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Common lands, woodlands and incendiarism in Atlantic Iberia

Patrick O'Flanagan

Abstract

Over the past two decades fire has been one of the most formidable forces responsible for transforming landscapes in Atlantic Iberia. Both common lands and woodland have been devastated by these blazes. By employing a political economy approach this paper seeks to identify some of the reasons why so much of this complex area has been afflicted by incendiarias.

Atlantic Iberia, extending from the Basque province in the north to Seville in the south and including all of Portugal, is one of the greenest sectors of the Iberian peninsula largely on account of its location and climate but also because of the critical and enduring role of various types of arboriculture in the rural economy. Recent atlases of Portugal and Spain confirm that most of this area except its southern rim, is characterised by extensive areas of woodland. Common lands are also a prominent feature here but their incidence is impossible to specify except at a local level. A plethora of terms are used to denote these lands. *Monte* is the designation most frequently employed in Castilian Spanish but this word can refer to a plant association, a hill or a mountain, a heath or a moor, or a category of common land. *Baldio* is the more concrete term used in Portuguese but *monte* is often substituted and to make matters even more confusing *baldio* is also employed in Spain.

Farming throughout most of Atlantic Iberia is dominated still by small fragmented owner occupied holdings within a social system referred to in the literature as *minifundismo*. Industrialisation in the Basque provinces and rapid urbanisation transformed agriculture there and in parts of Asturias, and other processes produced similar outcomes in Cantabria and Alentejo in Portugal (Garcia Fernandez,1975). But until the 1970s much of this kind of farming was essentially of a subsistence nature; surpluses of agricultural production only sporadically reached the market place. In the traditional system there was and still is a clear cut division between three cornerstones of this remarkable farming complex. Arable and permanent pasture lands are usually individually owned; upland and lowland moors and the heaths are owned and worked jointly by parish-based or even more localised communities of twenty families or less, focused on aldeas or lugares, which are ancient land units. Finally, despite their minute size, many holdings are characterised by the presence of stands of commercial woodlands. In more recent times the subsistence nature of traditional farming has been revolutionised by the CAP and by urban and industrial expansion and farming areas contiguous to cities and primary arteries of communication have benefited enormously from these changes. Exceptions to this are most of western Andalucia and Portuguese Alentejo where large latifundia are common and woods are less frequent (Balabanian,1980), and the coastal section of the Algarve of southern Portugal with its huerta-like agriculture.

A visitor to this region is immediately struck by three cardinal elements in the cultural landscape (O'Flanagan,1996); the density of settlement and the intensity of landscape modification; the survival of many elaborate and intricate agrarian structures and the degree to which these vernacular structures are undergoing change through the pressures of urbanisation and the reorganisation of rural and urban production, and finally the appallling scars which more than a decade of deliberate fire razing have inflicted on the countryside. Fires have seriously subverted the economic fabric of many communities of small farmers.

This paper attempts to specify causation and damage and there is a consideration of the nature of degradation on common lands and woodlands. To be anyway meaningful it has to be set within the context of the processes which are unleashing massive socio-economic changes within this region. In addition most of the empirical material examined here refers to Galicia and secondly to Portugal, the precise areas where the incidence, scale and damage inflicted by incendiarism have been most severe. Similar events have been reported in the last two decades especially in the other northern Atlantic coastal communities of Spain.

The literature on the human implications of these types of fires and their consequences is sparse. In recent years studies of degradation have been copious, but, strangely forest fires and their consequences are awarded scant attention.

Woodlands

At least since the Reconquista, woodlands have been on the decline throughout Atlantic Iberia with several phases of rapid retreat punctuated by longer periods of gradual regression. Historical geographers have yet to address the complex issues involved in the timing, causes and consequences of woodland dimunition and perhaps one of the most critical concerns is the precise relationship between the decline of woodland and the expansion of the common lands over the last millennium. In many instances, specially in more lowland areas, woodlands were cleared and put under the plough or converted to permanent pastures through the efforts of the major monastic orders in the twelfth and thirteenth centuries. In more unpromising upland locations common lands became established and were increas-

ingly used for crops such as oats, rye and mountain wheat. These kinds of developments occurred from the mid-eighteenth century onwards as a consequence of mounting population pressures in heretofore isolated upland areas.

Over this century there has been a reevaluation of trees as a marketable product and a massive expansion in the area of woodland throughout Atlantic Iberia. Critically there has been a major species transformation and pines and eucalyptus have replaced traditional chestnuts and oaks. *Pinus pinaster* is by far the dominant pine type. Few current detailed studies are available to indicate the incidence of different tree types.This lacuna is filled in part by the elaborate *Mapa Forestal de Espana* (1967), and the Portuguese *Atlas do Ambiente* (Lisboa,1971). Major variations are evident in the composition and incidence of Spain's woodlands. Taking Galicia as exemplar, because it is the most tree covered part of Iberia, west of a line between Cabo Ortegal and the city of Ourense, nearly fifty percent of this generally lowland area is covered by trees. To the east, sixty percent of the land area is designated as desarbolado which reflects a covering of shrubs rather than trees and less than twenty percent of the land is wooded. Eucalyptus are especially evident to the west and *pinus pinaster* are everywhere while a greater variety of pine types is found to the east, including *pinus silvestris*, *pinus negra* and *pinus insignis*. Native woods are now a rarity especially on the lowlands. Indeed only a few sotobosques have survived in isolated areas of the provinces of Lugo and Ourense and Tras-os-Montes in Portugal. Formerly managed by a rigorous regime of coppicing or pollarding, these trees supplied raw materials for construction, furniture and farm implements.

Common lands

Scholarly investigations have focused more upon monte than woodlands and do not adequately distinguish between common lands and the various manifestations of woodland. Most research concerning these lands is pitched towards a legal/juridical investigation; there are, by contrast, few historical studies. The interpretation of official statistics poses similar difficulties. The reasons for this stem from the fact that common lands have often been both politically and socially contentious issues. Simplistically this division is expressed in tenurial arrangements; most woodlands are privately and individually owned, whereas traditionally, common lands are collectively owned and managed locally. The state, various corporate and municipal interests and individuals have been attempting to 'privatise' such territories and bring them under exclusive ownership. This has provoked an ongoing conflict which has lasted for nearly two hundred years and it has been a destabilizing factor in the relations between rural communities and the state engendering alienation besides acting to undermine the economic foundations of minifundismo.'Spontaneous' appropriation, clearances and squatting on commons, has been another means through which 'privatization' has transpired. The following example of land uses recorded on some privatised common lands in the provinces of Lugo and Ourense illustrate these complex conditions.

Table 1 Land use on privatised common lands

Land use	%
Pasture	1
Scrub	14
Arable	13
Gorse	38
Wheat	2
Other trees	3
Pines	26
Unproductive	5

(Source: Balboa,1990, p.288.)

This example refers to conditions where formerly collectively managed lands had been divided between local farmers who developed them to suit their own requirements. Common lands traditionally were held and managed under four principal types of tenure whose idiosyncrasies need not detain us here. Over the last two hundred years the proportion of such land worked under these vernacular arrangements has declined dramatically and exceptionally so in Galicia. In the nineteenth century the state did its best to dismantle traditional arrangements so as to increase productivity. The scholarly consensus is that these efforts were a dismal failure. More critical were the internal transformations of rural society which witnessed a shift to a family centred ethos away from a more community focused one. This switch was also expressed by the slow but remorseless division of the communally held into private management or ownership or both. Another critical outcome was an enormous increase in the proportion of trees, especially pines. For Portugal, Brouwer paints a similar picture but demonstrates that the state followed a more interventionist policy throughout the 20th century and here rivalry between different ministries, essentially pursuing different objectives, made a confused situation even worse (Brouwer,1993). Under Salazaar's Estado Novo, common lands were legally abolished but were restored to the *status quo ante* after the 1974 revolution. The public relations disaster inflicted by the forestry service before 1974 has not been redressed in popular perception and the more recent efforts by the state to intervene in such territories have met with little success since its activities are still locally regarded as instruments which undermine the cohesion of all aspects of community life.

By 1970, in Galicia, almost seventy-four per cent of common land was privately managed, that is 1,583,571 out of a total of 2,158,900 ha. But no data are available to indicate exactly the uses that such huge swathes of territory are being put to. What functions does monte discharge? The data arrrayed in table 1 confound the contention that monte basically acts as a kind of supplementary support for traditional agriculture. In conditions where convention offers farmers few opportunities to enlarge their holdings it is not surprising to find common lands being appropriated for expansion, hence the cereals and, most dramatically, the fact that a third of these'privatised' lands are devoted to commercial forestry. On collectively managed lands episodic cereal cultivation was normal, the rotation interval being on average one in ten years. Products were, and also are, used as soil enrichers, compost, animal bedding, animal food supplement and especially firewood and here the critical plant is gorse (*Ulex Europeus*) (Villanueva,1984). The grazing of stock, especially cattle, was another almost ubiquitous activity. In the high mountains, common lands served as mountain summer pastures (*branas*) for transhumant herders, as hunting grounds for wild animals such as deer and boar and as sources of water for drinking, irrigation and milling.

Fire

Any investigation and analysis of fires is beset by a number of major problems ranging from definitional issues to difficulties associated with all aspects of their recording and damage assessment. Reliance has to be placed on evidence from a multiplicity of sources and here newspaper reports and informal interviews with those engaged in land management, from farmers to firemen, are the most trustworthy means to make progress. Even the definition of fire in these circumstance raises intractable conceptual problems. Official managers lack rigorous procedures for registration. In some instances all recorded sighting of fire foci from the ground or from the air are so categorised irrespective of their scale. No system is in place to furnish either a quantitative or qualitative assessment of the damage done in relation to the tree destruction,water quality, or less still to landscape quality. Worse still, no reliable data are available that differentiate between damage inflicted on common lands or woodlands or combinations of both. This situation is further confused by the fact that trees burnt on common land may be recorded as a woodland fire. Little of this land is insured, often its tenurial status is dubious, so claims are rare. Given that the vast majority of fires are deliberately provoked few begin from a single focus, in fact five to ten separate foci are not infrequent. In addition, the age old tradition of controlled burning of common land may also be recorded as a blaze. These difficulties may, in part, be related to the decentralised nature of government in Spain where administrative practice varies under each autonomous region: within Atlantic Spain there are five such zones and Portugal must be also added to this tally.

Incidence

With so much forestry and monte, fire has always been a problem in Atlantic Iberia especially during summers and autumns when dry Mesetan air blocks out moist air masses from the sea. Fire has been employed also from time immemorial as a means of control and renewal in the heathlands and, not surprisingly, fires often get out of control and provoke monumental damage. But the number of fires recorded over the last decade and a half and the damage caused by them massively outstrips the number of 'natural' outbreaks of preceding decades. So ubiquitous have been these blazes that no area has escaped. It is probably universally correct to assert that the areas least affected have been those large uninterrupted zones under the plough in Galicia, Portugal and the Vascongadas and extensive permanent pasture zones of Asturias and Cantrabria. The incidence of fires in space and time over the past decade has been extremely variable.

What is evident is the staggering amount of monte and forests that have been consumed by fire. The official data indicate that the areas that have suffered most are Galicia and northern Portugal and the Algarve particularly the Serra de Monchique and the other ranges north of the Portuguese coastal lowlands which experienced spectacular and extensive fires in August 1995. So severe were the fires in northern Portugal, particularly on the outskirts of the city of Coimbra that road and rail links to Lisbon were intermittently cut over two weeks in July 1995 .

The only zone where suitable regional data are available is for Galicia and those for the late 1980s have been selected to illustrate the scale of the problem. Between 1975 and 1983 United Nations Forest Fire Statistics show that nearly two million hectares burnt in Spain in some 60,000 recorded fires and forty percent of that total occurred in Galicia putting Spain at the head of the league in Europe. By 1996 these figures have at least quadrupled. Figure 1 indicates the total amount of land burnt in hectares between 1984 and 1989 in Galicia's four provinces and the data does not differentiate between common lands or woodland. Three areas stand out as being especially consumed by fire; the provincee of La Coruna and Pontevedra in the southwest; a long swathe of lands covering the foothills of the massifs of the provinces of Lugo and Ourense, and finally, the most isolated uplands in the east of these same provinces. Collectively these municipal areas include virtually every possible physical, cultural and eco-

Figure 1. Total Area (Moate and Woods) Burnt by Municipio in Hectares, 1984 - 1989

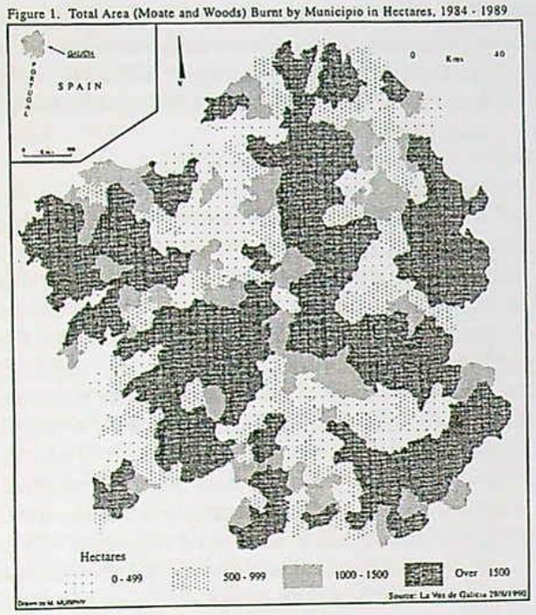
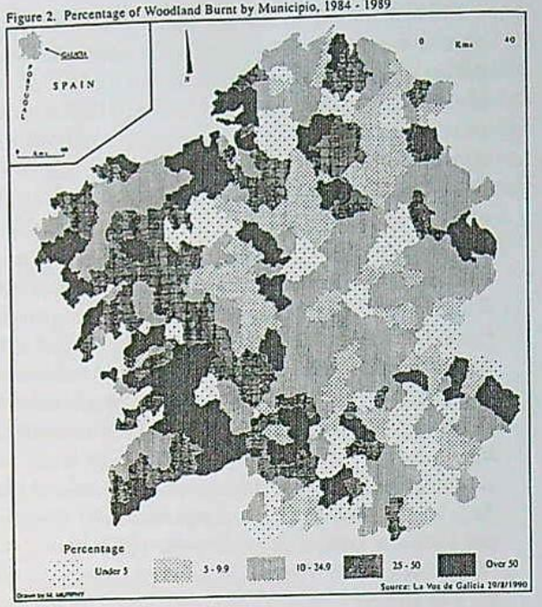


Figure 2. Percentage of Woodland Burnt by Municipio, 1984 - 1989



nomic zone in the region. By contrast the areas least afflicted are those located adjacent to the major cities especially the coastal ones.

A more differentiated picture is indicated by figure 2 which illustrates the amount of trees burnt as a proportion of the total area under trees (the data here refer to trees but it cannot be taken at face value as exclusively referring to woodlands as many 'privatised' and wooded areas of monte are also in the reckoning). The patterns depicted by figure 2 contradict, to a degree, the evidence indicated by figure 1 in that some of the areas with the largest proportion burnt are close to the cities of La Coruna, Santiago and Pontevedra. In fact there is a corridor of severe damage extending between these settlements which has registered the worst outbreaks of any zone. It is evident then that the zone most damaged by fire correlates not to the remote and isolated uplands but to eighty municipios where more than a third of Galicia's two and a half million residents live and which is the most urbanized and industrialised part of the region. The coastal municipios in this area have been especially afflicted by fire and are amongst the most pressurised parts of the region because of the very conflicting and unremitting demands which recreation, urbanization and industrialization are exerting upon them.

By contrast, the figures suggest that the uplands have managed to escape the worst depredations of fire. This is, however, misleading, as mean municipal area here is at least ten times that of the coast and few areas are suitable for trees and tall shrubs in these inhospitable uplands. Indeed, the scale of destruction in many upland areas has been impressive and the long term legacy of upland fires must be a cause of greatest apprehension.

What are the principal conclusions that can be drawn from this investigation? First of all, the areas undergoing the most rapid change and where the pressures for development are as intense as they are inexorable, include the western cities and the corridors between them and some of the most scenic coastal zones of south western Galicia. Here *c.* fifty-six percent of the total area destroyed by fire is located and this area also contains half of the total forested area in Galicia. Interestingly, over eighty percent of municipios in this area have experienced persistent emigration over the past decade, there are also high levels of unemployed and the employment structure remains heavily skewed towards the primary sector.

In second place are those municipios located in the interior uplands and mountains where the amount of land under trees is low but where proportions of monte are disproportionately high. This region shares the same ingredients of decline that have been noted already for the rural coastal lowlands. Here all of these indices are far more extreme and there are few processes promoting growth. An ageing population, fewer direct heirs to property, large-scale abandonment of upland holdings as well as the erosion of collective vernacular community institutions are characteristic features. Rural labour is in short supply due to migration and this has meant that many upland communities are no longer able to adequately manage their common lands and their woods.

Finally, in the central parts of Galicia, mainly in the provinces of La Coruna and Lugo, there is a block

of some seventy odd municipios and a further eighty odd scattered municipios where some thirty percent of Galicia's woodlands are concentrated but only six per of this total has been lost to fire. What is noteworthy concerning this tally of 150 municipios - which is exactly half the entire region's total - is that they collectively indicate sustained levels of economic growth largely as a result of agricultural and rural modernisation. In summary, two types of rural areas have experienced the most intense damage from fire. These are the areas on the west coast where many conflicting and mainly growth-inspired pressures are evident, and the most isolated and marginal upland parts of Galicia in the east. Broadly similar experiences are evident in northern Portugal.

Instigation

What is abundantly evident is the link between premeditation and instigation. Most fires seem to have been scrupulously planned deeds, often carefully executed and with usually devastating results. Forensic results have identified explosives, rockets, gliders with timed petrol bombs as well as flammable liquids as having been employed to start fires. The fact that most fires have multiple foci also stresses wilful intent. But once again reliable data does not exist to separate the highly organised crime from the personal vendetta or aberrant behaviours. Witnessing one fire left the writer convinced of the significant role of organized incendiarism, having counted eight separate foci in an early July 1995 afternoon on the lower Douro valley at Cinfaes. Needless to say, there have been no criminal convictions in which the organisers have been judicially processed. Of the handful of people that have been before the courts very few have been convicted. Justifications, ranging from smoking out vermin, to cleaning scrub, to catching wild boars, have been trotted out by suspects in court.

The actual data, whether they relate to individual outbreaks or extended tallies, at least pinpoint the scale and intensity of the fires. At Carnota in coastal La Coruna in July 1990 eight separate foci led to a fire which destroyed 5000 ha of pine trees over a ten day period in a zone of steep slopes and thin soils with a very low potential for any kind of tree recuperation. In August 1995, almost the entire area of woods on the western slopes of the Serra do Monchique in the Portuguese Algarve was destroyed by a catastrophic blaze in a little over a two week period leaving some 10,000 ha of charred remains. But this instance was only one - admittedly one of the most extensive - of the 48,300 fires registered in Portugal that year (Rev.de Bombeiros, 1995). This total represents double the tally of all the fires recorded in the six years up to then. In July 1990,1039 fires had been recorded alone in Galicia, there being more than 200 reported each week. A formidable panoply of laws, fire fighting artefacts, and personnel have been assembled through a combined effort by the central government, the regional authorities, the local firefighting institutions, and community defense groups to address the problem of fire which has now become highly politicised. In the Algarve an elaborate system of fire towers, rangers and aeroplane surveillance linked to a central control in Faro is in place but it failed to adequately handle the major 1995 outbreak already noted. In Galicia an even more elaborate range of measures is now in place. The press has taken issue with this strategy, alleging that the regional government has adopted a mechanistic approach to control and prevention (La Voz de Galicia,1990). By 1990,the Xunta de Galicia had assembled three fire planes, six helicopters, had four army companies, and 140 policemen (guardias civiles) on standby. Besides these it had recruited 6000 local 'vigilatores' and had cleared 1,200 ha of firebreaks as well as clearing thousands of hectares of tinder-dry undergrowth. In spite of these elaborate and sophisticated measures 1990 was one of the worst years in terms of the number of recorded fires and the scale of destruction. It can be cogently argued that these complex measures largely failed as they mainly addressed containment rather than the causes and the long-term outcomes of fire. It is correct to note that in Galicia the number of incidents has dramatically fallen since 1990 but socio-economic conditions which facilitated fire to emerge as almost a form of protest, have scarcely been addressed. Also, the complex and diverse consequences of fire have not been regarded as a priority.

Causation

Modernization, underdevelopment, social conflict, alienation, the burdens of the past, inertia are some of the medley of factors which have been cited as factors responsible for the burning of Atlantic Iberia. Paradoxically much media attention and scholarly research has focused upon causation rather than outcome. Neither has there been public debate in relation to the formulation of policy to rehabilitate damage nor have any serious attempts been made to assess degradation and plan for rehabilitation. It is true that considerable attention has been awarded to prevention. In scenically attractive areas with high land values, such as along sections of the coasts, burnt formerly protected woods have often been quickly converted into 'urbanizaciones' or second homes have been erected.

Given the multiplicity of actors involved, no simple explanation can be invoked to account for what is, in effect, more than a regional catastrophe. The complexity of the issues involved is exemplified by the fact that the past and present policies of the forestry serv-

ices in both Portugal and Spain have contributed to the problem. Their attempts to privatise common lands and their often, top-down attempts at planting have placed a gulf between local interests and many state institutions.

A broader, perhaps looser, framework of understanding is better achieved by employing a political economy approach which seeks to engage with incendiarism within the context of extensive socio -economic transformation within Atlantic Europe (Blaikie,1995). Such an approach allows for engagement with those pressures which are impinging on the region from outside, and also from within, such as the policies of the EU, the respective states and the autonomous governments and the interrelations between all of these. Secondly, market forces, especially in relation to all aspects of wood, are particularly pertinent. Finally, the relationships between these forces and the outcome of the struggle between forces working either for or against change are also critical.

It is clear that a conjuncture of events, forces and processes has provoked the fires which have afflicted Atlantic Iberia over the past decade or more. Because of the multiplicity of issues involved, the scale of the area under scrutiny and the intensity and variety of problems afflicting the area, it is not feasible to prioritise any particular factors. The legacy of state involvement mainly through the aegis of its forestry services has, up to recently, been concerned with reafforestation. This policy was implemented relentlessly and thoughtlessly in both states under their respective dictatorships. Forcible privatisation of common lands to accomplish plantation was commonplace, leading inevitably to alienation and social resistance from local communities. Democratisation and regional political devolution in the case of Spain witnessed the forestry services taking on conservation as a major responsibility. But EU and state policy is still driven by economic criteria, hence 'economic' species are still the cornerstone of replanting although local communities retain some input. The problem remains one of misunderstanding and different perceptions. State efforts still are viewed suspiciously especially considering that few communities have been rewarded in any way by the state. Thus a generalized local attitude to state initiatives is to view them as obstacles to both individual and community efforts to promote improvement and the burning of state woods is often perceived as a robust response to state interference and transgression against vernacular privilege.

In tandem with this are the difficulties of recollectivising lands which were privatised and planted under dictatorship. The preference of some communities is to attain *status quo ante* and replace the woods to permit traditional exploitation of common lands. Hence another cause of incendiarism is the frustration of individuals who wish to avoid protracted negotiations with forestry service agents and to avenge the perceived cupidity of locals who profited from 'privatization' in the past .

Finally, EU legislation especially in relation to milk quotas has added a novel dimension. Average farm size throughout much of Atlantic Iberia, Alentejo again excepted, is *c.* 2 ha, so in order to permit farmers to attain viable quotas in their eyes, monte has also been included in many quota estimations and to facilitate this woods of all kinds have been razed by fire.

In a region which boasts of one of the best stocks of wood in western Europe it is not surprising to note how the vitality of the wood industry permeates all sectors of society. Like so many other features of Atlantic Iberia this sector of the economy manifests all the contradictions of the region. Here are found some of the largest, technologically sophisticated and progressive wood processing facilities in the form of mills, pulping units and cellulose plants. As in the fishing industry it is worth noting that regional and local capital is deeply embedded in wood enterprises making them one of the few sectors of the economy with a strong indigenous presence. On the other hand some of the most traditional structures characterise this sector of the economy. This is particularly evident in relation to the producers who are in the main small or very small farmers.

One then can identify a complex web of actors in what Alvarez Sousa describes as the 'cycle of wood' (Alvarez Sousa,1992). Multinational penetration and large cellulose plants combine with traditional sawmills to make up the transformation sector. Then there are merchants some of whom source from the primary producers as well as selling the manufactured product. Here too may be included the transport sector which is labour intensive. Finally there are the farmer - producers who make up the bulk of those involved in the sector but who have least influence over its development. Without exaggeration some sixty percent of all holdings in the region manage some trees for commercial purposes and this number rises to at least ninety percent in the most wooded area, namely Galicia. In such conditions few holdings can boast of more than one hectare under trees and it is no wonder that management practices are so basic that quality control remains rudimentary. Trees for many farmers, even grown at such reduced proportions, are a declaration of status in a rural society only beginning to escape from the shackles of subsistence.

Competition within the transformation side of the industry and between it and the merchants has certainly intensified in an economic sector which is subject to huge price fluctuations. Received wisdom and popular belief contend that certain interests have colluded to force raw material prices down by a cleverly managed covert policy of incendiarism. Most of the pine and eucalyptus trees which have been burnt have mainly experienced external damage to branches and leaves, the bark being only charred leaving the wood intact. Catastrophe forces the farmer-producer to sell at rock bottom salvage prices. In this scenario the transforming sector creates a constant glut of supply and can reap enormous profits at the expense of the producers and agents who can be circumvented by buying direct from the farmers. Needless to state there have been no convictions but credence can be given to this kind of explanation because of the depth to which corruption of all kinds is embedded in the cultures of the region.

Corporate capital may also be implicated in some of the spectacular fires which have devastated parts of the coastlands of the provinces of the La Coruna and Pontevedra. Given the permeable environmental protection laws and their even weaker implementation, there is much speculation that preserved woods have been razed to clear the way for urban leisure type developments. Once again, no convictions have been achieved but it must be more than a coincidence that some most suitable land for development has been razed and some fine examples of this are evident in the Finisterre peninsula.

Farmers, communities, localities and fire

For most of the twentieth century many farmers in Atlantic Iberia have lived at the edge of subsistence and their hold on the land was sustained by traditional expedients such as mass emigration, remittances and savings. Obviously this account telescopes complex conditions and past legacies. Some of the explanations of the rash of incendiarism in Atlantic Iberia have sought to place interpretation in the context of economics or a binary opposition between traditional and modern societies. These views indeed carry weight but wider perspective based upon political economy permits a more detached interpretation.

It has been already argued that the legacy of prolonged dictatorship has defined and honed local perception of the state and its organs as interlopers and transgressors, as in the instance of the activities of the forestry services. Secondly, the nature of rural social structures and how they have evolved and changed in recent years is a topic that has been largely ignored. Many characterisations of rural society in the region have tended to specify it as a generally homogenous group of small -scale, family farmers but recent research has identified intensifying social segmentation. Furthermore, demographic change has also intervened in the shape of smaller families and high rates of youth outmigration particularly from the uplands which has left many holdings without direct heirs (Torres Luna,1993).

Among the cumulative results of the modernization process in the region has been growing individualism which has fractured many vernacular arrangements such as the management of collectively owned or common property. It has certainly deepened the alienation of those who, for whatever reason, have not benefited from the modernisation process. Tangibly, it has meant that simple joint tasks like the clearing of undergrowth in woodland are not expedited. High labour costs often rule out individual initiative. The result being that fire spreads dramatically in circumstances where undergrowth is dense.

Not only have large swathes of monte been abandoned but there are few collective organizations at local level available to fight fire. This is especially the case in Galicia's eastern uplands where selective outmigration has denuded the countryside of young people. A recurrent response in many informal interviews with countrypeople is their disinterest and effective inability to fight the fires and their dependence on the state and all its technology to act on their behalf.

The burning of woods in isolated upland areas is unlikely to have been provoked by corporate agents due to high costs of removal. The fact that most of the people who have been judicially processed for incendiarism in these circumstances have been described as having behavioral problems, leads inevitably to a link with alienation and it appears to be especially connected with social groups and individuals who have been marginalised by progress. This is the case with entire communities in the uplands. Individual aggrandizement has also been invoked as a rationale for burning and people wishing to convert common land into permanent pasture have been cited as culprits. More menacing developments are linked with the culture of corruption. The coastline of Atlantic Iberia is Europe's main entry point for narcotics with different sections of the coastline specialising in particular commodities. The connections established between Portugal and Brazil and between Galicia, Columbia and Venezuela through migration and trade for instance, have ensured that these regions act as a conduit for narcotics into Europe. Contraband tobacco networks established during the years of the dictatorship were never disarticulated and they were especially well embedded in coastal communities. They involved many sectors of society including elements from the forces of law and even the judiciary. In a clientist society such networks, many of which are referred to as 'clans' in the media because many extended families are involved, turned their attention to drugs from the late 1970s onwards. The scale of their operations beggars belief but their activities also became associated with incendiarism as a device to divert

the attention of police away from their work on the coast or elsewhere. These more obscure forces have also been implicated with incendiarism as a means to launder cash in coastal speculative activities. The state has, as yet, failed to adequately confront this enterprise and narcotic abuse is rampant, in every part of, and amongst every class in the region

Degradation

There is a copious, often contentious literature on the topic of environmental degradation (Blaikie and Brookfield,1987). In Atlantic Iberia the kinds of degradation unleashed by fire have been multiple and it is clear that a flexible understanding of the term is warranted to encompass a range of different circumstances and to include aesthetic, cultural, economic and physical deterioration of landscape quality. Such a viewpoint must also allow for multiple causation and multiple outcomes of degradation. Bailey's classic statement in his "peasant view of the bad life" certainly can be invoked to explain attitudes and behaviour towards the common lands of Atlantic Iberia which account for a high proportion of the fires (Bailey,1966). Here the state is viewed as the interloper and fires in these areas have made them, at least temporarily, unproductive because of conflicting perceptions regarding how their use should be maximised. There can be no doubt however that in the uplands and steep hills of Atlantic Iberia classically defined degradation is a major problem. Here too upland moors are being burnt repeatedly and consequently the forces facilitating physical degradation come in to play such as erosion and deterioration in water quality. Once initiated, the damage caused by these processes is difficult to redress, making replanting, for instance, impossible simply because the soils have been removed or greatly impoverished.

The fact that the status of Atlantic Iberia's common lands remains unresolved makes them a contentious issue. The enhanced economic significance of woods and woodlands and the social fissures engendered by the startlingly rapid nature of social change have together combined to precipitate some of the problems described here. Tackling these difficulties may be the best method of controlling incendiarism and the types of degradation which have ensued.

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