of course, the Western world has not been liberated from the ethnic conflict: the blows of terrorism in Spain and in Ulster should be noted, the protest movements of African American community in the US during the sixties and seventies, and episodes of Maghreb violence in France in the eighties. Still, it is noteworthy that more than three decades of ethnic tension in Quebec have generated only one fatality. And although the attacks on immigrants are not uncommon in Europe, there have not been assaults by civilian hordes. All this indicates that the deadly ethnic unrest is not an inescapable fate in divided societies”.

Several factors could be behind this decline of lethality and intensity of interethnic tensions in Western societies. Sustained growth and prosperity have enabled the emergence of rich “mul-

ticultural” and tolerant societies that apparently show an increasing apprehension and even rejection towards using violence as a method to resolve litigations. This coheres with the incontrovertible fact that most of the deadly ethnic riots occur in under-developed societies. At the end of his taxonomic work, Horowitz advanced this rather benign outlook that perhaps is based on unfounded hopes. Only time will tell if this trend towards decline of ethnic unrest takes hold as prosperity spreads across all continents. Keep in mind that humans are very flexible in their use of behavioural tactics and this also applies, of course, to inter-group violence.

By this, I mean that abandoning the recourse to lethal ethnic altercation in affluent societies do not override interethnic disputes because confrontations may adopt many other forms of pressing, cornering and violence against “others”, with similar or even greater effectiveness. What can be achieved through the sustained activity of a small militia specialized in terrorist attacks combined with vandalism and street intimidation by youth sympathizers need not be left to the explosion of big disturbances with relatively spontaneous courses and uncertain results. That is, in short, what happened in the Spanish Basque Country during the last decades of twentieth century where a project of ethnic homogenization was forged and advanced mainly, though non-exclusively, by these other tools. Quoting this case as an example of improvement as Horowitz does [see previous page], because of absence of strictly defined deadly ethnic riots, seems a bit inadequate especially for those who suffered the stalking and killings.

Moreover, Horowitz devoted very little space, in his treatise, to describe other ethnic disputes in the West like those among Greeks and Turks in Cyprus, or the still festering hatreds and unrest in the Balkans, simply because they opted for explicit war tactics rather than resorting to the method of “uncontrolled” civil disturbance. A choice that put them, of course, outside the

range of Horowitz's subject matter. Not to mention the ethnic conflict "*par excellence*": the dispute between Palestinians and Israelis which has resorted, across seven decades, to a big variety of violent tools - military, "guerrilla", terrorist and violent protests - thus falling outside the restricted periscope of ethnic altercation.

De-activate nationalisms?

What has characterized the West over the past two centuries is a change of clothing for ethnocentrism: the adoption of dresses, ornaments and narratives with a touch of ideological sophistication to wear and claim the attributes of political nationalism [36, 61]. Improved scripts and new ways to cement in-group cohesion and expansion attempts. Nationalism, in fact, not only does not show signs of languishing but it seems to enjoy an enviable good health in many places. The two major wars of the twentieth century should have served as a definitive vaccine against it but, apparently, there is no lasting immunization against the agitation of the ethno-national itching.

There is plenty of evidence, for example, of the (relative) surprise that European leaders had when, on the eve of the First World War, they tried to persuade their apparently convivial, prosperous and peaceful citizens to support a major contest and met with an enthusiastic response full of patriotic fervour and with joyful claims for enrolment [104,167]. Just over three decades of sustained prosperity and good living had been enough to erase recollections of the penultimate disasters produced by European litigations. In the eve of the Second World War the atmosphere was not as fervent - the memories of horrors of the previous war were fresh -, but there was no choice but to face the struggle because Germany (and with it, Italy and Japan) had started an uncontrollable drift of expansionist nationalism. But

repeating the apocalypse twice, in the first half of the twentieth century, did not serve to prevent the Balkan butchery, at the nineties, which erupted quite easily by burning ethno-national frictions at the very core of European soil. And today the potential for new ethno-national confrontations is latent in several corners of Europe.

Perhaps part of the problem lies in allowing to achieve pre-eminence to political initiatives which are based on narratives of ethno-national exaltation. It seems to me that the existence of doctrinal parties (i.e., those explicitly ascribing religious or patriotic scripts at the heart of their programs and formulations) constitute an under-appreciated danger. In Europe, these organizations abound and the current mosaic of ethno-cultural groups allows all kind of frictions. Hence, the mere possibility of an amplifying combination by those narratives should trigger alarm signals. I am proposing, ultimately, that the gains obtained by separating religion from political power in modern states, should also be extended to the field of ethno-national communion. I suggest, to put it another way, the creation of regulations that would impede access to either government or representative institutions to organizations based on nationalist exaltation. I like to think on a horizon, in short, where nationalist parties or movements will be considered an anachronism comparable to having Lutheran, Methodist or Catholic parties. Although I know this is not an easy path, due to the old-rooted proclivity to build attachments around confessional lines.

Maybe the education of future citizens should start focusing and insisting on the longstanding prescription to give to Caesar what is Caesar's, to God what is God's and to the ethno-cultures only their deserved dues as well (i.e., festive celebrations, folk festivals and sporting events, limiting their inevitable signalling loads). The sacrifices for the in-group that Gods and Fatherland can claim are formidable and those two patriotism sources,

alone or together, have repeatedly demonstrated their toxicity [135,140]. Citizens' education should be oriented towards establishing buffers or attenuators of the spread of these communion calls which show a strong tendency to monopolize beliefs and trigger explosive synergies. Because the merger of identity and religious ingredients produce very dangerous cocktails [67,143].

It is not necessary to remember here that autocratic States can also be extremely harmful. But the States based on the formula of liberal democracy with multiple guarantees for the exercise of a maximum range of rights by autonomous citizens (including also cautions against exacerbations of "civil patriotism"), have shown more versatility to handle the interests of individuals and groups. Adding norms attuned to the danger of ethnocentric vectors might contain their influence. It remains to be seen, in any case, if that path is viable in a competitive scenario. Because the resources of political institutions of supranational scope or pompous global regulations have had a rather poor performance so far.

"Horowitz record": the comprehensive analysis of deadly ethnic riots throughout past century, illustrates the importance of identity markers in the genesis of inter-group confrontations and particularly of those anchored on biological roots as they favour sharp edges for between-group frictions. That kind of signals often facilitate the emergence of boundaries which are vulnerable to the outbreak of severe conflicts during routine competition between neighbouring communities. I must admit, however, that I have ventured here on a level of analysis, the modalities of ethnic conflicts, which is difficult to relate to the experimental investigations handled elsewhere in the essay. All suggestions are therefore indicative: there is only faint evidence about possible interlinks which might be used to design new routes of exploration. But nothing more than that. I have discussed the data in the context of relations between the ancient vector of ethnocentrism and the

sophisticated varieties of modern nationalism, with the aim of emphasizing the properties of a drive for intergroup combativeness, ethnocentrism, which persists under very different forms of social political organizations. An impulse that often claims for extreme sacrifices during episodes of hard inter-group litigations showing an explosiveness and voracity that often surprises those who had contributed to its feeding.

Conclusion.

“While fully acknowledging the tremendous growth of modern nationalism in response to the forces of transformation generated by modernity, I am closer to the view of those who criticize and reject the exclusive identification of nation with modernity. Certainly, nations emerged at a certain (early) point in history, they appear and disappear and are therefore not “primordial” in this sense. Furthermore, the national phenomenon has evolved in history, so even the term “perennial” is insufficiently reflective of historical change. And yet if one accepts the modernist definition of a nation as a rough congruence between culture, ethnicity and state, then nations are not confined to modern times. ...Ethno-political aggregations including pre-modern and modern nationalisms have been present through all history and despite a huge diversity of forms and the big transformations they have suffered, they come from deep layers of human psychology.... The crucial question in this issue, why ethnicity and nationalism are forces with such explosive power has not been answered”

Azar Gat in Gat A, Yacobson A.

Nations: the long history and deep roots of ethnicity and nationalism,
New York: Cambridge University Press, 2013, p. 2-18.

It was reassuring to encounter a dozen years later since these ideas were first advanced [see note p. 115], that mathematical models devised by Joan Esteban and Debraj Ray aiming to predict intra-state armed conflicts [53,54,55], pointed to the ethno-cultural borders as the most important fracture line for serious disputes in today world. In the period since the end of World War II, there was an overwhelming dominance of insurrections, rebellions or

civil strife over conventional wars between states. The figures offer, in fact, a very clear advantage both in the total number of conflicts and in casualties among militia and civilian populations. As analysis from the point of view of economic inequalities (the Marxist approach) led to nowhere to explain the ignition and severity of these confrontations, they redirected their tools to the ethno-linguistic or religious enduring cleavages and that lead to the emergence of fruitful patterns.

Departing from objective definitions of two key variables: the degree of political polarization (antagonism or perceived distance between litigants groups, taking into account size and cohesion of these groups), and the degree of fractionalization or diversity of contenders (number of groups), Esteban and Raj described the crucial parameters that push ordinary frictions in states hosting strong ethno-cultural boundaries inside them (the majority), near or away from the threshold of a civil conflict. The ethno-cultural segmentations are powerful predictors of civil conflicts when there is at stake an important public gain (the monopoly of political or religious power by a group, for example), and not only when potential profits are foresighted (cash or equities to be distributed across all components). Their findings show that apprehensions against outgroups induced by elites, are much more relevant to trigger ethnic conflicts than “primordial” irritants that supposedly carry the boundaries among neighbouring communities. In short, ethnic borders serve as “primed” or “prepared” fault lines that are used to incite conflict when leading sectors foresee opportunities to get succulent benefits in the form of public unchallenged primacy, in victory, by displacement, relegation or elimination of the defeated group.

Together with these improved insights into the description of the links between ethnicity borders and conflict proneness, it was also reassuring to detect that leading historians had started to abandon approaches postulating purely “artefactual” tools

for the emergence of modern nationalisms. Azar Gat works [61] reflect very well the revision of those postulates that explained nationalisms as totally imaginary and malleable political frameworks, arising from the confluence of Enlightenment ideas, the industrial revolution with its dense conurbations and a uniform education for people to overcome disintegrating separatist forces. All these ingredients contribute to the building of the so called “civil nationalism” (open, encompassing), to erase and surpass “ethnic nationalisms” by a more complex guarantees scaffolding of individual liberties. After an impressive immersion in the political continuity of various ethno-cultures on every continent, Gat concludes that the nation, as a template for political action based on the amalgamation of an expanded foundational lineage with cultural shared traditions, appeared very early and very often during history. Plenty in advance, in any case, of the principles and institutional structures that have characterized modernity. Ethnicity defined as the continuation (real or perceived) of an expanded lineage or community of reference together with a cultural tradition well preserved in a geographic niche, has played a key role in changing state forms from city-states to many types of multi-ethnic empires. In fact, resistance, subversion or armed rebellions against “outsider’s” governments have been a constant in the history of mankind. And the ethno-national vectors are still playing, in fact, an important role today even in states or supranational unions erected and founded on full guarantees for the exercise of equal and inclusive rights for individuals and communities who live within it.

Therefore, I am not alone anymore. In the surge of modern nationalisms not everything is symbolic elaboration and creative political architecture with perfectly changeable rules and boundaries to draw and erect nation-states at will, on the map, depending on the needs and vicissitudes of every period. This can be done, of course, and has been done repeatedly in modern times

but never for free - the costs of such inventions have been often very costly -, because the balances achieved did not guarantee stability. Mainly because strong ethno-nations tend to resist to forceful and artificial accommodations. In this attempt to find interconnections with continuity trends rooted on psychobiological requirements, I feel now accompanied by approaches coming from social studies like those of Gat, who have linked modern nationalism with evolved continuities of founding populations alongside recognizable and well preserved cultural traditions that display conspicuous signalling attributes (language uses or religious rites, mostly). Durable ethno-national attributes which have survived despite the changing forms of state organization.¹⁸

18. Local Catalan historians with a long-lasting and orthodox Marxist careers as Josep Fontana are hurrying now to put themselves under Azar Gat wake and they talk, openly and without shame, about the continuity of a geographically well settled ethno-culture with distinctive cultural attributes as the defining vectors of the Catalan nation [Fontana J. *La formació d'una identitat: una història de Catalunya*, Vic: Eumo, 2014, p. 13). But see: Jacobson S. The origins of the ambiguity: nation and empire in Catalonia from Middle Ages to 1880, NISE: *Studies on National Movements*, 2014, 2.

Chapter 9
¿Cosmopolitan or provincial?
From divine nationalism
to the secessionist glamour.

“Catalonia feels at ease within the open, modern and federalizing Spain of the late twentieth century. She plays the role of a rebel and rather dismissive aunt, but always available and with a tight loyalty to the monarchy. In the foreseeable future, there are no aspirations among Catalan nationalism to achieve full sovereignty and it is for that reason that is valid to qualify it as ornamental and rhetorical”

Tobeña A. “*El nacionalisme diví*”,
Bellaterra: Publicacions U.A.B., 1998.

With the theoretical tools and the bulk of findings I have been discussing through this itinerary it is convenient, at this point, to come back to recent Catalan secessionist tensions. I expect also, at this point, to have diluted somewhat that feeling of perplexity that unnerves the battalions of “experts” and “analysts” who have tried to decipher the emergence of this phenomenon without much success. The legion of skilled political scientists, sociologists and economists I mean, that appear downright overwhelmed in front of a social movement that has no substantive reasons for its impressive runaway.¹⁹ No wonder, however, for those perplexities and numbness because the issue is rather intricate and muddled. The political behaviour of human communities responds to a host of factors so formidable that the task

19. Three years after the secessionist eruption reached levels which have been consistently near to the boiling point, fresh attempts still appear offering lists similar to the one [Table I, page 27] advanced here: De Blas A. Las causas del independentismo, *El País, Opinión*, 3th January 2015.

of catching the essential vectors and adventure some diagnosis and prognosis is reckless and perhaps useless [145,146]. See, for instance, the misguided prognosis I ventured on an academic publication, on exactly this issue, as shown at the heading of this chapter [139].

In the nineties of the past century and after twenty years of growth and prosperity within an open, optimistic and highly decentralized Spain I raised, without a bit of hesitation, the conjecture that Catalan nationalism was the guarantor of the whole assembly. No danger of a secessionist drift on the horizon and a safe and unalterable loyalty towards the monarchy. A strict and firm loyalty, indeed: maximum guarantees of reliable cooperation. Under the guise of complaints, dissatisfaction and endless claims from the regional administration there was, so I guessed, a highly rhetorical exercise. And hence the “divine” epithet. I did not intend to connote religious tones with that label or to make a surreptitious reference to the notion of “chosen people”. Not at all. I linked Catalan nationalism to the adorable, festive and bourgeois style frequented by some leftist elites, at that time: the “gauche divine”. That is, pure pose, merely varnish such nationalistic extremism. A splendid stylistic play devoted to enjoy the privileges and connections around the Regional administration, with the relief of a tidy conscience afforded by simulated victimhood.

I won well deserved reproaches by both sides. The separatists deplored the fact that I discredited a powerful seed with a demonstrated ability, over the past two centuries, to germinate political movements that had played decisive roles in modern Spain. Unionists, on their part, lamented the frivolous diagnoses on a major issue, the superficial and non-serious depiction of an incandescent material. The events unleashed in recent years which have prompted to write this essay are, in fact, incontrovertible evidence that both sides were right and I had erred. Cat-

alan separatism did not culminate in the gestures, in the festive and complacent rituals of localism and the remarkable amount of benefits - in bank accounts and all kinds of assets -, that certain parochial elites and mafias knew how to squeeze. It entailed, like other movements rooted on a strong and ancient ethno-culture a firm ambition to get wide political recognition and it had also the fuel to supply the engines to reach the goal of sovereign power [5]. That was the essence of my blatant error.

Although, to my defence (partial only), I was not entirely alone in assessing the issue as stylistic and rhetorical. For example, during the recent secessionist fever the impression of contemplating a fleeting phenomenon, certainly impressive and full of faith, energy and communion but nevertheless transient, due to the tendency for moderation and wisdom by people from the region, has tempted many observers and even the rulers who have had to deal with it. A common diagnosis was to depict Catalan rebellion as an artificially filled “*soufflé*” carrying, therefore, a load for a spontaneous reflux to crumble over time. Such diagnosis has been cultivated in all forums and I suspect that this incredulous perception jumped even to the rest of Spaniards who followed, patiently and sceptically, the enthusiastic upsurge of demands for secession. “*It will pass away*”, “*They will eventually get tired of nagging, you know how stubborn they are these Catalans*”. I’ve heard such expressions often within the rest of Spain, along with curiosity and eagerness to discuss, without fuss, the viability of “independence” for Catalonia. That itself is a big change detectable everywhere: independence as a defensible and acceptable option if based on democratic rules, has become part of the routine political discussion between Spaniards, thus losing much of the resentment and the sharp edges of taboo that always had brought.

However, such newly minted flexibility did not erase the conjecture of an artificial boiling: the “*soufflé*” ready to wane soon-

er than later. Even the monster street demonstrations mounted by Catalan secessionism on the successive Sept. 11th festivities did not shake the suspicions that it was a transitory phenomenon and, ultimately, amenable by way of quantifiable agreements (a transfer of funds between administrations, in short). Until the gigantic theatrical pseudo-referendum of 09/11/2014, when almost two and a half million citizens exercised, in a formal and civilized manner, a useless and illegal vote to decide on secession, the certainty that there was a major problem had not crystallized. From then, there was no choice but to acknowledge that a huge segment of Catalan citizenry had the luggage ready to break with Spain and was willing to bear the costs of breaking off all links and ties with it. It was discovered, suddenly, that the “*soufflé*” was a “*plum cake*”, in a happy expression by Fernando Rey [118]. A vast, firm and inter-classist social venture had emerged that considered the Kingdom of Spain as a foreign country.

The main vector for the jump from monopolizing a “regional power” which yielded a good amount of extractive benefits for local elites and allowed the consolidation of a big segment of civil servants, to claim of full sovereignty and international recognition as an independent state, is to be found in the side effects of the unsupervised exercise of regional power. Let me explain: the effective implementation of the Regional Government as the “baseline” administration in Catalonia, with a full capacity to rule on most everyday areas on people’s lives, is what led to consider the Central State as a completely dispensable institution. Obsolete, useless and parasitic: “*what good is Spain for, if we can live on our own and interact directly with Europe and the world?*”, was the usual motto and a widely common belief.

The process of delegation of power towards Spanish regions started from the approval of Home Rules, shortly after the 1978 Constitution adopted a federal-like structure. Powers were transferred to all of them quite rapidly and with similar degrees

of implementation, thus recognizing nationalities, regions and provinces as the basic structures of territorial administration. A unique characteristic in both Catalonia and the Basque Country was the enduring monopoly of that power in an almost exclusive way, by nationalist parties with fuzzy and imprecise ultimate goals, but without ever ruling out the objective of becoming independent states. When a strong and recognized power holds a well-defined geographical and cultural area, it is quite tempting to proceed slowly but steadily to build “a national project” directed to demand full sovereignty if circumstances offer a viable shortcut. The global economic turmoil unleashed in 2008 with the consequent collapse of the Spanish economy, with the severe hardships that followed in the middle of a torrent of corruption scandals offered the expected “window of opportunity”.

Leading sectors of local elites, civil servants as well as business networks linked to the Regional administration needed, however, an added force to trigger and feed a mass movement of great magnitude and enormous vigour as shown all along the secessionist outbreak. Middle classes from rural or industrial inland areas of the region are the traditional nursery of parochialism in Catalonia: the devotee and leasehold seed which never fails with a bit of patronage and cultivation, a task which has been done with great perseverance and thoroughness, by nationalist associations for decades [6]. With this “default” base it can always be counted. But to penetrate deep into large segments of urban professionals and high-middle classes, much more than that was needed. A systematic and impregnating influx coming from exemplary models of great success was required. Working classes and marginalized layers from successive migrations were, on the other hand, completely subdued and the organizations that should represent them had been silenced by incompetence, coercion or bribes.

So, only a big and sustained operation of propaganda was needed. High level advertising of grand style. In that field, the

role of celebrities is always crucial in today's world. We thus come back, in full, to the sphere of nationalist "glamour" [119], but without the rhetorical varnish I assigned it more than twenty years ago, with the "divine" label. Now the prospect of achieving full sovereignty was a plausible goal and the task ahead was seducing large segments of professionals and well to do people. The sublime degree of "*glamour*", in this corner of the Mediterranean is awarded without hesitation to soccer stardom [156].

A league of celebrities.

"If a human community succeeds at keeping alive the project of reaching an official recognition of its political singularity, among the countries of the world, this alone means that such community has a positive self-image. This is the reason that allows to enunciate that Catalan people appreciate and like themselves a lot... Catalan self-esteem derives from a satisfied diagnosis about the gentry, styles and habits they have created. They like the way they are and they pretend to persevere on the same track. And they want this to be sanctioned upon political stages of great relevance, to warrant that it will endure".

Tobeña A. "*El nacionalisme diví*",
Bellaterra: Publicacions U.A.B., 1998.

In today's technological and interconnected society both political movements and successful leaderships are forged if they get enough amplification on powerful media supports. To pull up and thrive, the combination of "*prime-time TV plus web spreads through networks*" is compulsory. It is a necessary condition. A must for taking off, although this does not guarantee the top or a brilliant finish because competition is brutal. The irresistible emergence of Senator Barack Obama during the Democratic primaries for US presidential nominee, in 2008 elections, established that principle. "Obama" phenomenon, a handsome guy gifted with a sensational and caring voice and armed with the simplest announcement of hope ever coined ("*Yes, We Can!*")

swept the country, became a global icon and continues to generate replicas in many places with minor prophets who try to emulate him.

That is the reference model for the new messiah: a great and cool guy, elegantly dressed and with a self-assured gaze and posture, using an enveloping and caressing voice to sell naive slogans with a bit of ideological ingenuity. This is enough to conquer the world if television camera adores you and social networks spread your psalms. Recent vintage Catalan secessionism (the most abundant: see p. 31) has enjoyed that leadership for a decade, although I must say it has been exercised with discretion. In my opinion, the supreme leader of Catalan secessionism is Mr. Pep Guardiola and I do not greatly exaggerate in saying that can he can compete as an equal, in planetary resonance, with Mr. Barack Obama. Mr. Guardiola took a great Spanish football club, the FC Barcelona, and converted it into the absolute ruler of the world stage in the most popular sport on the planet, soccer, over a five-year period (2008-2012). That gave him an unmatched visibility and even today is the world's Most Valuable Coach and perhaps the most respected football expert, globally. A celebrity of the highest order which also meets the criteria listed at the beginning: "a great and cool guy, elegant demeanour, determined air, using an enveloping and caressing voice to repeat rather naive slogans with a bit of ideological ingenuity". Several magazines of international circulation have granted him, by the way, the title as the "most elegant and attractive male of the universe," surpassing the splendid stars of Hollywood who often win that award every year.

Since taking the reins of the team in 2008 and the guarantee of an overwhelming television presence, Mr. Guardiola began broadcasting signals of full sympathy with aspirations of a sovereign Catalonia that were, at that time, surfacing with force at the region. Departing from the base of a series of sweeping sports

success, he started the habit of expressing himself as a citizen who did not need other identity mark, outside being a Catalan, to address the entire soccer's world. From the newsrooms of the stadiums of Barça, Manchester, Wembley, Anfield, Emirates, Parc des Princes-Paris, San Siro-Milan, Rome's Olympic, Real Madrid and many others places, he discussed and argued in Catalan language with the same normality and routine as he did in Italian, English or in Spanish languages. And when it came to talk about his country, his homeland, everyone understood to what place he was referring at. He conveyed to a global audience, but especially to his compatriots, the stubborn message that it was possible to exercise any role or function, without inhibition, using a Catalan frame; that this was feasible from any pulpit and without sheltering or accommodating under a Hispanic frame. No one had done anything like this – deliberately ignoring Spain, being a Spaniard, with such an enduring elegance – and from places of that impact. His tenacious wit together with his team great victories on the dazzling parades at the most glamorous windows of the planet helped to convince fellow Catalans with secessionist dreams (majoritarian, probably, among Barça followers and their friendships circles), that everything was possible.

In the massive street demonstration on 11th September 2012 that inaugurated the series of outstanding processions which provided worldwide resonance to the “Catalan secessionist challenge,” Mr. Guardiola closed the event with a final speech recorded and broadcast from a giant screen. And in the solemn parody of the “self-determination referendum” of 11th November 2014, he flew swiftly from Munich to cast his “vote”, in downtown Barcelona, offering his image and eager to answer questions to be disseminated “*urbi et orbi*”, expressing his joy and hopes for Catalanian freedom and full sovereignty. A few days earlier he had led a very select bunch of academic and artistic celebrities, publishing a letter of support [64] to the “yearning for democ-

racy” (*sic*) and in favour of Catalan self-determination that was aired by some of the most important newspapers of the globe. So, the most influential citizen of a community, who had earned a well-deserved place to get listened by the world was positioning himself giving unequivocal messages in favour of secessionism. Those are indeed functions of an international ambassador, to say the least, for the moment.²⁰

During a dinner at the house of a couple of physician friends, at St. Just Desvern, on the South West side of the hills that surround Barcelona, on the same suburb where lived the President of the Regional Government at that time, the socialist Mr. J. Montilla, we had a discussion motivated by my cold reaction to the euphoria for the victories of Barça F.C. shared by my hosts and other guests. The occasion coincided with the cycle of great consecutive triumphs at all tournaments across Europe and World Leagues (summer of 2010). A big discrepancy arose when I advanced a firm bet about the political career that was starting the leaving president of Barça FC, Mr. J. Laporta, who had been stained by several scandals. I ventured to guess that his real ambition, at medium term, was reaching the post of President of the Regional Government. I got strong protests and general derision, but by reducing the terms to chances of Mr. Laporta party to get at least one seat, at the Parliament, the bet was accepted by the hosts: another feast with a magnificent “paella” to be paid by the loser (everybody was sure who would be). I won, but I am still waiting for due repayment.

20. On the 21th July 2015 Mr. Guardiola accepted to be candidate for a seat at the Catalan Parliament within the list presented by a coalition (“*Junts pel Si*”) formed by the aggregation of main secessionist parties (CDC, ERC) and several secessionist associations, at the elections of 27th September 2015. He was closing the list of candidates for Barcelona (without possibilities to be elected), using his post as first coach of the Bayern Munich team, as a political platform. His current position, as I revise this, as a main coach of the Manchester City team will even increase his global influence.

I explain that because Mr. Laporta was the instructor and model for Mr. Guardiola political activism. He anticipated his team's coach in the role of a prominent sportsman who advertised, day after day and from all places, an open secessionist agenda when it was extremely rare to do that. He was a good teacher from the advantage point of occupying the Presidency of Barça FC. It is true that he wasted, at supersonic speed, his promising political career by his lubricious excesses and erratic attitudes, though he has an open avenue for a comeback because of his age. That factor, age segment, that generational strata from which he comes, I suspect is an important factor in the present case. Mr. Laporta and Mr. Guardiola have similar ages and both reached positions of great influence on Catalan society, before reaching the age of forty years old. The composition of the governing boards at Barça FC since Mr. Laporta arrived to the presidency illustrate what I mean: a generation of entrepreneurs, economists, advertisers and other young professionals with some prestige and who had progressed in fields near to the reach of regional administration, acquired posts with high visibility and began to act with an international perspective from an exclusive Catalan frame, openly ignoring Spain's one.

Barça F.C. is not a valid equivalent of Catalonian society, of course. It does not reflect the variety of people, groups, companies and initiatives that are perspiring within the region, although it is a concentrate of its main ingredients and, above all, it represents Catalonia everywhere. It is the real flagship of the country. The more relevant mark: the only great multinational enterprise and the only brand with an undisputed overall resonance. It is necessary to depart from this fact to understand a good part of social dynamics in Catalonia. The recent period of overwhelming world victories of Barça FC team, monopolizing excellence and virtuosi performances in soccer, coincided with a shifting of the entity from positions of a moderate regionalism with folk tonal-

ities towards increasing demonstrations of strong nationalist and pro-secessionist positions. The generation of young executives and professionals at the head of the entity were not oblivious to that move at all.

The worldwide impact of Barça FC team together with the consolidation of the city of Barcelona as one of the preferred places for international tourism, a trend that started at mid-nineties of the previous century, was the perfect cocktail to convince a broad segment of middle classes and professionals that the conquest of a fully sovereign state completely independent from Spanish ties was not only desirable but viable. By reviewing the names on lists of signatures behind periodical statements of support for the right of self-determination of the Catalans, it is easy to detect that most of the entrepreneurs, artists, promoters and professionals belong to the Guardiola-Laporta generation.²¹ Children and grandchildren, in fact, of modern Spanish democracy and its highly-decentralized rules and easy-going way of life. It is customary to tell the chronicle of the eruption of Catalan secessionism as a series of clashes and disputes between regional institutions and Spanish institutions, but I suspect that some background vectors are trapped much better by analyzing phenomena like attitudes and behaviour of new elite segments.

The gallery of celebrities for secession embraces, first, some players, managers and executives of the Barça FC team and its entourage, and then expands to include professionals of other areas. Economists, actors, comedians, TV and broadcast conductors, singers, academics, artists and entrepreneurs from various fields who preach separatism and form a restricted but stylish stardom whose mood depends, in any case, of the combustion

21. Mr. C. Puigdemont, the President of the Regional Government, 2016- late October 2017, when he fled to Brussels after proclaiming a failed independence, is a politician with a long trajectory as a secessionist journalist and political activist who represents very well this generation.

state at privileged seats of Barça FC stadium best lodges. It is there, within the solemnity of a crowded stadium on vibrant and biggest occasions when the secessionist liturgy reaches the point of splendour: the songs, colours, slogans, banners and rhythms of a cheering and enthusiastic community. The claim for secession has been blessed there, meticulously, in multiple sporting events of great scope, sending proclamations to the entire world via TV and web-based streams. Magnificent liturgy strengthens the naissance of ambitious hopes. Keep in mind that during recent years in live television and radio programs of Barça FC matches, the commentators never forget to make open and persistent references to the horizon of secession for Catalonia. And I suspect these media stars do that spontaneously and without receiving specific indications: to participate and contribute to the collective enthusiasm.

Chapter 10
An alienated society?
Sovereign reasons and rations.

“In an interview to Julio Caro Baroja at his Madrid home on a midwinter morning at the eighties of past century, we were chatting amiably and as ETA terror campaigns were still very active I asked:

—Don Julio, ¿what do you think it must be done to finish with secessionist terrorism?:

He thought for a moment and answered,

—Well..., the only thing that I can suggest is to send trains full of psychiatrists to the Basque Country.

An interesting idea, not a boutade only, because in life and, of course, in politics rational processes count, but psychopathological factors also operate on both individual and collective options... I fantasize with those trains: aerodynamic convoys travelling at high-speed and, on the coaches, white-coated passengers discussing heatedly about electro-shocks and other palliative therapies. Why they take so long to arrive to Barcelona? I ask to myself while I'm listening the secessionist leaders and their spokesmen speaking so openly convinced?”.

Ignacio Vidal-Folch,
Trenes llenos de psiquiatras,
El País, Opinión-La cuarta página, 17th December 2014.

“There is no doubt – please, look at Google - that the label more used lately by political and intellectual adversaries of Catalan secessionism is “madness”. With all its synonyms and variants, of course: folly, craziness, silliness, lunacy, foolishness, insanity, alienation...”.

Joan B. Culla,
Bandazos a ciegas,
El País-Cataluña, 6th November 2015, p. 2.

In the previous chapters I have discussed several vectors that may be useful to approach the genesis and dissemination of the secessionist eruption in Catalonia. They do refer, all of them,

to normal phenomena of social psychology and their links with biological rooted mechanisms that promote conflicts between neighbouring ethno-cultural communities. Without resorting to the hardships and miseries of a failing economy or to the oscillations in the alliances or combats between political groups (which have an undeniable influence, but do not serve to explain why these frictions resulted in secessionism outbreaks in some places and not in others), I expect to have offered some useful insights.

In communities with strong ethno-cultural roots, when parochial and xenophobic tendencies are fuelled by an incessant hammering of media propaganda and activism encouraged by a Regional Power of tenacious cantonal affiliation, these factors can ignite abrupt episodes to demand “national recognition” or attempts to secede. That ought to be expected and considered fully normal. When the usual economic or socio-political periscopes fail conspicuously at explaining the source of these movements, however, a typical temptation of analysts and observers is to resort to psychopathology. To dive into the hypothesis of a collective alienation [47]: they hurriedly recur to transient madness or follies of the masses and forget the role of social “moods” that can be surprising, unusual or overpowering but devoid of any mental disorder. See, for example, the quotations heading Chapter 2 [p. 23] or the ones introducing this Chapter [159]. This reiterative habit of recurring to a psychopathological pseudo-explanation, when there are apparently no other hooks available, lead me to write the short comment that follows below although the audience to whom it was addressed never saw it because it was not published:

*An alienated society?*²²

“In an editorial devoted to analyze the prospects for confrontation between Catalan secessionism and Spain, “*The Guardian*” [15th October 2014] advised prudence and disposition for compromise as good antidotes for the typical Iberian temptation for frontal crashes, and versatility to test tactics that had given good results in Scotland and Quebec. With this rather alarmed sermon the newspaper advanced a diagnose for Catalan society which was a bit surprising. They depicted it as a “*society often claustrophobic*”. It could be guessed, from context, that *Guardian* editorialists did not pretend to say that claustrophobia sufferers were particularly abundant in Catalonia because it’s blatantly wrong. They also did not pretend to argue that citizens live there within a continuous and suffocating anguish due to an unbearable Hispanic closure and oppression. Not at all, because at *The Guardian* they know well that Catalans and the rest of Spaniards enjoy a lively conviviality on everyday routines: they trade and work together, and they date, joke and intermix on all kind of gatherings without tensions. Even the most radical secessionists repeat continuously that they deeply appreciate all Spaniards and that they want to have them as best neighbours till the end of times. And there is no reason to doubt that.

I suspect that with the “claustrophobic” label, “*The Guardian*” aimed to remark attributes of communities which are a

22. I reproduce here an op-ed essay written for “*El País*” that was not published. It appeared at “*Tercera Cultura*”, 3th November 2014, available at <http://www.terceracultura.net/tc/?p=7286>. The introductory note said: “We shelter here, at *Tercera Cultura*, this essay that expresses technical doubts upon some psychopathological labels which have become common in the analyses of the secessionist revolt that Catalonia has suffered for two long years so far, with an increasing social tension. This essay was conceived for “*El País*”, but never appeared. At *Tercera Cultura* we are not apprehensive at all to publish discussions on the psychology of political behaviour and if they address hot issues much better. It is something we have always done, though short opinion essays are not frequent in our posts”.

bit unpleasant if one must bear them as a visitor or foreigner. Encapsulated or too self-absorbed attitudes and habits from natives which are somewhat suffocating for the lungs and for the open-mind of outsiders. For those who contemplate such closed attitudes from a detached perspective. It is an experience that many people perceive in front of exotic and non-permeable communities. But the fact that “*The Guardian*” assigned such claustrophobia to a Mediterranean culture geared to tourism and usually boasting of high and unbeatable cosmopolitanism deserves attention because, often, the vision of others helps to better frame the traits of social groups.

Perhaps such label was not entirely misguided because there had been other recent diagnoses of Catalan society, issued also from outside, which have used descriptions with “psychiatric” tones. Javier Marias, for example, in *El País Semanal* [28th September 2014] ventured, referring to the independence fervour in Catalonia: “*It is as if Catalans had been drugged or hypnotized.*” And not content with that he added then that the mere thought of being in the skin of an ordinary Catalan gave him “panic.” Real terror, he insisted looking at foreseeable future if secessionist aspirations were met. That represents another step in psychopathological gradation. Marias is conjecturing a potential “collective poisoning” of severe intensity with a bleak prognosis. And he is not the only one to do so. To round out the picture, authoritative voices within Catalan society have begun to resort as well to similar diagnoses. Without leaving the opinion pages of this newspaper and referring to the same phenomenon, Joan Boada sentenced, not long ago “*Are we transiently crazy or we are like that?*” [9th October 2014]. Which translates to a proclivity to insanity linked perhaps to enduring temperamental traits.

So, this curios and wide concordance on depictions bordering or fully psychopathological is suspicious. Are they right these “diagnoses”? Are we reaching a point where it will be necessary to recruit swarms of clinical psychologists and psychiatrists to urgently replace political scientists and deploy an emergency treatment, on a massive scale, for Catalan secessionism? As a

professional goal, it would be challenging by the overwhelming and chimerical proportions, of course, but I am sure that such mission is nonsense. That it is not necessary at all, because these diagnostic hypotheses are erroneous: there is no psychopathology behind the urgent crave for secession of a formidable segment of Catalans. Nothing of that. They are neither drugged, nor hypnotized nor mad, the secessionists.

On the contrary, they have devised a strategy to achieve clear objectives, at all costs (or almost). They intend to win the game and its associated benefits, in short. Every one of them, with the portion of awards they may claim when the time comes to distribute profits, in case of victory. Benefits that can be substantial, trivial or merely symbolic. And that behaviour is precisely the reverse of insanity. The picture they offer is certainly extraordinary but is a big mistake to use the language of mental disorders albeit figuratively. It only contributes to confuse. Catalan secessionism frenzy is complicated but it is much more manageable and understandable if one adheres to the analysis of the sociology of politics and the psychology of litigating communities in circumstances of high voltage polarization and partisanship. There is no reason to invoke processes bordering the psychopathology.

I will advance a conjecture with the aim of raising doubts and open, perhaps, a fruitful path. I suspect that these misguided analysts have observed an incandescent social boiling which had scarce rational foundations and hence the (metaphorical) resource to group psychopathologies. I think, however, that it is always mandatory to stick to simpler explanations, if possible. I will advance one possibility (among many others to explore), if only to satisfy my University colleague Dr. Joan B. Culla, who claimed in this newspaper [19th October 2014], that Spanish thinkers should dedicate serious efforts to analyze the deep reasons of the secessionist agitation. I propose, therefore, just a hint for their judicious speculations. When contemplating with revering admiration, the gigantic processional pilgrimages of Catalan secessionists I began to suspect that this devotion, fervour and communion apotheosis should have connections

with romantic passion. My guess is that secessionists (perhaps close to half of the census, by now) were madly in love: enthusiastically infatuated by an ideal, by a splendid, joyful and golden imagined paradise (towns and villages around the region, by the way, appeared these days garnished with glittering ribbons of Eden-yellow colour, perhaps to have a taste of it). They live, the secessionists, passionately dazzled by the glare of a horizon of honey, but without consummating any real delicatessen yet. They have ignited a rosary of horny states and faked-culminations, true, though for delights of a thoroughly and fully satisfying climax, zero results for the time being.

Romantic infatuation is usually considered a transitory state of lunacy and perhaps the confusion of these distinguished analysts arises from this. But the burning of romantic passion is not a mental disorder, except in very unusual and bizarre cases that nurture some literary peaks. Falling in love is a stormy and very remarkable mood state yes, but not a foolish trance for most people. It's exhilarating, energetic and festive as a rule, and it always pursues a clear and highly specified goal: to seduce and conquer a fellow soul to create a strong alliance in individual episodes, or to monopolize a territorial and cultural niche in those communal passions that trigger urgent appetites for victory over opponents. I leave for serious Spanish thinkers the task of identifying, in a clear way, who uses honest lures and who uses damaging cheats and perversely interested tools in a litigation between old neighbours with the script of a soap opera. It is also necessary to discern how these waves of liturgical passion (not necessarily benign, all of them), created the expansive and craving mood of a crowd of fervent worshipers. Hard work is urgently needed to help to find tracks to devise compromises. Agreements that should be the least harmful possible, especially for those who will be suffering occasional tempests from within".

This column contained a diagnostic proposal that permitted to discard any reference to trances, sorceries, spells, intoxications,

delusions [47] or other abnormalities of coherent judgment to characterize Catalan secessionist agitation. Secessionist engines would be like those that typically trigger the fervour of falling in love: the unleashed passion for an ideal as a powerful and highly effective striker - not crazy or stupid at all -, to boost bellicosity among groups and optimize the hunger for returns from victorious battles. When that romantic passion is focused on a political goal shared by many people it induces euphoric and overflowing moods but fully normative (not pathological), which can be very useful on inter-group litigations with prospects for victory. Mobs, insurrections and rebellions are based on the ignition and boiling of these collective drives. Some of them achieve their ultimate goals, crystallizing as a new social niche and are then celebrated for their long-lasting cultural achievements, while others fail to materialize and are often maligned in the chronicles by the squandered energies and lives.

The overall objective of these agitations is, as stated, to monopolize a territorial and cultural niche eliminating or marginalizing opponents. In the case of secession, the profits to be distributed are quite tangible and widely distributed: for some individuals are unique and unforgettable (the heroic founding fathers); they can be also substantial for a wide segment of people situated at convenient posts; and for the majority they are usually trivial, irrelevant or merely symbolic. All, however, get the removal of bossy seniors and the displacement of irritating neighbours who become “*de facto*” foreigners. And that represents an immediate net gain with an associated intimate reward. There is no foolishness, therefore, in these fervent eruptions within some communities in their progress towards achieving a goal of social pre-eminence despite the dislocations induced. The atmosphere is oppressive and burdensome for those who do not share such passion and are at risk of becoming either marginalized strangers or assimilated by force. But the frenzy is usually directed with

skill and tenacity towards conquering an objective with succulent and enduring awards to be distributed.

That was the conjecture I launched. It might be right or no. If it is right, however, we should discard the psychopathological assumptions for these effervescent episodes because by labelling them as crazy and misguided, we blur the crucial fact that they play an adaptive role in fierce competition between confronted communities. It is probable, however, that there is no genuine conviction when harbouring these “psychopathological” labels, but rather the use of scathing dialectics. The old tactic of discrediting adversaries denying them the use of reason and good judgment: throwing derogatory epithets to strip them, unceremoniously, of the condition of judicious people. In fact, alongside the supposed silliness other conjectures are launched ranging from an improbable and inborn communal stupidity to an extreme candour easy to be swayed by persuasive manipulation [47,150]. But these alternatives contradict the assumption of a sudden and pathological anomaly of sound cognition.

Inoculation of “false memories”.

Another conjecture that has been widely used to explain the eruption of Catalanian secessionism refers to the propagandistic inoculation of a “false memory” [150], which then would become an unstoppable vector once this new recollection is assumed as fully correct. In this case, the imagined experience remembered as genuine was the “intolerable insult”, inflicted on Catalan citizenry, by the amendments and cuts applied by the Spanish High Constitutional Court, at 2010, to the Statute of Autonomy of 2006. This renovated Home Rule had been approved that year in a referendum by 74% of voters and was subsequently endorsed, with minor changes, by the Spanish Parliament in line with a Central

Government that had announced total respect for decisions that came from Catalonia. But the High Constitutional Court amended some important points of the new law, four years later. There is a near unanimity among analysts and observers to consider this amendment as the “*casus belli*”, the real starter of the secessionist wave. But it is also true that despite such Statute had an extremely strenuous gestation in the middle of hard partisan struggles, less than half of voters went to the ballots (48.9% of the census). Therefore, that brilliant figure of above two-thirds of approval became, due to this rather poor turnout, a meagre 35.7% of final backing by citizens. A score, certainly, not to be celebrated with fireworks. That discrepancy about these distant figures from the same event (35,7% of total backing versus 74% of approval rate), was the cognitive basis to inoculate the seed of the “false memory” with which to build afterwards the “irrefutable” chronicle of a “big insult”.

This, in any case, only shows the possibility of “*a posteriori*” building a successful story about plausible origins, thus illustrating the effectiveness of indoctrination campaigns. I am sure, in fact, that a large majority of informed Catalans are now convinced that such Statute was approved in a referendum by an overwhelming proportion of citizens and that the Spanish High Court amended it without any need, showing an intolerable arrogance. Pure vocation of command and control from the State. But even accepting that (distorted) version of reality, this is not an evidentiary argument that the “false memory” was the actual starter of the expansive force of the secessionist wave.

It wasn't, in fact: it was used as another anchor to launch the indoctrination campaign. The final cooking and triggering of the secessionist outbreak was the result of intense and smart agitation campaigns which were leaded by various platforms closely linked to the nationalist and secessionist parties and the Regional Government, within a context that permitted to foresee a secessionist majority, at the Regional Parliament, after several years of chaotic

leftist governments immediately before the great European recession that started at 2008. The first goal of these actions was trying to obtain from Madrid a complete financial autonomy while already hinting and threatening, at the outset, that subsequent demands for full sovereignty will soon be arriving [5, 6]. A powerful and stubborn campaign claiming for the “*right to decide*” (a metaphorical disguise for self-determination), was the core of this strategic approach and the graphs on page 30 [Chapter 2], reflect very well the growth of the eruptive outbreak, along two years, to reach maximum highs from 2012 onwards

Since the target of the propagandistic pressure was focused in the simplistic slogan of “*we want to vote*”, an stubborn and overwhelming demand for exercising “*the most basic right in a democracy: voting in a referendum*”, and there was a curious laziness, inactivity and lack of reactions by the Spanish Government, I attempted quite early during the eruption of the secessionist wave, to suggest a proposal²³ that was received again by complete silence:

“Multi-consultations”

“Everybody understands that when claiming for “*the right to decide*” what is pursued, in fact, is the capacity to sanction a secession mandate with full legal and unshakeable guarantees. That is, without possibility of a reversion or further legal claims. This

23. “**Multiconsultas**”, *Tercera Cultura*, 23th January 2013. Available at <http://www.terceracultura.net/tc/?p=5886> The introductory note by *Tercera Cultura* said: the author of the comment “Multi-consultations” redirected to our platform an op-ed which was sent previously to *El País* (*Opinión-La Cuarta Página*), and silenced. At *Tercera Cultura* we believe that free thinking and critical evaluation of social events, particularly if it departs from solid data and better still if it distils some humour, is good for modern and open societies. So, we publish a comment that for others can be uncomfortable and for us is fresh air. And we invite professionals, from scientific fields to express opinions on issues that can affect our present and our future.

is the essence of the “Catalan revolt” launched, the 11th September 2012, by a flood of secessionist protesters and assumed by the Regional Government, consecrating it at the frontispiece of its program to be culminated, yes or yes, in 2014. That is, by hook or by crook: with consent of parties and within the law, if possible, or without respecting such formalities, if not.

In this issue that has troubled the horizon of Spanish political life is desirable to depart from solid data. There’s one that is incontrovertible: a considerable segment of the population of Catalonia wants to get out of Spain as soon as possible and has glimpsed a favourable opportunity. It is not wise to deny or hide that: there is a significant proportion of Catalans who want to be governed by themselves, breaking all ties that bind them to the Kingdom of Spain. They consider that the sheer weakness of a Spain near bankruptcy offers an interstice to achieve that goal. It is possible that the secessionist segment arrives or even exceeds half the census of citizens of the region. All data from serious surveys conducted in the last years as well as the results of the regional elections at November 2012 came to clinch it: the votes garnered by parties proposing a horizon of full sovereignty for Catalonia reached the score of 1,800,000, close to half the total voting cast (3,657,450). It is therefore an inescapable reality.

In the European context where we live, the primary obstacle standing before the secessionist impulse is the opinion and will of the rest of Catalan citizens. That is, the other half of the region population who want to maintain links with Spain as they are. On that November election, around 1,750,000 persons issued a negative vote on an independent Catalonia, by voting for parties that made explicit their opposition to that possibility in an occasion that had this issue as the main focus (or unique, almost). 85,000 citizens did not vote anyone casting blanks or spoiled options, and a big segment of 1,600,000 citizens abstained from voting so their preferences are unknown. However, if we consider the findings of serious polls and the pattern offered by these election results, it wouldn’t be absurd to assume that the fraction of abstainers who could go to a binding consultation about

secession will tend to fragment in similar proportions close to two halves. So, adding tentatively the figures we could have just over two and a half million of Catalans in favour of secession and about two million and a half against it, of the total of five million citizens who could exercise their options.

There is a tie, accordingly. A resounding tie that should lead, on fair game and particularly in times of great hardship, to postpone further litigations on the issue. That draw, however, is not paralyzing at all, quite the contrary, the push of the secessionist segment. Hence the rush to set a pressing timetable since separatist agitation could diminish or be diluted, even without reactions of opponents, because states of opinion have peaks but also plateaus and deep valleys. On the other hand, the procedural tools to translate a decision-making into an effective application have their peculiarities. The strategy of the Regional Government and its secessionist allies is crystal clear and has well-defined stages. First, to inoculate the conviction among citizens that holding a consultation on self-determination is an inalienable right that assist the Catalans as an unquestionable departing point (the “*right to decide*”, is the mantra repeated everywhere). That has been already achieved. If that right was exercised at Quebec and the Scots will do the same at 2014, the Catalans cannot be less than people of those remote places, whatever the existing laws establish. Hence the stubbornness: any barrier will be presented as an attack on the elementary rules of democracy and used to report the abuse to the world. With this approach the secessionist always win: if there was an agreement with the Spanish institutions to carry out with the consultation, it would be sold as an overwhelming victory and the first step towards segregation, and if not the resulting paralysis will be presented as an intolerable abortion of the craving for freedom of an industrious, creative and enterprising community who wants to walk on its own. That is, the campaign as an ingredient to extend loyalties and amplify the bandwagon consensus.

The second step pretends to consign in quantitative terms a “*Spanish defeat*”, in a consultation (legal or paralegal) where the

dilemma of becoming “a state within Europe” will be presented (this is the formula already advanced by the President of Regional Government). A favourable concurrence between 55% and 60% is actively pursued. That would be enough to claim victory, no matter the degree of turnout. That is, a minor advantage in a paralegal process and not necessarily binding, will be enough. Because they always win too, with that approach. It is very unlikely, on the one hand, that the Andalusians, the Canaries, the Galician, the Corsicans, the Venetians, the Tyrolean or the Flemish (to give just a few examples), would be against an option like that if it was raised. And when you have at your disposal, as it is the case, the full power of media platforms close to the Regional Government (the media regiment), the result can be anticipated. In any case, if these approval scores could not be reached the guilt could go to the “suffocating” Spanish institutions that did not allow a clear and binding question and a legitimate procedure. Therefore, it is compulsory to organize a “trap consultation”. Best winning it, albeit by a hair, because then “*charnegos*” defeat (citizens of the Spanish origin), will be certified. But if the result were a tie (the most plausible scenario, given the numbers above), nothing would be lost and another milestone will be completed: establishing an important precedent. I should point out that within the “*charnego*” sector of the citizenry I include, of course, all opponents to secessionism with or without actual *charnego’s* pedigree: from urban and suburban pockets of second and third generation descendants of Spaniards migrants that still constitute the bulk of resistance against secession, the relatively new South American, Maghreb or Eastern Europe migrants, and the Catalan natives who hate the secessionist adventures of their fellow compatriots.

Wise Spanish constitutionalists have a delicate task in trying to prevent that such opportunistic strategy would advance step by step, culminating stages and achieving all goals. Compromises like the ones which were implemented in Britain or Canada in front of comparable secessionist challenges, will do little because tradition, interlinks and rules are others in these countries.

A pathway to be explored would be to overpass the secessionist claims “on the left flank”: that is, meeting the “democratic” demands for a consultation with several opportunities for voting. For example, with a string of carefully shaped and well scheduled consultations. I’ve slipped a suggestion before: I am convinced that all Spanish regions would love to be consulted on the possibility of becoming “a state within Europe” and do that at the same time as Catalonia. The comparative analysis of those results would be of great interest and now that the need to reform the Spanish Constitution is on the table, that data would be helpful to legislate wisely. Later, though with enough lapses of time as to allow due sedimentation of opinions and avoid an unnecessary waste of resources, consultations could be held on clear options about separating from Spain or not, separating from Europe or not and so on for big decisions and for policy issues of relevance. For the most transcendent decisions, however, second rounds after fifteen days and demanding majorities not inferior to 70-80% would be prudent, for instance, although these details about requisites should be outlined very carefully. I consider urgent to establish generous grants to several groups of political scientists (there are first class teams in Spanish universities and at CSIC Research Agency), to carry out simulations about these tests in models of complex social games and to run lab studies and surveys on samples of students and ordinary people.

All of that with the aim of helping shrewd legislators and policy makers so that the process of constitutional reform that could result in a new law for Consultations, would produce gains for everybody. Because what we must try to avoid is that a single misconceived and poorly arbitrated “match” resulting on a draw or a narrow victory of the secessionist fraction (important, but a fraction after all), would become the prelude of the Spanish epitaph in Catalonia which is what is intended. In conclusion, despite the stubborn insistence and demands to get “*the right to decide*”, this is not really at stake (very few are interested in it). What is at stake is the will of some to gain and prevail, impos-

ing themselves to the detriment of others, because that is always highly motivating for those who foresee substantial profits and those disoriented or deluded that follow them along.”

Since this column was written not a single step has been taken in the direction suggested there, not even on purely theoretical or speculative terms. The Regional Government and its parliamentary allies accompanied by the tireless agitation of secessionist associations, redoubled their commitment to celebrate a referendum of self-determination trying to mimic “*the Scottish way*”, arriving to the point of celebrating the imposing simulation of 11th Nov. 2014 referendum [see p. 33, Chap. 2], mobilizing millions of loyal fans but without any effective result despite a considerable waste of resources. Meanwhile, the central government adhered, stonily, to the constitutional deadlock to carry out any consultation, binding or not, about the issue of a secession. The basis of that static position was that such a possibility is forbidden by Spanish Constitution which was approved, by the way, by an enormous majority of Catalan citizens. This legal framework establishes that sovereignty resides in the Spanish citizenry and no turning back is possible on this issue. The litigants, so far, have been firm on keeping their sides while tension has not decayed in the region [see Chapter 2], because the bulk of secessionists who recognize themselves as members of a single ethno-culture, the Catalan one, is opposed by another fraction of Catalan citizens of a roughly similar size who do not want to give up their status combining both Spanish and Catalan identities. This latter segment is the one I labelled as “*charnegos*” citizens (CatSpanish), with a bit of frivolity. A segment from which, incidentally, I am a member.

The issue is therefore fully entrenched although such persistent roadblock does not prevent to venture that, sooner or later, as the result of a revision of the current constitutional framework

an outlet will be opening to try to solve the intractable tie. And it would not be strange if similar steps to those suggested in that article are finally implemented, in the form of a concatenated series of consultations prescribed with the required steps and due cautions.

Epilogue

Gregarious and nationalistic.

"A community becomes a nation when is politically sovereign, either as a dominant majority in a nation-state or as an entity of political relevance in a multi-ethnic empire or state. If it is not an independent state, a community can be considered a nation if it has tools for self-determination and self-government or works actively to reach them".

Gat A, Yacobson A.

Nations: the long history and deep roots of ethnicity and nationalism,
New York: Cambridge University Press, 2013.

"Our movement rejects a vision of men as a self-centered subjects, slaves of instincts from natural law urges for lives of transient and egoist pleasures; contemplates not only individuals but the country and the nation: individuals and generations linked by a moral law with common traditions and a mission that, by overcoming the instinct of a life governed by the brief cycle of pleasure, builds a superior existence founded on duty; a life free of time or space limitations in which every individual, through his renouncing of egoism, personal sacrifices and even death, can reach the spiritual stages where the true value of humanity resides".

Benito Mussolini

The Doctrine of fascism, Enciclopedia Italiana, 1932,
vol. 14, in McCohen M, Fremon N., Eds., Princeton Readings
in Political Thought, Princeton, NJ: Princeton University Press, 1996.

Occasionally, someone recovers old initiatives designed to temper and re-direct the fierce competition between the two major Spanish cities, Madrid and Barcelona and their cultural and economic areas of influence. A recurrent and cherished idea would be to give Barcelona the rank of co-capital of Spain, thus recognizing its decisive role overall Spanish economy and culture. Mr. Pascual Maragall, the revered mayor of Barcelona during the Olympic

Games of 1992 and reviled president of Catalanian Government during the struggles which led to the Statute of Autonomy of 2006 and the tears that followed, insisted often on that. He requested the transfer to Barcelona of the second parliament house, the Spanish Senate and several Ministries (Culture, Education and Health, for example), as well as some high government agencies. Housing these top-level political platforms would fulfil Catalan ambition to exercise an internationally recognized leadership. Moreover, having a selection of local creative forces at the reins of central power will engage Catalan society into the building of the big homeland that both Spain and Europe represent. This idea could bring, in addition, the benefit of placing high-level power structures inside an autonomous territory with a Home Rule, thus generating complex layers of influence through top civil servants rooted in the region. All of that would attenuate, hopefully, the typical temptation of erecting an encapsulated chieftdom by short-sighted and nationalistic leaders.

That's the theory. But besides the expected resistances by Madrid bureaucracies and disclaimers founded on the need to coordinate government on a single site, these initiatives have the immediate problem of generating suspicion in other Iberian corners with an old-established tradition to exercise influence from the periphery. Fast: Andalusians, Galicians, Asturians or Canarians, to quote a few, have learnt to play their cards at Madrid corridors and structures but it is doubtful whether they would reach similar penetration at Barcelona. It would not be surprising, therefore, that serious proposals of this kind would arouse a fierce rejection, with immediate demands to block satisfying the vanity of one region at the expense of others. There are several ethno-cultures within Spain which extend further away from those coming from old Aragon or Castilian ancestries. All of them can be well envisaged from the promiscuous and hectic Madrid of this time, especially since the implementation of the network of

high speed trains. Thus, the real prospects for raising Barcelona role and power within Spain, look rather dubious.

The Crown could have a role in this issue because there are plenty of opportunities to act on the symbolic stage. It is perhaps non-wise, to give an example, the rigidity on the royal family living residence: all year round in Madrid with a fortnight vacation at Majorca, when in Barcelona they could enjoy beautiful palaces, splendid gardens and a welcoming atmosphere by establishing a second home or even the first one for long periods. A regular presence of the King in a city that has succeeded to become a must for international tourism and a preferred hub for forefront business branches would strengthen the ties between Catalan society and the Crown of Spain.²⁴ Together with some headquarters of agencies from the European Union, or better still, from the NATO, with deployment of resources and officialdom could have diluting effects for secessionism.

It is impossible, of course, to predict how these issues will come up although perhaps one anecdote can illustrate my point. In my visits to Valencia, when small talk turns towards these matters (quite often, indeed, because the pact of silence that reigns in Catalonia does not apply there), and I am asked to indicate my position on the demands for Catalanian secession I always hasten to say that such a thing does not interest me at all, due to the predictably enclosed, highly devout and *mafia*-prone Mediterranean small state that would result. But I add immediately that if one day Spain disappears and other kinds of political clusters are set up within the European umbrella, I would be willing to put some hopes on a contemporary recreation of the old Kingdom of Aragon, with its capital in Valencia or Naples (never in Barcelona). I win then instant and enthusiastic adherents to that idea.

24. Secessionists knew that very well and made the Crown their main target for criticisms and protests after the failed proclamation of Independence, at October 2017.

That is, institutional signalling at the highest level seduces and convinces immediately, everywhere. And that kind of marking is an important part of what is being asked for in Catalonia: representational symbolism of a certain relevance and dignity; getting status, as a country, with recognition in the concert of nations. Secessionists often dream on a chair for Catalonia at the UN Assembly in New York (the remote corner where Andorra is, will do), and another one at the headquarters of the European Commission in Brussels or Strasbourg (even in the anteroom where those of Macedonia and others are waiting). Those are ingredients of the imagined paradise which would culminate the national fulfilment with other symbolic icons. And if that is impossible, then a formula quite like it – “*Free State associated with the Kingdom of Spain*”, for instance -, with distinctive recognition markers.

That aspiration comes from afar and will endure whatever happens with the ongoing secessionist challenge, because in Catalonia grew and consolidated an ethno-political community of undoubted success and durability; an undeniable “national” entity that will persist in its aspirations even if the current impulse does not get enough force to make the goal of full independence achievable. The two quotations which opened this epilogue [p. 175] remind, from very distant perspectives, that national aspirations are matters of very long reach. The “Catalan question” will continue its undulating path either close to the boiling point, as in recent times or in a more liveable and peaceful pace, because at the Eastern corner of the Iberian Peninsula, the triangle where the Pyrenees mountains meet the Mediterranean, a distinctive social aggregation has nested and grown for centuries. It is a peculiar ethnic culture,²⁵ between its Spaniards and French neigh-

25. In one interview from two decades ago [52], appear some of the core ideas of this essay (Espada A. Los científicos deberían definir la etnia catalana, 5th October 1998, *El País- Cataluña*, available at http://elpais.com/diario/1998/10/05/catalunya/907549654_850215.html).

bours, which has repeatedly demonstrated a strong motivation

"In a book published by the U.A.B., titled *"El nacionalisme diví"*, Adolf Tobeña has gathered several papers where he pretends, in his words, to describe *"the psychological vectors of Catalan nationalism"*. **Question:** Compared to the *gauche divine*, those *"divine nationalists"*, as you call them, have governed the country ¿without losing their divinity and cynicism attributes? **Answer:** Conspicuous members of the *gauche* have governed as well: ask Mr. Oriol Bohigas, for instance. Though what I've tried to depict is, essentially, the practice of a nationalist elite which never goes further than regionalism and that entertains and distracts people through mainly rhetorical exercises. Such practice has resulted in the consolidation of that local elite which, as the cosmopolitan *gauche* elite, has adopted myths to build a privileged bureaucracy. **P.** The names of the *gauche* are more or less well known. But those of this elite? **A.** I have not given names, but it can be done: Triadú, Pujals, Calzada, Alavedra, Serra-Ramonedá, Laporte, Ferraté, Granados, Puig-Salellas, Molins... **Q.** Elites often share certain transversality. **R.** In this case as well. They share a lot; economic interests, for sure, in enterprises such as *Autopistas* o *Edicions 62*. It is true that some prefer the *Ampurdán* and others the Pyrenees or Tarragona for summer houses but they share fundamentals. Among them endorsing Catalanism, not only as political doctrine but as a psychological assumption. These elites share a self-love for a way of being, for the temperament of Catalans. **Q.** How is such temperament, if it really exists? **A.** Heavy political dust has hidden the essential trait which is that Catalans present a strong feeling of belonging. They feel that they possess a special character and they consider themselves as a differentiated ethno-cultural group. **Q.** Jung advanced the idea of a plausible national character. But from then nobody has returned seriously to such idea **A.** There will be a comeback. There are some new studies already on this issue. Jung departed from merely speculative intuitions and there were some studies afterwards, but the field was abandoned because differences in character between members of a community were much higher than character distinctions among communities **Q.** ¿and...? **A.** Now with much higher statistical potency and refined measures, more promising findings may appear. Experimental psychologists maintain that the more basic or primary temperamental traits are universal... **Q.** ¿What are they..? **A.** Emotional stability, aggressiveness, sociability, curiosity, impulsivity ...and their opposites. **P.** ¿and secondary traits? **A.** They are much more varied: religiosity, gregariousness, industriousness, ambition, aesthetic sense..., they present a lot of variations depending on the group. **P.** And from these measures what traits are characteristic of the Catalan temperament?. **R.** Ah, these studies need to be done in Catalonia. What I'm saying is that conditions are now ready. **Q.** ¿And what would you advance from a merely speculative perspective, in line with Ferrater-Mora depictions? **A.** You could start with the descriptions that foreign observers assigned to us during the Olympics of 1992: merchant, greedy, playful, leisure oriented, tribal, parochialist., these are communal traits which have survived the filter of time probably because the founding mixtures were successful enough as to maintain a chore, a nucleus of the ethno-culture **Q.**

and ability to generate actions of political affirmation which are impossible to ignore, let alone delete.

At the interview which appears on the “footnote” at the previous page, there are comments about crucial ingredients of nations with a firm and enduring identity base, which I have barely addressed in this essay: the frontier of the native language, the continuity of surnames and the restrictive mating inter-crosses with migrants, the settling on a specified core territory, the formation of local elites who recognize themselves as community leaders, the inner feelings of belonging to a singularized community, the maintenance of secular traditions and the germination of movements of political influence with perspectives oriented to a future of self-determination [61,121,140]. There was no need to enter them with detail, because the main goal here was trying to put some light on the origin of the last secessionist eruption.

It can be helpful to reproduce again *the main questions* presented at Chapter 2 [p. 28]:

Successful, certainly. **A.** All this is heavily criticized today...; when Catalan traditions are studied the usual conclusion is that all of them are invented..., but you could not invent a bulk of traits and tendencies without a primordial base. **Q.** You use the concept of *ethnia* to refer to Catalonia; this is not frequent. **A.** We need to widen the concept of *ethnia*. **Q.** Ah...?, **R.** Is problematic that. From morphology, from the physical point of view there is no Catalan *ethnia*, but anthropologists, linguists and psychologists should work together to try to grasp the concept much better than that. **Q.** ¿Where will you start? **A.** The features of Catalan *ethno-culture* probably depart from a cluster of surnames which have been repeated, in a restricted territory, through almost nine hundred years from an initial base of only several hundred; a clearly differentiated language, a character and an aesthetic sense that others recognize as peculiar. All that finishes by showing up in temperaments attributes. **Q.** ¿A language induces a character? **A.** Yes. A language probably contributes with some tonalities to temperament and to the perspective about the world. **Q.** ¿Why what procedures? **A.** The distinctive profiles and the musicality of idiomatic flows have neural signatures that can be differentiated. **Q.** ¿Twenty years of government by Mr. Pujol party could have changed Catalan temperament? **R.** Only in minor and transient details, on the surface. They have not touched the nucleus of temperament. But it is true that self-esteem, chauvinism and arrogance have increased. And all this probably has contributed to the excessive closure and encapsulation of Catalan society.

- ¿*Why Catalonia?*..., ¿and not Galizia, Baviera, Flanders, Wales, Corsica or Sicily, to use just some examples of old European cultures and territories?.
- ¿*Why at that time?*
- ¿*Why in the form of an eruptive surge, with great social agitation?*

And to remind as well, that I departed from the following hypothesis:

“THE EXTREME FRAGILITY OF A BANKRUPT SPAIN OPENED AN OPPORTUNITY TO CONQUER AN UNDISPUTED POWER BY THE LOCAL ELITES LINKED TO THE REGIONAL GOVERNMENT; WIDE SEGMENTS OF CATALAN MIDDLE CLASSES AND PROFESSIONALS FOLLOWED IN AND FROM THIS ERUPTED A SECESSIONIST WAVE WITH EXPECTATIONS OF VICTORY”

This seems a good departing point for trying to respond to the second of these questions, but the first and the third ones remained untouched by such “*opportunism by some local elites in front of adversaries’ weaknesses*”. Leading elites require a wide base of support to be able to ignite and maintain a movement of the magnitude that has been mobilized in Catalonia in recent years. At the start of Chapter 10 [p. 159] I summarized the essential points needed to complement that hypothesis. Let’s insist on them again: “*In relatively insulated communities which are rooted on a particular geographic site, ethnocentrism and xenophobia are always latent and ready to be awoken; when persuasion tools by modern media are used to accentuate these chauvinist tendencies and this combines with intense agitation*

campaigns financed by a local power with plenty of resources, these vectors might lead to the eruption of demands of “national” status recognition or litigations for achieving “secession”.

Dissections of these phenomena usually put their main focuses on the last two factors, the propaganda and the targeted activism, forgetting the potency of the former ones: the attenuated but persistent labour of ethnocentrism, xenophobia and gregariousness in communities that perceive themselves as unique entities deserving proper recognition. But, as these traits have some unavoidable connections with biological mechanisms and references to biology are seen with an enormous suspicion within social sciences, they are usually omitted. And when not omitted, their participation is explained in the opposite direction. That is, ethnocentrism, chauvinism and gregariousness would be the result of propaganda and gross manipulation: therefore, if there were not for such pressures they could be fully ignored (or almost). And here lies the glaring error. With or without propaganda, these vectors are still labouring. They can be accentuated or attenuated, of course, like any other trait but they silently operate in ethno-cultural communities at the service of optimizing yields when there are frictions and disputes with neighbours.

I have tried, for that reason, to condense the more relevant psychobiological knowledge on these issues to illustrate how these ethnocentric and gregarious traits can be decisive in the ignition and maintenance of a massive fervour when a “national script” is sustained. That provides an answer to the third of these questions (the agitation and magnitude of Catalan secessionist outbreak), but regarding the first one we should conclude that “Galizia, Bavaria, Brittany, Flanders, Wales, Sicily...”, to mention again the same list, should suffer similar separatist eruptions. Exactly: that is the right deduction to draw for a list of regions - that could be enlarged -, within the hesitant and often obfuscated European

“family”. Hence the dread that befell the West, in the two weeks preceding the Scottish referendum of autumn 2014 about their future in the United Kingdom, when polls began to predict the possibility of uncertain results or even a secessionist victory. The frivolity and arrogance of the British premier Mr. Cameron was then evident and the situation became so worrying that he had to resort to all persuasive tools and deterrent batteries, and even to ask, *in extremis*, an intervention by the US presidency in favour of the continuity of a united Great Britain. And therein lies the deep apprehension that usually awakes the apparently placid and festive “Catalan revolt”: in Europe, there are multiple ethno-cultural communities with very strong roots and they might want to emulate these British and Iberian adventures, with unforeseeable consequences for the rather fragile umbrella of the entire Union.

Now, there is relative calm because only Scotland and Catalonia have, on top of their regional powers, a party or a coalition committed to “tenacious cantonal affiliation” and influential sectors of local elites behind them [5, 6]. But this situation can be reproduced in many other places of the complex European mosaic. Note that in Scotland, the *Remain* victory at the referendum of September 2014 did nothing to lessen the strength of the secessionist movement that seems even to have gained force since then.²⁶ And in Catalonia’s the secessionist challenge remains unabated, completing stages and increasing the affective split with the rest of Spain as well as the social tensions and latent schism within the region itself, while forecasts about plausible future compromises are completely uncertain. The situation is and will remain, therefore, very delicate in Europe and it seems prudent not to hold to erroneous diagnoses.

26. Brexit vote of 23th June 2016 in favour of UK leaving the EU, though with clear victories in Scotland and Northern Ireland for remaining at the EU, has complicated even more a situation that nobody can foresee how it is going to evolve.

Besides the essential markers that distinguish enduring ethno-political groups, it should be possible to identify prototypical character traits of people that nest and thrive in these places. Literary chronicles and close unprejudiced observations have detailed often and with varying degrees of accuracy, some attributes going a bit further than raw stereotypes, and it is rather strange that objective descriptions have made little progress in this area [74]. At the interview [52] summarized on the last footnote [page 179] there is a brief and too optimistic augury about that, but I must consign that sound and convincing studies on this issue, applied to specific ethno-cultures, are still waiting. Just as there is a curious scarcity of studies regarding the potential influences of gender factors or types of leadership [141,156], which should not be ruled out “a priori”, in these matters.

Conversely, explorations on the plausible genetic weight of political preferences and attitudes have lately proliferated [21, 72, 112]. Combining that kind of searches with measures of distinctive temperamental patterns, in specific ethno-cultures, may perhaps open fruitful new paths. The first available data provide a non-trivial genetic heritage for those traits which are nuclear on this matter: from a moderate 20% of genetic marking for ethnocentrism [110], to genetic weights close to 40% for xenophobia [72, 21]. These scores represent heritable loads like those explaining political attributes such as conservative vs. liberal attitudes or preferences for left vs. right policies [102,122]. All this reaffirms my approach and agrees as well with the theoretical models proposing adaptive selection mechanisms for these trends [68]. Moreover, in the emerging and still insecure studies dedicated to catch possible gene traces or to single out candidate genes, some targets have appeared that are related with the neuro-hormonal substances discussed in Chapter 7 [p. 103].

There is no alternative, therefore. It is necessary to accept the fact that a considerable proportion of individuals will show

strong chauvinistic biases -parochial, provincial, ethnocentric or nationalistic, the label differing only in relation to the stratum to be described -, and will meekly or enthusiastically follow slogans promoting gregarious herds around a “patriotic mode”. That is normative and should be always expected, particularly at the edges of ethno-cultural frontiers because these motivational vectors exert a formidable role on inter-group competition.

In conclusion, there is no reason to invoke an alleged folly, silliness or other psychopathological conditions in the secessionist fervour that recently blossomed in Catalonia or Scotland, two rather rich and advanced regions of the European Union. It is particularly important not to confuse devote and passionate movements to reach important milestones in societies’ paths to become sovereign entities, with alienated or mad transitory states. Because the former always have and pursue clear goals to conquer while the latter usually blur them.

Indoctrination, finally, always will be there: it must be taken for granted along intergroup litigations. I have illustrated the workings of multiple neurocognitive devices that can be used to exacerbate chauvinist and gregarious tendencies at the ethno-national border: deeply rooted propensities which are always ready and normative. Apart from individuals who try to convert their lives on strenuous exercises of independent judgment and fully autonomous behaviour (the genuine individualists, who probably carry some biological gears which are somewhat like those which are behind some forms of autism [119], the spontaneous germination of belligerent and joyful communion is clearly predominant everywhere. It is carved in our way of being, in our essential nature, because humans have evolved through a long history of frictions and conflicts between gangs, tribes, communities, factions, sects and countries which have led to the persistence of evolutionary primed traces for quick an efficient

communal fusion. A collection of in-group favouring tendencies which have helped to build the magnificent tapestry but also the perpetually litigant neighbouring fronts that we recognize as distinctive ethno-cultures [61].

*Post Scriptum:
September dreams.*

I finished the first version of this book the first week of January 2015. Several events conspired to delay its publication, though this also permitted to incorporate the results of the regional elections of September 2015 [see p. 34], among other refinements, and to follow the course of the “Catalan challenge” against the Spanish state, which despite some ups and downs and occasional internal frictions has been firm, tenacious and perseverant.

September Dreams (2017).

September has paced the rhythm of the secessionist wave. It has served as a pacemaker for a formidable movement and everything indicates that it will continue to be so. The gigantic processions of each Sept. 11th were clearing the path towards the dreamed horizon by means of sensational choreographies that were celebrated, year after year, with stunning successes. September is always marked in red in the liturgical calendar of Catalan secessionism and the one at 2017, has already been announced that will be the culmination point: a decisive climax to attain the joy of full victory. The presidency of the Regional government proclaimed with solemnity that in the second half of that month a binding referendum will be held to decide, once and for all, on independence from Spain (see Footnote p. 189, for a brief summary of events after September 2017).

It will be convened one way or the other: by means of a formal agreement with the State institutions or without it. Based

on the “legality” afforded by Home Rule and with the provisions adopted by the secessionist majority at the Regional Parliament, it is intended to lay down the conditions for convocation and logistics of the consultation, as well as the scrutinizing and proclamation of results. It is assumed, without hesitation, that there will be an immediate recognition of final results both on the part of Spain and from the International Community with no reservations. These “democratic” procedures coming from a rich, educated and liberal society, offer apparently complete warrant. That is why it was announced in these terms and with total seriousness, from the palace of the Catalan Parliament, at Ciudadela Gardens, in Barcelona.

The signaling of deadlines and culminating motions has been a constant however, since the beginning of the secessionist wave without leading, for the moment, to any concreteness. These repeated announcements of “decisive actions” have only served to keep alive a challenge that goes deepening the division, in two halves, of Catalan citizenry. The half that shows more enthusiasm and vigor, the secessionist one, seems to deeply enjoy this commitment to sustain stubbornly the defiance while celebrating its congregational strength at the major September processions along with the regular episodes of joyful communion at the Barça stadium, on important matches. For the moment, the litigation runs through these more or less tense channels of exhibition and tentative estimation of forces, because the true “clash” of legalities so often predicted has not yet occurred, in spite of the threats which, with obstinacy worthy of a better cause, come from the secessionist activism.

The central government, on the other hand, not only has persevered in its calm, patient and impassive attitude of not moving a single political finger to the situation, but allowed itself the luxury, even, to be blurred throughout the year 2016. It remained almost absent while being provisionally in office, because

of the great difficulties to seal alliances to form a new government that left two successive general Spanish elections. This prolonged stagnation may have contributed to entrench further the endless draw in what concerns the “Catalan challenge.” It is a futile exercise to attempt to make predictions in this matter, although perhaps there is no choice but to adjust to a situation where the phenomenal liturgy linked to these “September dreams” brings the energy and the funds necessary to renew, year after year, the persistence of the litigation.²⁷

27. The widely announced and lengthily prepared secessionist attempt culminated indeed through Autumn of 2017. After a second, illegal, referendum of self-determination celebrated on 1st October 2017, a formal Declaration of Independence was approved and proclaimed by a tiny majority of the Regional Parliament, the 27th October at the Ciutadella House, downtown Barcelona. Such proclamation was followed, in a few hours, by suspension of the Home Rule dictated by Central Government after obtaining the mandatory approval by the Spanish Senate. This resulted in the destitution of the Regional Government and the dissolution of the Autonomous Parliament. The President of Catalonia fled towards Brussels, accompanied by several ministers, and the Vice-President and other members of the deposed Government were called by a High Court, at Madrid, and after an enquiry they were preventively sent to prison under the accusation of breaking the democratic law and attempted rebellion against the State. These events attracted wide attention across the entire world because the region had seen mounting tensions, from the end of that summer, which had been closely followed by the international media.

At 21th Dec. 2017 new Regional elections were called by the Spanish Government to put an end to the suspension of Home Rule, dictated two months before. Results repeated the figures of a divided society: turnout reached an historical mark of 79.1%; secessionist parties got 2,079,330 votes (47.33%), whereas non-secessionist parties attained 2,227,421 votes (50.71%). A narrow margin of 150,000 votes separated unionists from secessionists (see the detailed analysis by Maza A, Villaverde J and Hierro M (2019) The 2017 Regional Election in Catalonia: an attempt to understand the pro-independence vote, *Economía Política*, 36, 1-18.).

Since the failed proclamation of Catalonian independence, the political turmoil created by such extended push in Spain has not been solved. The

Ciscatalonia.

“*Ciscatalonia*” was the title of an Op-Ed I sent to the newspaper “*El País*”, on the first week of October 2015. It had the same fate than the previous pair of comments related to this issue, which I have reproduced at Chapter 11: it went directly to the dustbin. This last comment had been motivated by the results of the regional elections at Catalonia, the 27th September 2015, which were considered a kind of plebiscite about secession from Spain. Since that election, the secessionist challenge entered a tense stalemate in which it continues today. Here comes the text of that column:

“In the immediate aftermath of the failed plebiscite for independence on the elections to the Catalan Parliament, on 27th September 2015, there was a curious phenomenon. The results had clearly shown a society divided in two almost identical halves formed by supporters of an irrevocable secession and opponents

secessionist parties renovated their parliamentary lead at the end of 2017, but the formation of a new Regional Government had to wait till mid 2018 after several unsuccessful attempts to reinstate in power the rebellious leaders who had been imprisoned or fled to exile. So, in total, Catalonia spent seven months directly ruled by the Spanish Government.

A new left-wing Central Government was formed in Spain, at June 2018, that had the initial support from Catalanian and Basque nationalist parties. Such scenario seemed to open a fresh opportunity to explore arrangements for the entrenched litigation: approaches and talks were initiated between the Spanish Government and the secessionist Catalan Government but did not lead, however, to substantial advancements. At the Spain general election of 28th April 2019, left-wing parties renovated their relative dominance without reaching, however, a sufficient majority and the formation of a new Government is still pending at the time of writing this Note (July 2019). The High Court sentence of the rebellious Catalanian leaders is also pending after a trial that lasted for more than four months on 2019.

to break off from Spain. A firm and neat draw that was no wonder because this was the predicted outcome by all reliable forecasts, either through repeated surveys or considering the results of a recent pseudo-referendum and the previous electoral contest. That dichotomous split of a social body is, moreover, what is to be expected when the flooding with propaganda for each one of the positions confronted in such a stake gets enormous. And that is precisely what happened during that campaign with an overwhelming persuasion fire. A proof of that was the record turnout at poll stations on that September day, when regional elections had always been moderately or poorly attended. So, a sharp division of views and wishes of the citizenry, in a matter of great importance, was defined.

In such worrying circumstances that common people tend to digest quietly while returning to their endeavours and trusting perhaps that the tempest will blur or be diluted, the “secessionist” opinion launched a campaign from all stands and in a rush, to deny the obvious social fracture. To hide a division that the electoral results displayed in a resolute and ominous way. To mask or seal, by any means, the social crevices that the plebiscitary contest (and the secessionist movement that led to it) had left. The torrent of fallacies, distortions and manipulations used to buffer the gulf showed by the results and that everyone who lives or travels through the region knows quite well, was tremendous. There was apparently a most urgent need to cauterize the gap but not to repair damages or heal wounds but to disguise its existence. To try to convince (and self-convince, above all) that there were no notable ailments. That democratic harmony and good mood prevailed in the perennial, enviable and “plural” (that is the preferred mantra) Catalan paradise.

It is understandable, however, such sudden apprehension not on the suspicion as before, but in front of a clear and poignant observation of a social division. The mere fact of its existence undermines the foundations of government action of those who have been at the forefront of the regional administration for thirty-five years, which it is not a short time. The policies

on education, health, social welfare, development and territorial distribution of investments, while exercising the broad powers conferred by Home Rule, had failed to achieve the main objective pursued and insistently touted: to achieve a cohesive society. A well fused community, with people conscious of a common belonging and shared hopes for the future.

It seems that this goal has not been reached. All indications point towards the existence of at least two distinct communities in Catalonia. Because now we know, without doubt, that nearly half of citizens urgently wants to get out of the Spain's surroundings in which they apparently agonize, while the other half wants to stay in enjoying all its virtues and defects. Besides that, the fault line dividing them runs precisely through the border which was apparently welded by assimilating actions over more than a third of a century. Those who want to leave Spain belong mostly to segments of native population, while those who want to stay in Spain mostly belong to supervening population strata. In other words: on one side predominate natives and assimilated people (interspersed by multiple crossings), while the other side is dominated by the old and rejuvenated "*charnegos*" and other kinds of migrants and mixtures coming from very diverse origins.

The election results showed, very clearly, that the resistance to the homogenizing pressures of secessionism was forged, especially in the overpopulated suburban areas of Catalonia. In outlying cities and suburban neighbourhoods of the great Barcelona and Tarragona metropolitan areas: Baix Llobregat, Barcelonés, Vallès, Garraf and Camp de Tarragona counties. Those are the places where the bulk of Catalan citizenry with a firm Spanish vocation live. Men and women indifferent to the wet dreams fostered (in secessionist minds) by sirens with stunning Scandinavian or Andorran profiles. People who, to preserve their Iberian identity, delivered hundreds of thousands of ballots to liberal and centrist parties not necessarily favourable to their economic best interests, but perceived as champions of the continuity of their Spanish mark in a United Europe.

The colourful graphics published by the media the day after that election showed multiple orange and red islets amid an extensive background of monochrome secessionist areas, islets that marked the wayward municipalities in those suburbs and metropolitan areas: the places where the anti-secession political formations won. These graphics prefigured, in a way, the complex, tortured and changing maps and disputed borders on those countries where civil conflicts have become chronic over generations. It was plausible to envision a kind of Ciscatalonia in the future, with capital in L'Hospitalet de Llobregat, mimicking Ramallah, the Palestinian capital, next to the bigger Jerusalem / Barcelona.

I suspect that this is the underlying reason for the rush to falsely mask and seal the deep emotional crevices that have grown among big segments of Catalan citizenry. In these Ciscatalonia areas live half of the population of the region and they can demand and fight for their independence if the conflict worsens and poisons. And maybe they even reclaim and take the jewel of the crown, Barcelona city, because they know quite well that they have a clear majority there”.

It is curious my repeated failure to publish views coming from inside the conflict in a main Spanish newspaper that has loudly deplored the “guilty silence” of large sections of Catalan scholars. Instead of throwing away the essay I decided to try an additional test. I sent it to “*Federalistes d’Esquerra-Blog*”, a local civic association that has distinguished itself by carrying out a commendable educational and intellectual resistance to secessionism, departing from social-democratic and federalist principles. An association that is proud to invite everybody to participate in the tortuous debate on Catalan secessionism. But the essay was again rejected.²⁸ No response, not even a note of reception de-

28. This Op-Ed appeared later online, at the web “Tercera Cultura” [Available at <http://www.terceracultura.net/tc/?p=7879>], which accepted again to host a silenced comment.

spite I had publicly adhered to this society for which I had shown clear sympathy by signing its founding manifesto.

Although I never rule out the possibility that I can be blatantly wrong, in my appreciations, and hence the understandable wall to allow them to emerge in forums of a certain decorum, I harbour the suspicion that this is not the origin of the blocking. I tend to suspect that such a block derives from a deep apprehension by Spanish academic circles and related media (particularly, left-oriented ones), to opinions coming from disciplines somewhat related to sociobiological approaches, especially when the task consists of analyses about political conflicts. Influential boards from humanities and social sciences impose that those approaches that propose links with biological mechanisms must stay out, completely, of the public analysis of political phenomena. This is a rigid and tenacious posture whose tenet can be summarized as follows: *“Neuroscience, psychobiology, neurogenetics, evolutionary biology and related disciplines should not have a voice in the description of social phenomena. To study social processes there is, already, very solid knowledge and a long-credited tradition of methods to deal with the huge variety of vectors of cultural modulation in definable historical contexts. Vectors which left behind, thousands of years ago, any relevant link with biological gears to the point of making them useless to discern, with proper insight, the ambitions, quarrels and conflicts among humans and their institutions”*. I am fully aware that my writings often transpire the dangerous aroma of incurring on such unacceptable error, of bordering the intolerable because of my proximity to perspectives that give chills or trigger allergic reactions.

It is amusing, nevertheless, to note that some of these silenced opinions reappear later, with disguised coatings, in the routine discourses of culturally sanctioned voices. I will revisit, very briefly, two issues which I have frequented on this essay: the dangerous springs of the ethno-cultural frontier and the recur-

rence of the pseudo-explanation of a transient social madness or alienation. I will start with the former because it had an obvious role on this last comment which was dedicated to the intense debate, on the matter, hosted at “*El País*” newspaper.

Indeed, the “*Ciscatalan*” border lines drawn by the regional elections results of 27/09/2015 delimited the edges of a perfectly recognizable crevice. They marked a highly selective transition of both affects and political opinions between two neighbouring populations:²⁹ one formed by mostly natives (and assimilated people) versus another formed by old and new migrants (non-assimilated). This last aggregation can be referred to zones of specific migrant origin and to places of urban consolidation resulting from restricted social interchanges and selective mating. A kind of clustering that has quite a distinctive style and traditions: the citizenry which I identified with the name “*charnegos*”, a label still taboo today for the old CatSpanish (also known as “new Catalans”, in the last century), greatly renovated and revamped, more recently, with multiple streams from many places of the world.

There have been many attempts to explain why that population of (mainly) Spanish family language and culture broke with its traditional political voices, those of the local leftist parties and unions, to raise new representatives from liberal and centrist parties. These attempts proliferated because the disappointment was egregious. In mourning for the desertion of the old “red belt” towards centrist or even right-wing positions the blame was assigned to the brutal polarization generated by the secessionist stake, aggravated by the landing of populist neo-radical Spanish

29. Pau Marí-Klose “Un solo pueblo”, *El País, Opinión*, 6th October 2015, described obvious cleavages that still separate the two bigger communities which coexist in Catalonia (natives and assimilated versus non-assimilated long-settled migrants from Spanish origins), in terms almost identical to those used here. He commented as well that any reference to that is taboo.

leaders who have demonstrated a severe disorientation in all that concerns Catalan social reality.

These attempts have eluded, however, explicit references to the notion of ethno-cultural frontier although the data supporting it are thunderous. Only a distinctive and paradoxical political vote was lacking and it happened already on that election: the population pockets of these suburban neighbourhoods of migrant origins went from their customary “differential abstention” at Catalan regional elections,³⁰ into a defensive and resistant vote overriding their “class” interests. And, despite this, no one wanted to take notice. Circumlocutions of all kinds because the ethno-cultural affiliation ties managed to sweep the traditional vectors of segmentation based on economic interests, and lead to a shocking and overwhelming bi-polarization. However, the issue was analyzed as if the electoral earthquake had been a passing incident. All this only denotes the intellectual void and deep doctrinal prejudices that afflict the Spanish left. At a time when comprehensive maps of changing ethno-cultural boundaries are refined for using them as key elements in empirical studies of neighbourhood conflicts,³¹ local scholars ignore that. Hence the perennial perplexity as a monographic reaction to the successive episodes of an unyielding secessionist fervour.

30. Fernández-i-Marín X, López J. Marco cultural de referencia y participación electoral en Cataluña, *Revista Española de Ciencia Política*, 2010; 23: 31-57; Riba C. Voto dual y abstención diferencial. Un estudio sobre el comportamiento electoral en Cataluña, *Revista Española de Investigaciones Sociológicas*, 2000; 91: 58-88; Riera P. Differential abstention in a Spain with Autonomies: significant traits and explanatory mechanisms, *Revista Internacional de Sociología*, 2012; 70 (3): 615-642.

31. See, for instance, Vogt M et al. Integrating data on ethnicity, geography and conflict: the ethnic power relations data set family, *Journal of Conflict Resolution*, 2015; 59 (7): 1327-1342; and the data concerning Spain's situation in: EPR Atlas (pp. 1350-1358), available at <http://growup.ethz.ch>.

We go now for the alleged psychopathological drift of Catalan secessionism. I insisted that this conjecture is rooted in pure bewilderment, in the complete inanity of explanatory tools. When fully convincing vectors to describe a movement of enormous reach and persistence fail, the analyses revolve around the prototypical aunts' coffee table reaction while chatting and playing cards amiably: "they all have gone mad, they got a formidable attack of fever". Then, with the issue unanimously and swiftly resolved they can continue with the game and sip on the hot chocolate cup. These invocations to "trains full of psychiatrists" that Caro-Baroja asked for the Basque Country twenty years ago, and which are now requested urgently for the Catalan "illness" do not go much beyond that type of chatting. In Chapter 10 [p. 159], I insisted that there is no insanity, no collective madness rooted on any abnormality or on some mental pathology. Political movements can, of course, take incongruous, absurd, stupid, childish and even ridiculous tracks, and follow extremely harmful, pitiful and burdensome itineraries for most of its members, but this that does not enable to describe them as true mass psychopathologies.

That, the psychopathology of communities is a highly slippery territory which has not managed to go beyond some analogies and metaphors devoid of solid foundations and where hard and firm data is absent, after a hundred years of talking and discussing about the topic. Mental pathology, the field of intervention of psychiatrists and clinical psychologists, has kept tightly anchored at the individual level: the anomalies that emerge from dysfunction, dim or severe, acute or chronic in brain circuitry and its cognitive-affective workings of a person. Even in startling reverberations of some ravings or delusions that occur sometimes in highly attuned duets or trios, singularities can be detected easily. And the trend towards a simplifying uniformity of thought and lifegoals that can be seen within close-knit sectarian cells depend, as we have seen, on the psychology of social influence and

persuasion. No connection with underlying pathologies although they may lead to post-effects extremely maladaptive and burdensome.

I must insist on this point on the conjecture I advanced [p. 163] for secessionist fervour, based on the psychology of falling in love. I indicated that what we have been witnessing in Catalonia is the ignition and the tireless energy and agitation of a collective romantic passion. A highly motivating infatuation that has come to be shared by a million and a half citizens (at least), with the goal to conquer a long-coveted national culmination. If that goal could be achieved one day, it would result in huge profits for the leading elite and for hardened vanguards and smart acolytes of the movement. That is, we have seen and suffered a fully normative phenomenon of the psychology of intergroup competition (despite its extremely burdensome and tiring traits for agnostic minds). This romantic conjecture has won some resonance, a thing which comforts me, of course. Laura Freixas, for instance, celebrated³² the enlightening descriptions of the appeal and motivating power of amorous passion, when the goal is to achieve a shared dream of a pristine homeland. A perfect nation through a joyful and indestructible communion. All very common along the history of political rebellions and revolutions. Little or nothing to do with mental pathology. Much to do, however, with the stark competition for power, the accompanying sinecures and the surrounding profits and franchises. Even minor and trivial forms of disorder such as neurotic fantasies³³ are useless formulations for these phenomena.

No, that large and outstanding million and a half Catalans highly excited and moved by the dream of a sovereign and fully

32. Freixas L. Cataluña: mitos y emociones, *El País*, Tribuna, 22th October 2015.

33. Arias Maldonado R. La psicopatología del independentismo, *Nueva Revista de Política, Cultura y Arte*, UNIR, 2015; 15, October.

independent country do not suffer delusions or are globally neurotic. They aspire to a very simple and perfectly understandable thing: they want to govern by themselves in what they consider their homes, their towns and their landscapes. And they have decided to insist on that goal with surprising determination and persistence. The main problem is that at the very same villages, towns and neighborhoods other citizens (quite a lot of them, indeed) have grounded their lives since long ago. And these citizens do not share the same dream and do not seem interested in being governed by just one fraction of their neighbours. Final point.

I must regret, in the end, the apparently inescapable tendency to embrace explanations which carry a psychological varnish of incisiveness when they do not provide nothing of substance. Not a bit of a real insight. And I also deplore that stubborn delay in accruing firm and available knowledge about the individual and group psychology ingredients which are really at stake. A kind of knowledge derivable from normative psychobiology that now can help steer fruitful forays into those hard ethno-cultural, secessionist and national litigations. It is always better not to be tempted by despair, though it should be recognized that the tendency to create and disseminate totally useless doctrinal fog is and will remain persistent. We should count always on it in the work of clearing up.

SANT CUGAT DEL VALLÈS (BARCELONA),
SEPTEMBER 2016

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Why communities with strong identity ties to a territory or culture resort, every certain time, to secession demands, as a way to settle differences with their neighbors?

Adolf Tobeña dives on various fronts of the psychobiology of social and political phenomena, to discern vectors that contribute to ignite and feed segregation movements of an enormous strength at the ethnocultural frontier. Ranging from the genetics of ethnocentric propensities, to the social psychology of intergroup conflicts and neuroimaging studies of chauvinist and gregarious biases, Tobeña offers dissections that allow us to ponder if the secessionist surge in Catalonia was the result of spontaneous or induced convictions, or largely from the action of souterrain vectors operating upon citizens in a situation of intense intergroup litigation.

Regardless of beliefs and political preferences, the reader will encounter issues like:

- **Why Catalonia and not Bavaria, Brittany, Flanders, Sicily, Wales or other European regions?**
- **Why so many people and in such a short time became secessionists in Catalonia?**

Tobeña proposes exploratory paths and advances bold conjectures. A very suggestive one presents Catalanian secessionist push as the result of a powerful collective passion that must be rooted on the processes of falling in love at the service of an ideal of conquest.

If we want to understand recent secessionist waves at Catalonia or Scotland, we must approach them not only from the point of view of economic tensions or political struggles but also from psychobiological periscopes.