

Excavating landmarks – empirical contributions to doctrinal analysis

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Abstract

The idea of landmark cases is ubiquitous in legal scholarship and adjudication. Both scholars who rely on ‘landmark’ cases and those who avoid the label often focus too much attention on a small sample of individual cases when researching legal doctrine. This risks missing important cases and pieces of the doctrinal picture. The article proposes an updated methodology that returns ‘to the basics’ of doctrinal scholarship, but with an empirical twist enabled through modern database technology. The approach is exemplified through the case study of *López Ostra v. Spain*, a well-known environmental human rights decision under the European Convention on Human Rights. Based on a comprehensive dataset of all environmental decisions the article argues that the ‘landmark’ status of *López Ostra* is less empirically and doctrinally clear than conventionally accepted in legal scholarship.

Keywords: environmental human rights, data analysis, landmark cases, ECHR

1. INTRODUCTION

The concept of landmark cases is ubiquitous in legal scholarship and adjudication. There is scarcely an area of law without them and its basic defining characteristics are intuitively recognised amongst lawyers: landmark cases are major doctrinal developments that significantly shape our understanding of the law and leave their mark on future cases. Some scholars make express use of the concept in their research to denote cases that have in their view shaped the law on a given question above and beyond most other cases. Generally, a landmark case lies in the eye of the beholder and assumptions about relevant criteria are not made explicit. While some scholars do not expressly highlight cases as being of heightened significance, they nonetheless focus on a comparatively small sample of cases to explain and develop the law. In important respects, both groups operate under the sound assumption that some cases are more important than others to a legal question. However, the assessment of what counts as an important case is often based on an incomplete sample of available and

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relevant cases. The conventional doctrinal approach thus risks missing pieces of the legal picture: important cases may be overlooked because of a lack of awareness that they exist, or because they are for one reason or another not recognised as relevant.

In part, the focus on a small sample of individual cases lies in the educational approaches employed in law: lawyers habitually illustrate the state of doctrine by reference to representative cases. This is a necessary and important technique that the article itself employs. Representative cases, in contrast to landmark cases, do not purport to comprehensively explain the law on any given legal question: it is implicitly understood and often emphasised that there are a range of earlier and subsequent decisions that are equally relevant. Representative cases necessarily simplify an often sophisticated and nuanced picture to illustrate the law and impart knowledge to those unfamiliar with the field. Unfortunately, this sound educational approach is less suited to research, where the limited scope of cases can lead to deficits in rigour.

When conducting a comprehensive evaluation of the case law, one is struck by the fact that the vast majority of landmark cases do not appear out of nowhere: they have a rich developmental history and there is a broader context of earlier and subsequent cases that is crucial to a sound doctrinal appraisal. Acknowledging the predecessors and evaluating the effects of a landmark case on subsequent decisions is therefore not just a matter of good accounting, but over time promises a clearer and more accurate picture of the law. In this sense, conventional doctrinal analysis has failed to keep up with modern developments: in the age of hard copy law reports and journals, before the advent of the internet and legal databases, it was often simply not feasible to obtain a complete overview of all decisions on a given subject. The emergence and reliance on landmark cases was under these circumstances understandable: whenever a case was published broadly it almost invariably gained greater prominence.

The article suggests we critically re-visit this practice and return ‘to the basics’ as Liz Fisher has recently suggested in the context of environmental law, but with an empirical twist. Fisher argues that cultivating expertise in legal scholarship is an expression and a function of a close and deep understanding of primary material.¹ For the purposes of this article, this insight notably applies to court decisions, where a close and comprehensive engagement enables deep doctrinal analysis and guards against the tendency to overstate the significance of any individual case. The empirical twist comes through the comprehensive dataset of earlier and

¹ Elizabeth Fisher, ‘Back to Basics: Thinking About the Craft of Environmental Law Scholarship’ in OW Pedersen (ed), *Perspectives on Environmental Law Scholarship: Essays on Purpose, Shape and Discretion* (Cambridge University Press 2018), 26.

subsequent decisions gathered for this article, in line with the technological capabilities that modern databases afford. In this way, any case and particularly real or perceived landmark decisions can be situated in their proper context, thus providing fresh insights that stimulate critical engagement with conventional doctrinal interpretations. In that sense, database analysis is offered as an addition to the conventional doctrinal toolbox.

At this stage, a few caveats are in order. The contention of the article is certainly not that all ‘landmark’ cases are mislabelled - it expressly does not take a firm view on what constitutes a landmark and whether any particular case rightly has such a reputation. Criteria for identifying landmark cases are contested amongst scholars and a case may well constitute a landmark case for some purposes, but not for others. Rather, the article suggests that given the general absence of a broader analysis we are missing potentially crucial pieces of the puzzle and focusing too much on a small number of individual decisions: data extracted from legal databases can deepen our understanding and is a largely untapped source of insights for doctrinal scholarship. In that spirit, the article intends to start a discussion, specifically around doctrinal methodology: it achieves this by telling the cautionary tale of one particular environmental case through the lens of one particular dataset.

The case study selected is that of *López Ostra*, a well-known environmental decision that arose under the European Convention on Human Rights (ECHR).² Over the years an almost universal view emerged that it was a pivotal decision for the development of environmental human rights under the ECHR, especially with respect to Article 8 ECHR. Based on a comprehensive dataset of all environmental decisions under the ECHR, this article argues that the ‘landmark’ status of *López Ostra* is less empirically and doctrinally clear than one might assume.

The data analysis highlights the broader context and impact of the decision in *López Ostra*. While the case certainly has its place in the canon of environmental human rights law, significant doctrinal developments in other cases precede *López Ostra* by almost a decade and foreshadow much of the substantive decision: *Dr S v. Germany* (1960), *X and Y v. Germany* (1976), *Arrondelle v. United Kingdom* (1982), *Baggs v. United Kingdom* (1985) and *G and E v. Norway* (1983). Upon closer analysis the impact of *López Ostra* is more evolutionary than revolutionary.

² *López Ostra v Spain* App no 16798/90 (ECtHR, 9 December 1994).

Moreover, and contrary to prevailing views expressed in academic literature, the case did not significantly increase the number of environmental applications filed, nor the instances of violations found over subsequent years. Even though *López Ostra* is the most commonly cited environmental case, it does not seem to significantly stand out from other major decisions.

The more persuasive doctrinal view is that a myriad of different cases jointly contributed to the modern approach of the European Court of Human Rights (ECtHR) to environmental cases. The article considers but ultimately rejects the often-postulated landmark status of two further cases that have left their mark on the dataset: *Guerra* and *Hatton*. The case study thus provides a good illustration how data and doctrinal analysis best work in tandem, with overlapping, but distinct spheres of operation. Ultimately, however, whether any of the examined cases constitute a landmark case or not is less important than illustrating the novel methodology combining data with doctrinal analysis.

Section 2 commences by providing an overview of the different understandings of the term ‘landmark’ and identifies a few possible indicators tested in the article. However, the article declines to defend any of these indicators as necessary elements of landmark cases. Section 3 outlines the methodology employed in gathering the dataset on which the data analysis is based. Section 4 then evaluates *López Ostra* in light of the doctrinal context of earlier and subsequent decisions and closes with an appraisal of contemporary relevance.

2. THE CONCEPT OF ‘LANDMARK’ CASES

Arriving at a satisfactory definition for ‘landmark’ cases is complicated by the fact that this topic has not received much attention in legal scholarship.³ While lawyers liberally use the term to flag decisions as significant, the underlying approach and definitions are seldom made explicit. The article attempts to draw out three distinct possible meanings of the term ‘landmark’ and uses them to develop tentative indicators as a basis for discussion. However, it bears emphasising that these indicators cannot be considered exhaustive and are best understood as a sample of a range of possible approaches. The primary aim is to put forward a novel approach to doctrinal methodology, not to defend any particular definition of landmark cases, nor the landmark status of any particular case. It is therefore useful to interrogate what

³ For the purposes of this article the term ‘landmark’ case will be used as a synonym for ‘leading’ and ‘controlling’ cases, as well as various other less commonly used terms denoting cases that are of particular importance. There are of course multiple works that deal with landmark cases, see for instance, Satvinder S Juss and Maurice Sunkin, *Landmark cases in public law* (Hart Publishing 2017), from the longstanding series on ‘landmark’ cases.

we might mean when we label a case a ‘landmark’, and to avoid circular reasoning by considering this question detached from any particular decision.

One approach to landmark status reduces the question to a contextual judgment: a case is a landmark if in the opinion of the person evaluating the case it has attained a sufficient level of significance. This approach treats landmark status as largely contextual – both in a substantive and overarching sense. The approach is substantively contextual because a case may be a landmark for one area of the law, but not for another. The approach is further contextual in an overarching sense because appraisals of the significance of decisions will naturally vary between reasonable people. The advantage of a contextual approach is its ostensible openness to diverse views, its weakness is that it is mostly interested in whether a claim to landmark status is doctrinally plausible, rather than convincing. The approach declines to go beyond basic plausibility, for instance by evaluating whether a case is actually significant given the context of earlier and subsequent decisions.

One indicator that we can draw from a contextual approach is the level of agreement on the importance of a decision: the higher the level of agreement, the more likely it is that a case will be considered and the greater therefore its ability to influence doctrine. This can be measured somewhat through a language analysis that counts references to a given case. However, this indicator may be misleading on its own because references tell us very little about significance and impact. One could easily imagine a case being cited frequently but dismissed as ill-conceived, or conversely cited approvingly, but relied upon for a proposition that it does not support. The number of references is then more an indicator of attention, rather than legal significance. However, we can retain the helpful indicative properties of reference counting as a guide through the dataset of cases, without falling into the trap of confusing attention with significance. We could also ask whether a case changed the prevailing doctrinal position and deepened our understanding of the law in some significant respect. However, even with this additional doctrinal layer, there is a danger that crucial decisions that have for one reason or another failed to receive significant attention (references) might be overlooked. Therefore, it is important to supplement this indicator with an indicator for legal impact that similarly combines both data with doctrinal analysis.

A different approach to landmark status emphasises the doctrinal impact by comparing the state of the law before and after the supposed landmark decision. While this approach chiefly focuses on a doctrinal assessment, based on the dataset collected for this article, we might pose

questions focused on the measurable differences between the prevailing doctrinal view before and after a decision was handed down. For instance, we might ask whether a case sparked an increase in the number of cases with similar factual circumstances and whether it made it more likely that courts would subsequently rule in favour of one party or another, thereby changing the decision-making environment. This indicator promises insights on the relevance of a case and can improve the quality of the doctrinal impact analysis by shifting our attention to lesser known cases. Once attention has moved to overlooked cases, conventional doctrinal analysis helps avoid the limitations of raw numbers as a proxy for significance.

Finally, a third approach to landmark status focuses on the signalling and symbolism it represents to the broader society. A social impact-based understanding is primarily concerned with the impact of a ruling beyond the legal word. Under this definition it is less the outcome and doctrinal significance, but rather the leverage and attention they grant to civil society and pressure groups that is crucial. Even if a decision formally ends in a defeat, it can nonetheless galvanize public opinion and achieve the policy changes that render a formal court ruling superfluous. This approach does not hold the legal impact irrelevant, but it accepts that decisions can have a limited significance to doctrine, while decisively impacting the broader society. David Rosenberg has adopted such an understanding of landmark cases. He has sought to quantify and measure the societal impact through a small sample of US court judgments and critiqued their ability to bring about social change.⁴

However, measuring and evaluating this indicator lies beyond the data gathered for this article. The law is naturally only one element in a complex melange of factors that we group under the broad heading of ‘social’ impact. The aims of the article are significantly humbler: it is ultimately preoccupied with legal significance and illustrating the potential synergies between conventional doctrinal and data analysis. The methodology is best seen as illustrating a range of possible approaches: most scholarship does not neatly follow any one approach and often draws on a range of indicators, whether it expressly makes use of landmark terminology or not.

In light of this, three indicators of ‘landmark’ status that will be investigated following the section on data methodology: (1) the measurable impact of the decision on subsequent cases filed and their outcomes, (2) the extent to which a decision altered the prevailing doctrinal

⁴ Gerald N Rosenberg, *The Hollow Hope: Can Courts Bring About Social Change?* (2nd edn, University of Chicago Press 2008).

position or applied the law to novel factual circumstances, and (3) to what extent the case continues to have enduring relevance for the current doctrinal position.

3. DATA METHODOLOGY

Before the article can test these indicators, we require further background information on the methodology employed to gathering and analysing of the data. This is crucial because the soundness of the data and its analysis ultimately underpins the novel approach to conventional doctrinal methods put forward in this article.

The initial dataset was obtained through the ‘hudoc’ database provided by the European Court of Human Rights. The database comprises all Court judgments and screening panel decisions from 1959 to 1998 and all judgments and admissibility decisions from November 1998 to the present. It further contains all public reports of the European Commission of Human Rights from 1963 onwards and some published admissibility decisions from 1955 to 1986, as well as all admissibility decisions from 1986 until the abolishment of the Commission in 1998.

The database was searched using a Boolean search with the following parameters: all document collections, all language versions, and no date limitation. In order to qualify as a hit the document must engage with any of the following Convention articles: Article 2, Article 3, Article 6, Article 8, Article 13, Article 1 AP-I. Additionally, the text of the document must contain either ‘climate change’, ‘global warming’, ‘pollution’, ‘environment’, ‘nuclear’, or ‘ecosystem’, and their respective French equivalents (‘changement climatique’, ‘réchauffement climatique’, ‘pollution’, ‘environnement’, ‘nucléaire’, or ‘écosystème’). Searches were conducted cumulatively as opposed to *en bloc* due to limitations of the search engine in accepting multiple complete phrases. For instance, while the search engine would accept searching for the term ‘climate change’ alone, it cannot search multiple phrases (e.g. ‘climate change’ and ‘global warming’) concurrently and instead splits the latter term into ‘global’ and ‘warming’ respectively, thereby vastly inflating the number of false positives.

These individual searches returned a combined total of 3091 hits, which were then manually examined for the existence of an environmental issue within the scope of this article. The dataset is only concerned with cases where an applicant invokes ECHR rights to challenge environmental degradation or pollution, including associated procedural protections, as opposed to challenging state action that seeks to promote environmental protection, for instance

under planning and zoning laws.⁵ Only the former category promises insights for the purposes of critiquing the significance of *López Ostra*, a case where the applicant claimed a violation through third party environmental pollution.

Within this dataset the category of cases relating to the conditions experienced by applicants in prison presented a particular challenge. On the one hand, inmates are subjected to intolerable conditions in their immediate environment. Most results that were returned in the original search involved deep institutional failures: a lack of basic maintenance, pest control and failures to limit the number of occupants per cell are common. On the other hand, the prisoners inhabit an artificial, purpose-built environment and the institutional failures do not neatly fit the categories of environmental pollution and degradation. Rather than decide in the abstract, the article seeks a case by case analysis that does justice to legitimate environmental concerns, regardless of where they materialise. The general guideline is that if the environmental pollution encountered by the applicants is common outside of a prison, then the case will be counted and treated as an environmental case. Conversely, should the pollution be specific to the prison system, such as that it primarily occurs within this specific artificial environment, then the case will be excluded. When in doubt, a case was excluded from the dataset in order to preserve the overall quality and integrity of the analysis. Overall, 20 prison cases were excluded from the dataset on this ground.

If the same case was considered by different Convention entities over time (Commission, Court, Grand Chamber) only the final ruling was considered. Upon confirmation of an environmental issue, the cases were categorised, and 18 data points were collected. It was noted whether the individual provisions invoked were violated, justified, dismissed, settled, dismissed for non-exhaustion of domestic remedies, or struck out. The meaning of ‘dismissed’ was expanded to include the use of any of the following phrases by the Convention decision-makers: ‘no violation’, ‘not necessary to examine’, ‘no need to examine’, ‘rejected’, ‘not applicable’, ‘gives rise to no separate issue’.

The list includes all cases available through the search engine on 1 June 2018. However, the dataset must be treated with a degree of caution when assessing cases originating from less than eight years ago. As we will explore in more detail below, the Court at this point in time requires between at least four and up to eight years to come to a decision on 84 percent of

⁵ Adapted from Maguelonne Dèjeant-Pons, ‘Le Droit de L’homme à L’environnement et la Convention Européenne de Sauvergarde des Droits L’homme et des Libertés Fondamentales’ in G Cohen-Jonathan, J-F Flauss and P Lambert (eds), *Liber Amicorum Marc-Andre Eissen* (Bruylant 1995), 79-80.

environmental applications filed in any given year. This is especially true for the years after 1998, when the time from initial application to final decision increased dramatically. Accordingly, the article has opted for 1950 - 2013 as the general reference period. Further details are provided in the appendix which will not be exhaustively referenced.

With the overview of the methodology completed, the article turns to applying the updated methodology to the case study of *López Ostra*.

4. EVALUATING LÓPEZ OSTRA

In part the case of *López Ostra* gained much attention due to its factual background which the section will now briefly outline before turning towards a more in-depth analysis. The applicant lived in a city with a high density of factories specializing in the treatment of leather. A waste treatment plant had begun operating in 1988 in only twelve meters distance from the applicant's home without a license and contrary to domestic law. Several incidents at the plant led to significant contamination, constituting severe public health problems through gas fumes and 'pestilential smells'.⁶ Local residents, including the applicant, were evacuated and the plant was ordered to partially shut down. The remaining operation, however, continued to pose significant health risks, as evidenced by expert opinions in the years from 1991 through 1993.⁷ The applicant complained that the inaction of local authorities violated her rights under Articles 3 and 8 ECHR. The Government argued that the environmental pollution endured by the applicant had been exaggerated.⁸ The Court rejected this view, particularly as the emissions exceeded the domestic legal limits and posed a substantial danger to human health. The Court noted that the state had failed to strike a fair balance between the economic well-being of the town and the respect for her rights resulting in a violation of Article 8 ECHR.⁹

There is widespread agreement in legal scholarship that the decision in *López Ostra* was highly significant: a case that broke new ground for environmental protection under the Convention and especially the doctrine on Article 8 ECHR. General environmental and international law scholars such as Jorge Viñuales, Pierre-Marie Dupuy and Philippe Sands describe it as the

⁶ *López Ostra v Spain* (n 2) [8].

⁷ *ibid* [9].

⁸ *ibid* [40].

⁹ *ibid* [55]-[58].

leading decision for environmental human rights,¹⁰ Ulrich Beyerlin and Thilo Maueruhn as the ‘first genuinely green decision’,¹¹ and most specialised environmental human rights scholarship gives the case significant attention. Dinah Shelton, Alan Boyle and Chris Hilson amongst others cite the case as a leading authority establishing environmental protection under the Convention.¹² These claims admittedly have merit: *López Ostra* is indeed an important piece of the modern doctrinal approach, not least because it was the first case to find a violation of the Convention through environmental pollution.

However, most contributions base their assessment of the case on only a small sample of environmental cases that preceded *López Ostra*. The data collected for this article fills this gap by focusing our attention on the cases that are relatively speaking overlooked in doctrinal research. Determining the broader context of a landmark ruling is only a first, but crucial step towards the deeper doctrinal investigation that the methodology advocated here requires.

The analysis concludes that *López Ostra* clearly reflects three principles established in earlier the airport noise emission cases: the idea that environmental degradation is relevant under the Convention, the responsibility of the state for the actions of a private treatment plant, and the applicability of Article 8 ECHR to environmental cases. The idea that an applicant need not demonstrate specific health detriments is often attributed to *López Ostra*, but was likewise foreshadowed in some respects, although the pedigree is less unequivocal. The Commission decision in *Rayner, Baggs and Arrondelle*, simply accepted health detriments as a given and did not require the applicants to furnish any evidence beyond establishing the existence of noise emissions.¹³ Admittedly, however, there were independent reports in these cases that confirmed the degradation and its impact on wellbeing, which were never contested by

¹⁰ Pierre-Marie Dupuy and Jorge E Viñuales, *International Environmental Law* (Cambridge University Press 2015), 307; Philippe Sands and others, *Principles of International Environmental Law* (3rd edn, Cambridge University Press 2012), 783.

¹¹ Ulrich Beyerlin and Thilo Marauhn, *International Environmental Law* (Hart - C.H.Beck - Nomos 2011), 400.

¹² Dinah Shelton, ‘Human Rights and the Environment: Substantive Rights’ in M Fitzmaurice, DM Ong and P Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010), 275-6; Alan Boyle, ‘Human Rights and the Environment - Where Next?’ in B Boer (ed), *Environmental Law Dimensions of Human Rights* (Oxford University Press 2015), 204; Chris Hilson, ‘The Margin of Appreciation, Domestic Irregularity and Domestic Court Rulings in ECHR Environmental Jurisprudence: Global Legal Pluralism in Action’ (2013) 2 *Global Constitutionalism* 262, 270; Sueli Giorgetta, ‘The Right to a Healthy Environment, Human Rights and Sustainable Development’ (2002) 2 *International Environmental Agreements* 171, 179; Daniel Garcia San José, *Environmental Protection and the European Convention on Human Rights* (Council of Europe Publishing 2005), 25, 59; Richard Desgagné, ‘Integrating Environmental Values into the European Convention on Human Rights’ (1995) 89 *AJIL* 263, 282.

¹³ *Rayner v United Kingdom* App no 9310/81 (Commission Decision, 16 July 1986), 12; *Baggs v United Kingdom* App no 9310/81 (Commission Decision, 16 October 1985), 20; *Arrondelle v United Kingdom* App no 7889/77 (Commission Decision, 13 May 1982).

respondent states. Overall, the significance of *López Ostra* lies chiefly in making explicit what was tentatively accepted and assumed in previous decisions.

4.1. Decisions before López Ostra

The Convention entities have issued 32 decisions in environmental cases prior to 1994: violations were found in six of these cases, three settled and the remaining 23 were dismissed. Naturally, not all of these cases decided will be immediately relevant and it is important to remember that evidence from data is a tool that supports, but by no means replaces the doctrinal analysis that follows. The section argues that significant doctrinal developments precede *López Ostra* by almost a decade and foreshadow many aspects of the decision. These developments are best illustrated through five cases identified through the comprehensive overview of environmental cases.

4.1.1. The first ‘environmental’ case

The first, albeit seldom recognized, environmentally themed case under the Convention was *Dr S v. Germany* in 1960.¹⁴ It helped establish the notion that environmental issues were irrelevant under the Convention, a view that would prevail for the following decades.

In its decision, the Commission rejected any form of environmental protection under the ECHR regardless of the particular circumstances. The applicant complained of the threats arising from nuclear technology under Articles 2 and 5 ECHR, namely the dumping of nuclear waste in the North Sea,¹⁵ the stockpiling of nuclear material and the stationing of ballistic missiles in Germany. The Commission summarily dismissed the application, holding that ‘(...) neither the examination of the allegations of the applicant, nor the direct examination of the case-file as it stands, disclose the appearance of a violation (...)’.¹⁶

From the brief decision, it is not immediately clear on which grounds the Commission dismissed the application. One possibility is to interpret the decision as a comment on the applicant’s victim status under Article 34 of the Convention. Had that been the case however, the Commission would have at least accepted that there was a case to answer under the

¹⁴ *Dr S v Germany* App no 715/60 (Commission Decision, 5 August 1960, unpublished) on file with author.

¹⁵ A practice outlawed through the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (adopted 29 December 1972, in force 30 August 1975) 1046 UNTS 120.

¹⁶ *Dr S v Germany* (n 14).

Convention. The question of victim status can logically only arise if it is acknowledged that, for instance, improper handling of nuclear waste engages the Convention in the first place. Instead, it would appear that the Commission is stating that the facts as stated cannot give rise to a Convention violation under any circumstances.

4.1.2. A statement of principle

The case of *X and Y v. Germany* was one of the first opportunities for a reconsideration of this position. The case concerned objections to destructive military activity on marshlands neighbouring the applicants' property.¹⁷ The Commission considered Articles 2, 3 and 5 ECHR and ultimately held that '(...) no right to nature conservation is, *as such* included among the rights and freedoms guaranteed by the Convention and in particular by Arts. 2, 3 or 5 as invoked by the applicant.'¹⁸

The decision by the Commission is again quite brief. It remains unclear whether the Commission refused to engage with Article 8, or if the applicants failed to invoke the provision. Whatever the reason, the decision by the Commission amounted to the first unequivocal statement of a legal principle to the effect that the Convention does not protect the environment, in the sense of nature conservation. While this principle appears uncompromising at first glance, it notably does not close the door on environmental degradation that affects the enjoyment of Convention rights.

In any case, it remains doubtful that *X and Y* had an enduring impact on doctrine beyond the very narrow idea that 'pure' nature conservation cases would not be admissible under the Convention. The Court continues to invoke this principle in its modern environmental cases, but it remains a largely rhetorical starting point rather than doctrinally significant. There are two reasons for this: for one, the vast majority of environmental cases before the ECtHR contain express allegations of harm to individual applicants and second, there are inherent difficulties in separating harm to nature from harm to humans on a principled basis.¹⁹

¹⁷ *X and Y v Federal Republic of Germany* App no 7407/76 (Commission Decision, 13 May 1976).

¹⁸ *ibid* (emphasis added).

¹⁹ The number of cases where the principle made a discernible difference is low, see *Schiopu and Verzesu v Romania* App no 26040/06 (ECtHR, 26 November 2013) [failure to remove oil tanks on land returned after expropriation]; *Ogloblina v Russia* App no 28852/05 (ECtHR, 26 November 2013) [dismissed application challenging deforestation].

Deep ecologists have convincingly argued since the early 1970s that there is in fact no meaningful distinction: both humans and their environment form part of the same global ecosystem and there is at most a separation by degrees and intensity of harm, but not a distinction in principle.²⁰ This conclusion leads deep ecologists down a generally rights sceptical path that naturally could not be adopted by a human rights court. However, the insight that environmental harm very often equates to harm to humans is present in the Convention case law. Thus, even while rejecting environmental protection for its own sake under the Convention, the Court routinely engages with the substance of applications that have a tentative connection to individual harm and finds violations of the Convention.²¹

4.1.3. *A change of heart: airport noise emission cases*

Several decisions soon qualified the somewhat sceptical view taken by the Commission in *X and Y*, especially a string of cases related to airport noise emissions in the early 1980s. One key reason for this gradual shift are changes to the interpretational doctrine in the late 1970s. The Court adopted a so-called evolutive approach to interpretation, which was first applied in the cases of *Tyrer* and *Marckx*.²² This approach broadly holds that the Convention rights are subject to evolution and change over time. Dubbed the ‘living instrument’ approach, it has led the ECtHR to adapt and expand the Convention rights to keep pace with modern developments and changes in the prevailing societal attitudes.²³ In its own words, the Court intends to provide for an interpretation of the Convention that ‘(...) upholds individual rights as practical and effective, rather than theoretical and illusory protections.’²⁴ Although this approach has been contested by some states, the Court continues to make use of the ‘living instrument’ approach to update its reading of many Convention rights. This allowed for environmental threats to human rights to be considered within the purview of the traditional civil and political rights of

²⁰ Arne Naess, ‘The Shallow and the Deep, Long-Range Ecology Movement. A Summary.’ (1973) 16 *Inquiry* 95.

²¹ *Kyrtatos v Greece* App no 41666/98 (ECtHR, 22 May 2003) [destruction of swampland]; *Schneider v Luxembourg* App no 2113/04 (ECtHR, 10 July 2007) [ethical opposition to hunting]; *Andersson and others v Sweden* App no 29878/09 (ECtHR, 25 September 2014) [infrastructure project in nature reserve].

²² *Tyrer v. UK* App no 5856/72 (ECtHR, 25 April 1978); *Marckx v Belgium* App no 6833/74 (ECtHR, 13 June 1979).

²³ George Letsas, ‘The ECHR as a Living Instrument: Its Meaning and Legitimacy’ in A Føllesdal, B Peters and G Ulfstein (eds), *Constituting Europe: the European Court of Human Rights in a National, European and Global Context* (Cambridge University Press 2013); Stefan Theil, ‘Is the ‘Living Instrument’ Approach of the European Court of Human Rights Compatible with the ECHR and International Law?’ (2017) 23 *EPL* 587.

²⁴ *Mamatkulov and Askaraov v Turkey* App no 46827/99; 46951/99 (Grand Chamber, 4 February 2005) [121].

the Convention. The ‘living instrument’ interpretative approach thus directly contributed to the noise emission cases that decisively shaped the modern environmental doctrine.

In the case of *Arrondelle* the runway of Gatwick Airport was originally located approximately one mile distance to the applicant’s home.²⁵ Both the runway and the M23 motorway were extended in the years preceding the application and encroached to within a few hundred feet of the home. An independent inspector determined that this led to ‘(...) intolerable stress by reason of the intensity, duration and frequency of the noise primarily from low flying aircraft passing almost overhead.’²⁶ Not surprisingly, attempts to sell the property proved futile, and the applicant invoked Articles 6, 8, 13, 14 and Article 1 AP-I before the Commission. The case was ultimately settled during the course of these proceedings.²⁷ The local Council agreed to purchase the home at its current market value and the difference to the unblighted value of the property was paid by the UK Government. Further airport noise emission cases soon followed.

The facts in *Baggs* were largely similar to those in *Arrondelle*, although the noise levels endured by the family were considerably worse and originated from Heathrow Airport.²⁸ The independent Eyre Report on Heathrow Air Noise summarized the situation as follows:

‘The conditions which Mr. and Mrs. Baggs and their family have been forced to endure for years without respite or redress are truly shocking and deplorable. Of necessity, the Baggs spend many hours in the open air. There is no escape when they go indoors. Insulation is ineffective in their well built bungalow. The Baggs will have to serve out their lives in these intolerable conditions which the introduction of less noisy aircraft will never wholly eradicate. Nobody wishes to buy their hell and I am not surprised.’²⁹

The applicant invoked Articles 8, 13 ECHR as well as Article 1 AP-I. The UK Government argued that it was not responsible for the noise emissions caused through the conduct of third party aircraft operators. The Commission rejected this line of argument. It deemed the direct cause of the noise emissions immaterial and held the state responsible by way of its planning and regulatory authority.

The proceedings in *Baggs* were likewise settled, but not before being joined with two other applications considered by the Commission: *Powell* and *Rayner*. The latter two applications

²⁵ *Arrondelle v United Kingdom* (n 13).

²⁶ Cited as per *ibid*.

²⁷ *ibid* [4].

²⁸ *Baggs v United Kingdom* (n 13).

²⁹ Inquiry headed by the then Inspector for the London Airports, Sir Graham Eyre, from 1981 to 1984, which published its report in December 1984, cited as per *ibid*, 3.

proceeded to the Court, but as the claims under Article 8 ECHR had been previously dismissed by the Commission they were not examined further under this provision.³⁰ Nonetheless, the Commission decisions in both *Powell* and *Rayner* acknowledged that environmental issues can give rise to infringements under Article 8 ECHR, but ultimately deemed them justified under paragraph 2.³¹ Both *Baggs* and *Arondelle*, as well as to a lesser extent *Powell* and *Rayner*, were important precursors to the decision in *López Ostra* in three respects.

First, they represent the first cases where the Commission engages constructively with environmental degradation under the Convention. While it is correct that *Baggs* and *Arondelle* were settled before a definite ruling was issued, and the claims of *Powell* and *Rayner* were not upheld, the cases nonetheless ensured that environmental applications were taken seriously. Environmental concerns became firmly established as relevant and potential infringements of Convention rights. The dismissive attitude in *Dr S and X and Y* was overcome and states began to take notice. They could no longer rely on an outright refusal to hear environmental cases and at least some friendly settlements appear to be motivated by a desire to avoid an adverse precedent.

Second, in all of the cases, states were consistently held responsible for environmental degradation arising from the conduct of third parties. It was largely immaterial that the aircraft were operated by private airlines: states were responsible by way of their oversight and regulatory authority. Before the aircraft noise cases, this was far from a settled view. In *Rayner*, the Commission cites *Marckx* as the sole authority for the proposition that states are directly responsible for private actors under the Convention.³² However, *Marckx* does not deal with environmental degradation and is better understood as supporting the notion of general positive obligations arising from Article 8 ECHR. The case was less concerned with direct responsibility for the actions of private actors by virtue of a general regulatory authority.

Third, the cases held Article 8 ECHR admissible and accepted, to varying degrees, that infringements could arise from environmental degradation. Even if no violations were ultimately found, these unprecedented decisions opened the door to the modern environmental protection under the Convention. Notably absent from all of the rulings was any requirement for the applicants to demonstrate specific health detriments as a result of the environmental degradation. None of these cases of course diminish the role that *López Ostra* had as the first

³⁰ *Powell and Rayner v United Kingdom* App no 9310/81 (ECtHR, 21 February 1990) [25].

³¹ *Rayner v United Kingdom* (n 13), 12.

³² *Marckx v Belgium* (n 22) [31].

case explicitly finding a violation on environmental grounds. However, but for the settlements that states reached with applicants, we may well have seen this development much earlier. In the end, it was the strategic decision to settle that prevented earlier findings of violations in the airport noise emission cases.

4.1.4. Beyond airport noise

G and E v. Norway expanded and confirmed this line of reasoning beyond airport noise cases. In the case, the Commission first accepted that a lack of nature conservation may constitute a violation of the Convention, provided that it impacts a Convention right.³³ The applicants were two indigenous reindeer farmers who objected to the construction of a hydro-electric dam which threatened to flood land traditionally used for reindeer herding and fishing by the Sami people. The Commission accepted that this may constitute an infringement of Article 8 ECHR when read in conjunction with minority rights.³⁴ However, it held that

‘(...) without ascertaining the exact extent and nature of the interference with the applicants’ rights under Article 8, para. 1, after careful consideration of the necessity of the project by the national organs, the interference could reasonably be considered justified under Article 8, para. 2, as being in accordance with the law, and necessary in a democratic society in the interests of the economic well-being of the country.’³⁵

Drawing inferences from such cautiously worded decisions is difficult. However, it appears reasonable to conclude that the Commission accepted that the environmental degradation amounted to an infringement of the Convention, which could give rise to violation given appropriate circumstances. *G and E* therefore arguably constitutes a further early example of Article 8 ECHR proceeding to the justification stage. In any case, the ruling confirms two of the principles established in the airport noise cases: environmental concerns are relevant to the ECHR and constitute a potential source of infringements, particularly of Article 8 ECHR. This is true even if there is no tangible health risk to the applicant, and arguably even where the emphasis is more strongly on nature conservation, albeit couched in economic terms.

Therefore, the pure statement of principle that we saw earlier in *X and Y* to the effect that nature conservation is not protected under the Convention was short lived save for a very narrow interpretation that is close to irrelevant in practice. The Court does indeed recognise nature

³³ *G and E v Norway* App no 9278/81; 9415/81 (Commission Decision, 3 October 1983).

³⁴ *ibid* (n 33), 3.

³⁵ *ibid*, 7.

conservation as a value protected under the Convention, so long as a connection to individual rights can be established. If such a connection exists then the Court will engage with the substance of the application, even where the link is tentative and nature conservation takes a leading role, overshadowing the alleged harm to the individual.

4.2. Decisions after *López Ostra*

This section shifts the analytical focus away from the decisions that preceded to those that followed the ruling in *López Ostra*. Specifically, it considers the immediate measurable impact of the ruling on subsequent cases (4.2.1), before turning the indicators for doctrinal impact previously identified (4.2.2), and concluding with a consideration of two alternative landmark decisions (4.2.3).

4.2.1. Mapping the data environment

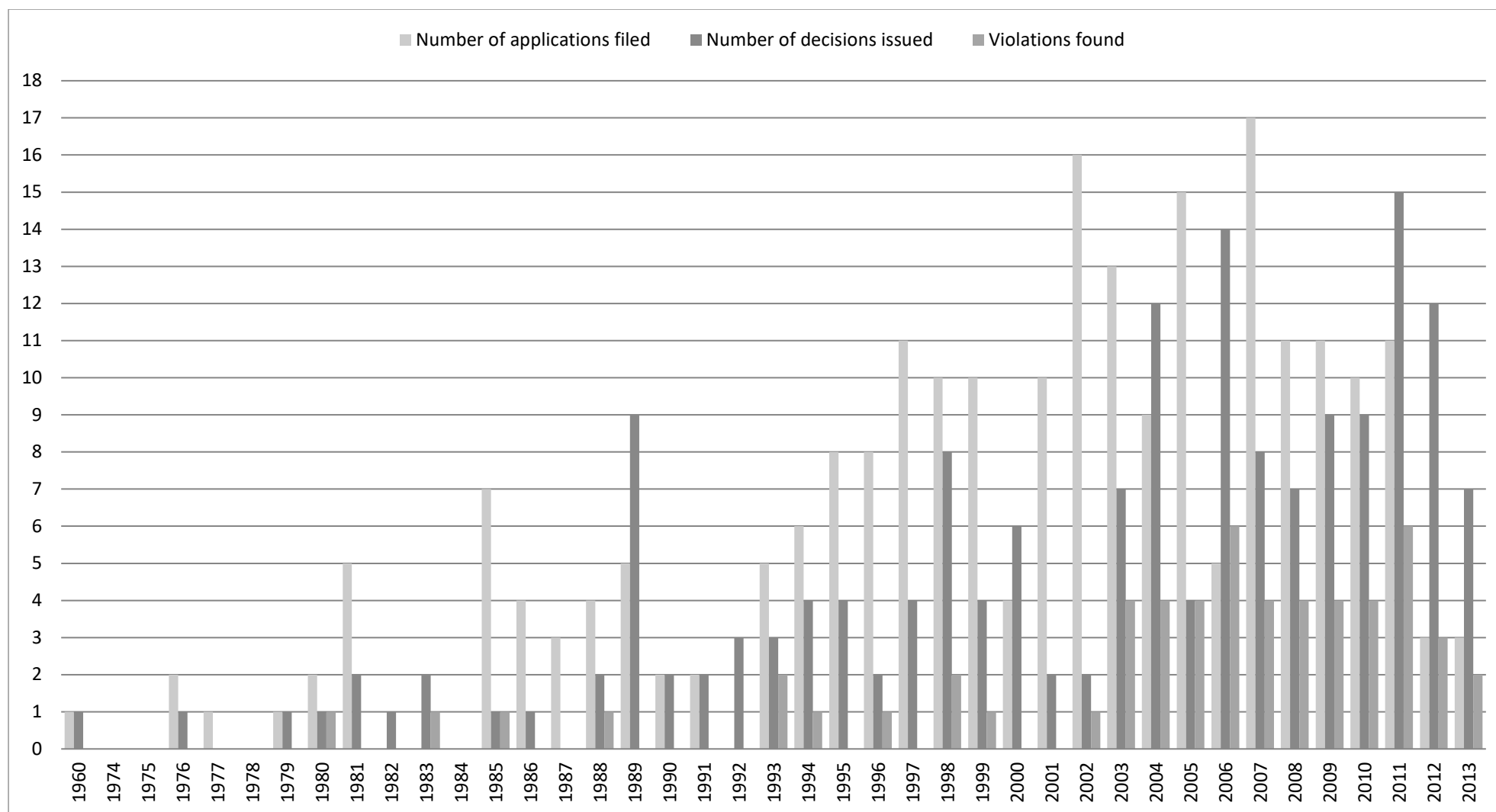
As previously mentioned, most commentators base arguments in favour of the significance of *López Ostra* on doctrinal considerations, with only occasional empirical claims. Margaret DeMerieux for instance states that ‘(...) the Commission was, subsequent to its admission of *López Ostra*, bombarded with applications from two types of applicants, a few of whose claims have reached the Court in quite significant litigation’,³⁶ and Kirstof Hectors claims that ‘[a]fter this judgment, a lot of nuisance cases followed’.³⁷ At least with respect to absolute and relative increases in environmental cases filed, decisions issued and violations found, these claims are contradicted by available data. This goes as much for the Commission decision in *López Ostra* in 1993 as it does for the subsequent Court decision in 1994.

Figure 1 below demonstrates that both years saw a combined total of four environmentally themed applications filed and two findings of a violation. There is no significant rise in the number of environmental cases filed in the following years: from 1995-2001 there are only modest fluctuations. Much the same can be said for number of violations found in the same time period, which remain largely consistent. By contrast, a significant spike in applications filed, decisions issued and violations occurs in 2002. The number of applications filed reaches

³⁶ Margaret DeMerieux, ‘Deriving Environmental Rights from the European Convention for the protection of Human Rights and fundamental freedoms’ (2001) 21 Oxford Journal of Legal Studies 521, 530.

³⁷ Kirstof Hectors, ‘The Chartering of Environmental Protection: Exploring the Boundaries of Environmental Protectio as Human Right’ [2008] European Energy and Environmental Law Review 165, 169.

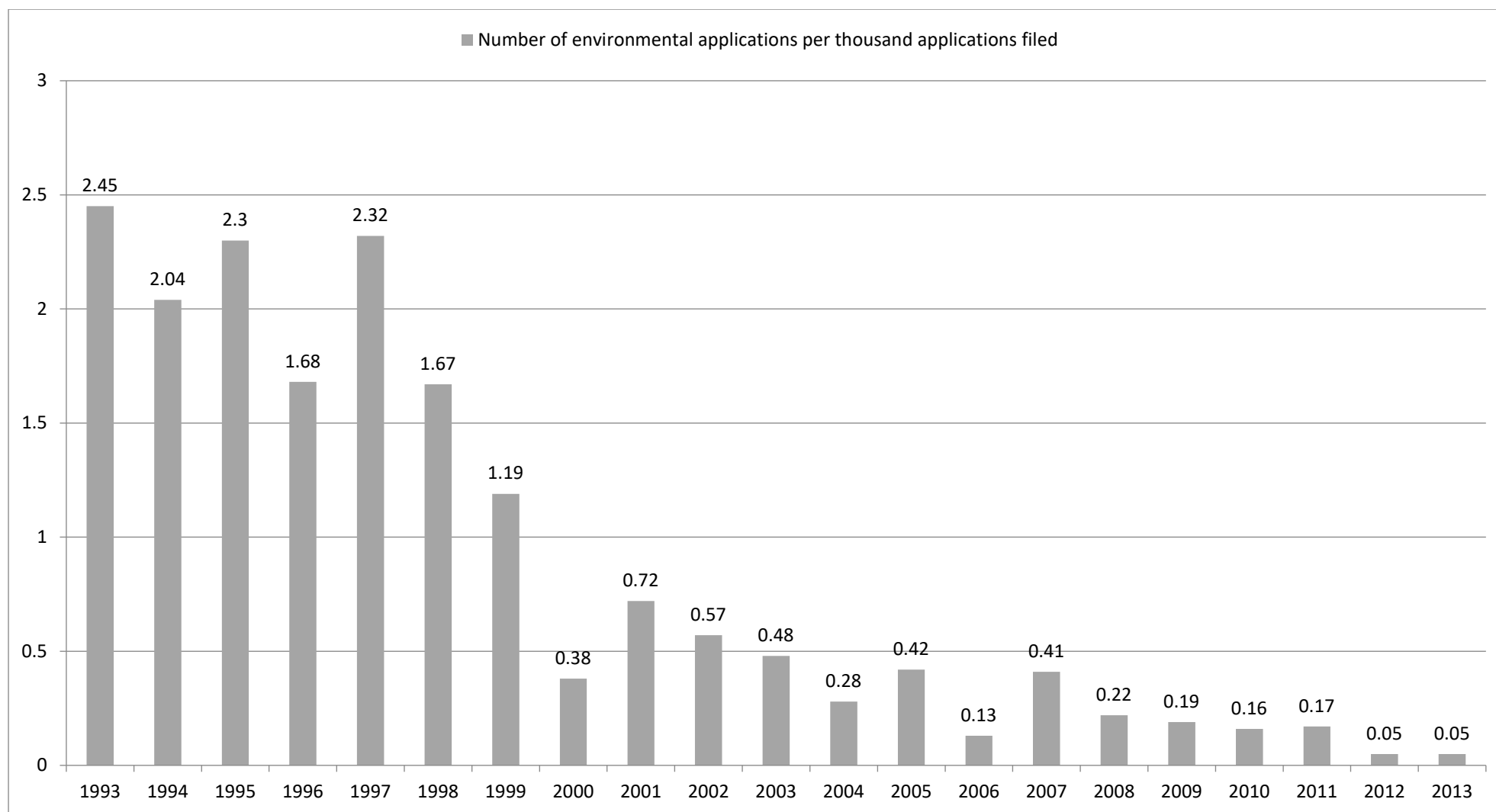
an unprecedented level (sixteen) and leads to a higher sustained level for a longer period, in contrast to a similar spike in 1985. Moreover, in the years immediately after 2002, there is a sustained increase in the number of violations found. Given the year of the decision in *López Ostra* (1994), this effect cannot be easily attributed to the case.



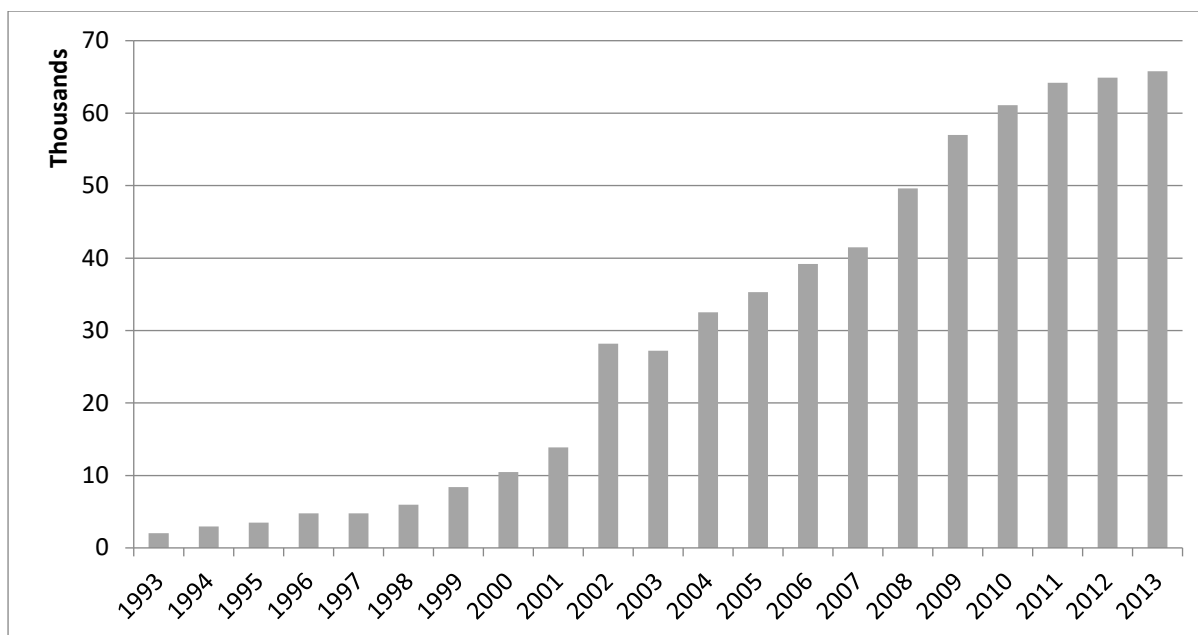
[Figure 1: number of environmental applications filed, decisions issued and violations found per year from 1960 – 2013, n(applications filed)=235; n(decisions issued)=172; n(violations found)=57]. The applications filed outweigh the decisions because some applications are still pending in the relevant time period.

A possible rebuttal to this interpretation of the dataset would argue that the data masks an increase in environmental cases relative to overall cases. Again, analysis of the data represented in Figure 2 below demonstrates that the relative number of environmental cases drops after *López Ostra*, leading to a general downward trend from 2.3 environmental applications filed per thousand cases in 1995 to only 0.05 filed in 2013. This is in part attributable to the increase in overall (i.e. including non-environmental) applications filed following the reforms introduced by Protocol 11 to the ECHR represented in Figure 3.³⁸ Crucially, the Protocol abolished the Commission and expanded access by rendering mandatory the previously optional right of individual petition to the Court. Both reforms led to a dramatic increase in applications. The year 1997 is an outlier but does not speak against the overall trend.

³⁸ Protocol No. 11 to the Convention for the Protection of Human Rights and Fundamental Freedoms, restructuring the control machinery established thereby (Protocol No.11 to the ECHR) (adopted 5 November 1994, entered into force 1 November 1998) ETS 155.



[Figure 2: Number of environmental applications filed per thousand applications filed from 1993 – 2013, n=196]



[Figure 3: Number of all applications filed annually from 1993-2013 in thousands]

The case it seems for an inundation of environmental applications following the decision in *López Ostra* is not a strong one.

4.2.2. *Assessing the doctrinal impact*

The focus now moves onto the doctrinal impact indicators we previously identified in the discussion of some of the characteristics ascribed to landmark cases. When considering the doctrinal impact of *López Ostra* on subsequent decisions we are faced with a dilemma. A straight-forward data evaluation has not given us much evidence of a spike in environmental applications or their success rate, but that is in and of itself a poor measure of the doctrinal impact. *López Ostra* may well have been highly significant for the particular legal questions it considered without necessarily setting off an avalanche of environmental cases.

4.2.2.1. *Relevant decisions*

To determine relevant decisions, we require a more focused perspective on the dataset, specifically, we must get a better idea where evidence of a strong doctrinal impact could be found. For the purposes of the Convention, this analysis requires an evaluation of the average time taken from initial application to final decision at the time of *López Ostra*, which is

complicated by the abrupt increase in applications filed following the entry into force of Protocol 11 to the ECHR in 1999.

The nature of the Convention system is such that it requires the exhaustion of domestic remedies before any application. Depending on the domestic legal system in question this can take several years in addition to the time taken up by the Convention entities before a final decision. The dataset gathered for this article can only partially address these concerns, namely by calculating and accounting for the time required by the Convention entities in environmentally themed cases. At least, this yields a reasonable understanding of the time that it would take for a doctrinal innovation to be applied at the Convention level.

The filing date of an application with the Convention entities is usually given in the decisions of the Commission and the Court. Barring only sporadic exceptions where no such information was recorded, this yields a solid basis for evaluating the time from initial application to final decision.³⁹ Between 1960 and 1998 the Convention entities required a median time of roughly 33.5 months to resolve an environmental case. This applies to those applications that meet initial documentation and formal requirements for allocation and consequently cannot be dismissed administratively, but only through a decision.⁴⁰ The same figure for the time period from 1999 to the present day stands at 58 months. Naturally, there are many parties involved in moving a case through the necessary procedural steps, culminating in a final decision. This analysis is not intended to assign blame to any actor, nor does it lend itself to identifying possible causes: it is likely that various causes contribute to delays, including uncooperative state parties, delayed applicants and the overall case load managed by the Court. In any case, from 1999 onwards, the Court requires significantly more time to deal with environmental applications.

This has several implications for data interpretation. Data that spans fewer than eight years must be treated with a degree of caution. At the time of writing, a majority of cases originating from between 2014 and 2018 will not yet have been resolved. Consequently, the framework of reference for this article is limited to the years up to and including 2013. The relevant timeframe to look for a doctrinal impact of *López Ostra* (1994) in environmental cases is within the first four years following the decision, as this is the timeframe in which the majority of cases filed (but not concluded) before 1994 filter through the Convention system. It remains possible that

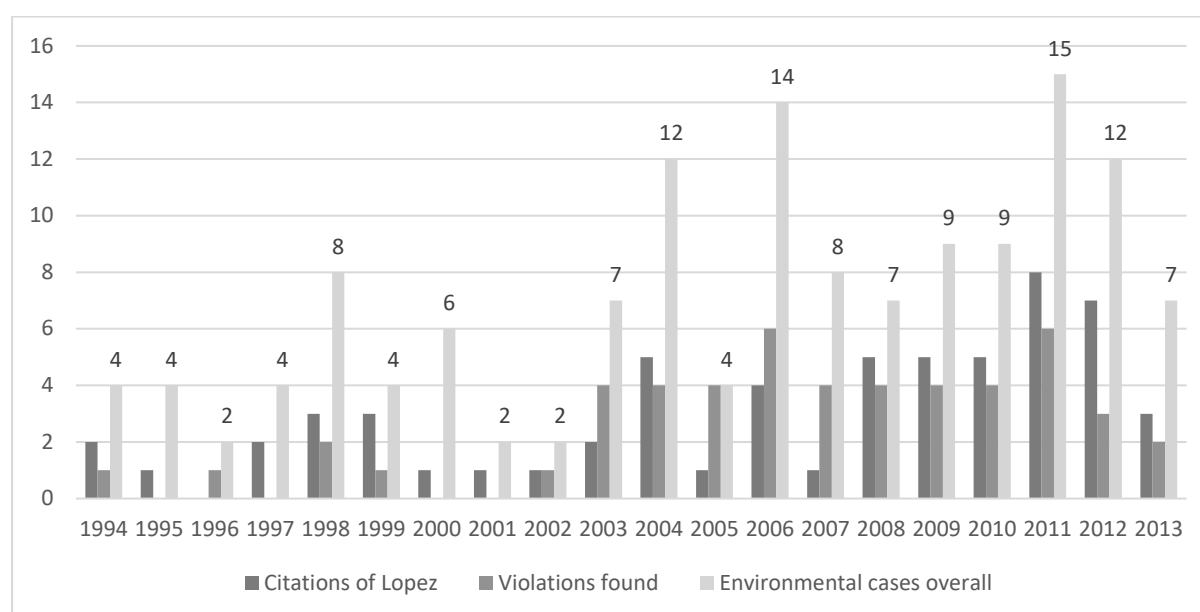
³⁹ The specific cases are recorded in the appendix.

⁴⁰ See Rule 47 of the Rules of the European Court of Human Rights.

domestic court cases took significantly longer to arrive at Strasbourg. Based on the data gathered here, this objection cannot be conclusively dismissed. However, there was certainly nothing to prevent the Court from immediately applying its environmentally friendly reading of Article 8 ECHR to pending cases. We can now turn to the number of references as an indicator that might help us focus on potentially significant cases that were overlooked.

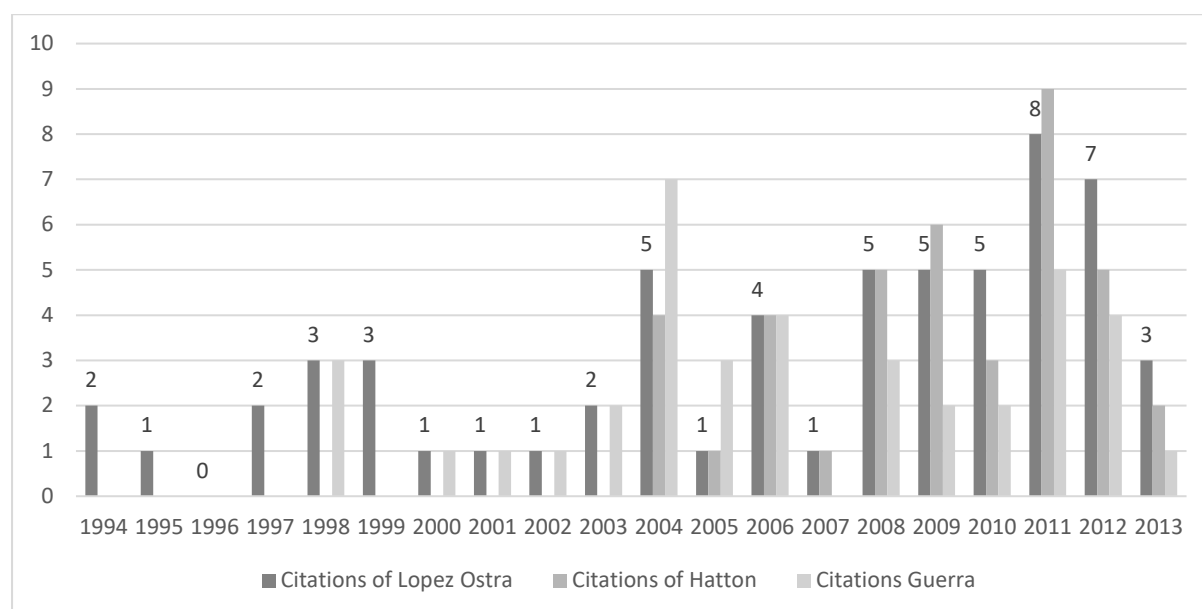
4.2.2.2. References

We can now move on to the indicator based on the number of references made to *López Ostra* in subsequent decisions. *López Ostra* has been cited in 60 subsequent environmental cases, *Hatton* has been cited in 40 (combined references to Chamber and Grand Chamber decision) and *Guerra* in 39 (combined references to Chamber and Grand Chamber decision). At first glance, this makes all three cases significant as the average number of citations for environmental decisions is only approximately 4.46. However, as previously mentioned it is worth looking beyond the frequency of references for deeper signs of impact that can test the notion of singular importance often associated with *López Ostra*. While references to *López Ostra* track the number of violations found in environmental cases quite well, the decision was not invariably referenced when finding violations. Figure 4 below gives the number of decisions that cited *López Ostra* in relation to cases where violations were found and overall number of environmental cases in a given year from 1994 (the year of the decision) to 2013. The perceived relevance of *López Ostra* fluctuated after 2001.



[Figure 4: Number of decisions that cite *López Ostra*, the number of violations and overall environmental cases in a given year from 1994-2013; *López Ostra* figures highlighted, n(*López Ostra* references)=60; n(violations found)=51; n(environmental cases)=140]

A similar picture emerges when we compare the citations of *López Ostra* with those of *Hatton* and *Guerra* over the same time period (Figure 5).



[Figure 5: Number of decisions that cite *López Ostra*, *Hatton* and *Guerra* respectively in a given year from 1994-2013; *López Ostra* figures highlighted, n(*López Ostra* references)=60; n(*Hatton* references)=40; n(*Guerra* references)=39].

López Ostra is roughly tied with *Guerra* once the latter decision is issued in 1998 until 2003, when the Chamber ruling in *Hatton* is handed down. All three cases receive an almost identical number of citations from there onwards. Attention and impact it seems are evenly split amongst these three cases, with the higher number of references to *López Ostra* chiefly explained through the earlier date of the decision.

4.2.2.3. Data interpretation

Against this backdrop, the impact of *López Ostra* appears more ambivalent than the literature would suggest. Even if a significant domestic delay existed as suggested in the previous section, the fact remains that *López Ostra* had no discernible impact on the number of violations found in environmental cases. The ECtHR was not short on applications to which it might have applied the doctrinal position developed in the case. Moreover, as Figure 4 demonstrates, despite the rise in environmental applications filed, this does not result in a subsequent spike

in the number of decisions that reference *López Ostra*. They remain fairly stable throughout the years. That being said, *López Ostra* is certainly not overshadowed by references to other rulings and remains important. Nonetheless, the data within the four years following the case suggest that in many respects the doctrinal position did not change significantly after *López Ostra*. This was likely because many of the innovations conventionally ascribed to the case were already introduced in earlier decisions, most notably on aircraft noise.

By contrast, the case for a broader impact of *López Ostra* beyond the four years following the decision are stronger: the case is frequently cited and there was a considerable rise in environmental applications in 2002 that is sustained in the following years. Overall therefore, the empirical picture is a mixed one: some factors speak to the significance of *López Ostra*, while others caution against this interpretation.

4.3. Alternative landmark decisions

This ambivalent picture makes it worthwhile to examine the two alternative candidates for landmark status that emerged from the dataset on doctrinal merit: namely the decision in *Guerra* and the chamber judgment in *Hatton*. While they received much attention (as expressed through references to these case in subsequent decisions) a closer doctrinal look reveals that their impact was less significant. As such, both cases illustrate that reliance on data analysis alone can lead to misleading conclusions if it is not supplemented by doctrinal investigation. Ultimately, the latter demonstrates that the enduring significance of both *Hatton* and *Guerra* is more limited than conventionally accepted.

The significance of *Guerra* is limited through the Court's strong reliance on the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.⁴¹ The doctrinal principle that *Guerra* outlines is now fully incorporated and more expansively safeguarded in the Aarhus Convention. The chamber judgment in *Hatton* for its part is less significant as it was overruled by the Grand Chamber, which employed an approach that relied heavily on the margin of appreciation. While the margin of appreciation doctrine is still alive and well at the Court, the particular approach in *Hatton* has generally not been followed in subsequent environmental decisions. Both cases

⁴¹ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 28 June 1998, in force 30 October 2001), 2161 UNTS 447 (Aarhus Convention).

provide a good illustration how data and doctrinal analysis best work in tandem, with overlapping, but distinct spheres of operation.

4.3.1. *Guerra v. Italy*

The applicants lived at a one kilometre distance from a chemical factory which produced fertilizers and other chemicals that were classified as ‘high risk.’⁴² It was alleged that the continued operation of the plant caused cancer in a number of employees and constituted a threat to the population. Invoking Articles 2, 8 and 10 ECHR, the applicants demanded access to information held by local authorities on the involved risks. The Court noted that environmental degradation fell within the ambit of Article 8 ECHR and that the provision could be invoked not only to challenge direct state action, but also a failure to act to prevent infringements (positive obligation). In this case, the Court held that the denial of significant information to the applicants constituted a violation of Article 8 ECHR. This is a potentially doctrinally significant ruling with respect to the positive obligations of the state. However, as we have seen the general responsibility of states for third party conduct by virtue of regulatory authority was already well established in the earlier cases on aircraft noise emissions. What remains is the more specific finding by the Court that the positive obligations under Article 8 ECHR include access to information about environmental degradation. However, the scope of this obligation is nevertheless quite limited given the general right to ‘receive and impart’ information contained in Article 10 ECHR and the provisions of the Aarhus Convention, especially Articles 4 and 5.⁴³ While the latter has not been universally ratified by states, the Court nonetheless draws heavily on the Aarhus Convention to shape the right to information in environmental cases.⁴⁴ The contemporary significance of *Guerra* is hence limited for environmental cases.

⁴² *Guerra v Italy* App no 14967/89 (Grand Chamber, 19 February 1998) [13].

⁴³ While it is correct that the Aarhus Convention is arguably broader, the differences to the ECHR regime centre on the procedural barriers to relying on these rights, not the core of the protection they offer, see Birgit Peters, ‘Unpacking the Diversity of Procedural Environmental Rights: The European Convention on Human Rights and the Aarhus Convention’ (2019) 30 *Journal of Environmental Law* 1, 26.

⁴⁴ From the case law of the court considering the Aarhus Convention, see for instance *Tatar v Romania* App no 67021/01 (ECtHR, 27 January 2009); *Grimkovskaya v Ukraine* App no 38182/03 (ECtHR, 21 July 2011).

4.3.2. *Hatton and others v. United Kingdom*

A further candidate for ‘landmark’ status may be found in the chamber judgment in *Hatton*.⁴⁵ Even though its conclusions were largely set aside on appeal to the Grand Chamber, the case nonetheless made its mark in the dataset.⁴⁶ The applicants lived near Heathrow Airport and experienced significant daytime and night-time aircraft noise emissions. As we have observed in the data, the chamber judgment coincides with the significant spike in applications filed and violations found. Initial reactions to the judgment were generally positive and welcoming in legal scholarship, but as with *López Ostra*, there are reasons for doctrinal scepticism.⁴⁷

The chamber judgment initially found a violation of Article 8 ECHR through the government’s failure to strike a fair balance between the rights of the applicants and the economic interests of the state.⁴⁸ The chamber concluded that while it was likely that ‘night flights contribute to a certain extent to the national economy as a whole, the importance of that contribution has never been assessed critically, whether by the Government directly or by independent research on their behalf.’⁴⁹ Mere assertions of economic significance on its own were insufficient to justify the interference, as was a 1993 scheme to mitigate the impact of noise pollution. A secondary violation of Article 13 was found due to the limited recourse of applicants to challenge government decisions in domestic courts.⁵⁰

A majority of the Grand Chamber (12-5) overturned the finding of a violation under Article 8, citing the margin of appreciation, while upholding the ruling with respect to Article 13. In part this decision was reached because the Grand Chamber found that affected applicants were in a position to move without financial loss: the housing prices had apparently remained stable despite their proximity to the airport.⁵¹ The Grand Chamber ruling was criticised as a major step backwards from the chamber ruling in a joint dissenting opinion and in legal scholarship.⁵² From a modern doctrinal perspective, especially the discussion of the appropriate margin of appreciation by the Grand Chamber appears peculiar.

⁴⁵ *Hatton and others v United Kingdom* App no 36022/97 (ECtHR, 2 October 2001).

⁴⁶ *Hatton and others v United Kingdom* App no 36022/97 (Grand Chamber, 8 July 2003).

⁴⁷ Harry Post, ‘Hatton and Others: Further Clarification of the ‘Indirect’ Individual Right to a Healthy Environment’ (2002) 2 Non-State Actors and International Law 259.

⁴⁸ *Hatton and others v United Kingdom* (n 45) [107].

⁴⁹ *ibid* [102].

⁵⁰ *ibid* [116].

⁵¹ *Hatton and others v United Kingdom* (n 46) [127].

⁵² Jeremy Hyam, ‘Hatton v United Kingdom in the Grand Chamber: One Step Forward, Two Steps Back?’ [2003] European Human Rights Law Review 631.

The Grand Chamber invoked the case of *Dudgeon*,⁵³ the decision holding the criminalisation of homosexuality in Northern Ireland contrary to Article 8 ECHR, to muse on whether the intimacy of night-time sleep called for a narrower margin of appreciation than the subject matter of environmental policy would otherwise suggest.⁵⁴ It found that ‘the sleep disturbances relied on by the applicants did not intrude into an aspect of private life in a manner comparable to that of the criminal measures considered in *Dudgeon* to call for an especially narrow scope for the State's margin of appreciation.’

This comparison with *Dudgeon* was ostensibly relevant to the Grand Chamber because it viewed itself in a subsidiary role with respect to respondent states on matters of policy and found ‘intimacy’ of infringements a compelling standard.⁵⁵ This results in the application of the margin of appreciation to determine whether a violation of the Convention has occurred, specifically at the justification stage. At least this is a reasonable inference, leaving to one side some contradictory statements in the earlier sections of the ruling.⁵⁶ Thus understood, the margin of appreciation in effect grants the respondent state greater flexibility in justifying infringements: even when factual claims invoked to justify an interference, such as the economic benefits claimed in *Hatton*, are not substantiated. This is problematic in at least three respects, which go some way to explaining the limited doctrinal impact of *Hatton* on subsequent environmental cases.⁵⁷

First, there is a point on consistency. The margin of appreciation outlined by the Grand Chamber suggests a departure from ordinary rules of evidence. The Court typically requires substantiation and an evidentiary basis for assertions from both applicants and states, particularly with respect to the elements of a convention infringement and grounds for justification.⁵⁸ In *Hatton*, the Grand Chamber instead appears to use the margin of appreciation to loosen the evidentiary requirements to a point where it was content with mere assertions as to the importance of night time flights for the economic well-being of the UK.

⁵³ *Dudgeon v United Kingdom* App no 7525/76 (ECtHR, 22 October 1981) [criminalisation of homosexuality].

⁵⁴ *Hatton and others v United Kingdom* (n 46) [102] and [103].

⁵⁵ *ibid* [123].

⁵⁶ *ibid* [99] – [100], where it is discussed together with the scope of Article 8 ECHR, thereby implying the margin of appreciation applies to the scope of the Convention right.

⁵⁷ The margin of appreciation is of questionable consistency and merit, see George Letsas, ‘Two Concepts of the Margin of Appreciation’ (2006) 4 *Oxford Journal of Legal Studies* 705.

⁵⁸ Tobias Thienel, ‘The Burden and Standard of Proof in the European Court of Human Rights’ (2007) 50 *German Yearbook of International Law* 543, 563.

Second, there is a point of principle. The margin of appreciation conceived by the Grand Chamber lowers the protection afforded to individuals: the greater the margin of appreciation, the freer the respondent state is to engage in actions that would otherwise constitute violations of rights.⁵⁹ This margin of appreciation is in tension with the protection regime of the Convention, because safe for derogations under Article 15 ECHR, states cannot legally act contrary to Convention rights. The Grand Chamber in *Hatton*, it would appear, expanded the grounds for permissible violations significantly through the margin of appreciation.

Beyond these two points of consistency and principle, the key defect of the Grand Chamber decision is that it declines to provide any specific guidelines for applying the margin of appreciation: the reader is left only with vague references to ‘general policy’ that supposedly justify a more generous margin, and the ‘intimacy’ of a protected right and interference that may require a narrower margin.⁶⁰ On this basis, one can only guess what – if any – questions the Court might consider as not falling into the realm of its broad understanding of policy, what principles guide the determination of an ‘intimate’ interference, and why night time sleep is less ‘intimate’ than sexual preferences, much less which principled metric was employed to make this determination. As we shall see, this peculiar approach to the margin of appreciation advanced by the Grand Chamber in *Hatton* has been largely ignored in the modern doctrinal approach to environmental cases.

4.4. Modern doctrine in environmental cases

In its modern doctrinal approach to environmental degradation, the Court no longer primarily relies on the margin of appreciation doctrine when evaluating whether state action constitutes a violation of the Convention, especially with respect to Article 8 ECHR. The Court still invokes the concept, but the peculiar criteria mooted by the Grand Chamber in *Hatton* were not adopted. The margin of appreciation is now most often invoked to justify the Court’s reliance on the factual assessment of state entities (barring evidence to the contrary), especially with respect to compliance with domestic environmental regulations and deference to the state on appropriate remedies for violations. This still entails difficulties, as both of these questions can impact the scope of protection offered under the Convention, but it is less controversial. The contemporary approach is thus significantly less lenient on infringements of rights and

⁵⁹ George Letsas, ‘Two Concepts of the Margin of Appreciation’ (n 57).

⁶⁰ *Hatton and others v United Kingdom* (n 46) [100] – [103].

justifications invoked by the state. Indeed, a holistic account of the case law demonstrates that Article 8 ECHR has been moulded into a de facto right to health, and that a myriad of cases jointly contributed to the modern doctrine. The hallmarks of this modern approach are the:

- (1) broad scope of application,
- (2) absence of a requirement that applicants demonstrate a direct causal link between an environmental degradation and a detriment to their health, including taking possible future harm into account,
- (3) limited connection required to an applicant's private and family life, and
- (4) low minimum threshold required to engage Article 8 ECHR.

The subject matters that fall within the scope of Article 8 ECHR are broad owing to a wide interpretation through the Court: it has determined that a final and complete definition of 'private life' is not possible.⁶¹ Apart from protecting individuals from infringements through the state, the provision also contains positive obligations. These require the state to take appropriate measures to safeguard Article 8 rights from infringements by third parties.⁶² Especially with respect to dangerous activities, states must put in place a regulatory framework that is adapted to specific activities and alleviates the risks they produce.⁶³

An important contribution of *López Ostra* to the modern doctrine is an express recognition that Article 8 does not necessarily require the applicants to demonstrate a direct causal link between the environmental degradation and a detriment to their health.⁶⁴ This may at first appear odd given a right to health and the usual requirement to prove a case beyond reasonable doubt. However, it is notoriously difficult and at times impossible to demonstrate that a specific health

⁶¹ See *Van Kück v Germany* App no 35968/97 (ECtHR, 12 June 2003) [69]; *PG and JH v United Kingdom* App no 44787/98 (ECtHR, 25 September 2001) [56].

⁶² This is settled case law, see *W v United Kingdom* App no 9749/82 (ECtHR, 9 July 1988) [60], more recently, *Schüth v Germany* App no 1620/03 (ECtHR, 23 September 2010) [55]; on environmental degradation, see the instructive case of *Arrondelle v United Kingdom* (n 13); *Baggs v United Kingdom* (n 13); *Guerra v Italy* (n 43) [58] and *Hatton and others v United Kingdom* (n 46) [98].

⁶³ *Bacila v Romania* App no 19234/04 (ECtHR, 30 March 2010) [61]; *Öneryildiz v Turkey* App no 48939/99 (Grand Chamber, 30 November 2004) [90].

⁶⁴ This is settled case law, see *López Ostra v Spain* (n 2) [51]; *Taskin and others v Turkey* App no 46117/99 (ECtHR, 10 November 2004); *Fägerskiöld v Sweden* App no 37664/04 (ECtHR, 26 February 2008) [1]; more recently see *Maempel and Others v Malta* App no 24202/10 (ECtHR, 22 November 2011) [36] and *Koceniak v Poland* App no 1733/06 (ECtHR, 17 June 2014) [57].

condition was caused by a specific environmental degradation.⁶⁵ Therefore, this rule of the Court is best understood as re-distributing the evidentiary burden between the individual and the state. The Court allows applicants to bring cases based on a reasonable hypothesis of harm which may be satisfied through future harm in some cases, particularly where the potential consequences are serious and irreversible.⁶⁶ This means applicants may be successful if they can demonstrate (1) an existing environmental degradation that is (2) generally linked through reasonable scientific evidence to (3) a present (or potential future) health condition in the applicant. Where these requirements are met, the Court effectively operates on a rebuttable presumption that the health condition was (or will be) caused by the environmental degradation and does not require evidence of a direct causal link in the individual case.⁶⁷

In order to engage Article 8 ECHR, the Court further requires some connection of the health condition to family and private life, although this is rarely decisive to a case. This is because once a health condition is established that is linked to an environmental degradation through a reasonable hypothesis, it becomes difficult to imagine how this would not in some way impact the private and family life. Indeed, a multitude of cases exist where the connection to the family and private life has been tenuous, but the Court found no difficulty moving to the justification stage.⁶⁸ A good example is the case of *Brincat and others v. Malta*.⁶⁹ The applicants worked in a state-owned shipyard and were exposed to asbestos at their workplace for decades during their employment from 1950-2000. Their employers had failed to ensure that the health and safety standards for workers reflected the dangers, and instead assured them that ventilation and fabric masks provided sufficient protection.⁷⁰ Following the death of a colleague, the applicants underwent tests to determine whether they showed signs of a malignant cancer linked to asbestos exposure (mesothelioma).⁷¹ The results showed extensive asbestos fibres in their lungs and while the applicants all suffered from respiratory problems, none of the

⁶⁵ *Asan and others v Turkey* App no 56003/00 (ECtHR, 31 July 2007) [69]; *Avsar v Turkey* App no 25657/94 (ECtHR, 10 July 2001) [282]; *Ireland v United Kingdom* App no 5310/71 (ECtHR, 18 January 1978) [161]; *Cyprus v Turkey* App no 25781/94 (Grand Chamber, 10 May 2001) [112].

⁶⁶ *Taskin and others v Turkey* (n 64) [113] and [126].

⁶⁷ See for instance, *Fadeyeva v Russia* App 55723/00 (ECtHR, 9 June 2005) [45]; *Ledyayeva and others v Russia* App no 53157/99; 53247/99; 53695/00; 56850/00 (ECtHR, 26 October 2006) [95] and [100]; *Bacila v Romania* (n 63) [63]; *Grimkovskaya v Ukraine* (n 44) [60] and [61]; *Brincat and others v Malta* App no 60908/11; 62110/11; 62129/11; 62312/11; 62338/11 (ECtHR, 24 July 2014) [83]-[85].

⁶⁸ From the case law, see *G and E v Norway* (n 33) [indigenous farm land]; *Andersson and others v Sweden* (n 21) [use of cyanide in a mining operation].

⁶⁹ *Brincat and others v Malta* (n 67).

⁷⁰ *ibid* [11].

⁷¹ *ibid* [12].

survivors were diagnosed with malignant mesothelioma. The Court therefore rejected the applications under Article 2 ECHR (Right to Life) but had no trouble in finding violations of Article 8 ECHR.

Finally, the Court requires that both the environmental degradation and resulting harm rise above a certain minimum threshold.⁷² The requirement is not further specified in most decisions, with the Court stating only that ‘[t]he assessment of that minimum is relative and depends on all the circumstances of the case, such as the intensity and duration of the nuisance, and its physical or mental effects.’⁷³ While this may appear as a principle advocating a case by case analysis, on a broader view certain patterns begin to emerge. The threshold is typically used by the Court to exclude more remote applications, for instance in cases that challenge harm caused by light reflections.⁷⁴ Nonetheless, the Court will hold Article 8 engaged when there is at least some evidence on the harmfulness of an environmental degradation (mostly on the health of applicants) and almost invariably when authorities fail to uphold domestic environmental regulations and court rulings.⁷⁵ In practice, the threshold is hence rarely decisive because the overwhelming majority of applicants make credible claims of serious harm to their health through environmental degradation.

5. CONCLUSION

As we have seen the airport noise emission cases laid important groundwork for the decision in *López Ostra*. They set the precedent for three important principles that later formed the foundation for the decision in *López Ostra*: (1) environmental degradation may constitute an infringement of the Convention, (2) states can be held responsible for the environmental degradation caused by third parties under their regulatory control, and (3) Article 8 ECHR is particularly relevant to evaluating environmental degradation under the Convention.

The innovations and significance ascribed to *López Ostra* appear more ambivalent given the doctrinal context. There is of course sufficient scope for reasonable disagreement on this point,

⁷² This is settled case law, see *Fadeyeva v Russia* (n 67) [68-9]; *Fägerskiöld v Sweden* (n 64) [1]; *Borysiewicz v Poland* App no 71146/01 (ECtHR, 1 July 2008) [51]; more recently *Koceniak v Poland* (n 64) [58].

⁷³ *Gaida v Germany* App no 32015/02 (ECtHR, 3 July 2007) [1]; this is settled case law, see *Fadeyeva v Russia* (n 67) [68] – [69]; *Fägerskiöld v Sweden* (n 64) [1]; *Borysiewicz v Poland* (n 72) [51]; more recently *Koceniak v Poland* (n 64) [58].

⁷⁴ *Fägerskiöld v Sweden* (n 64).

⁷⁵ *Gaida v Germany* (n 74), 11; this is settled case law: *Moreno Gomez v Spain* App no 4143/02 (ECtHR, 16 November 2004) [57] – [58]; *Oluic v Croatia* App no 61260/08 (ECtHR, 20 May 2010) [48] – [49]; *Deés v Hungary* App no 2345/06 (ECtHR, 9 November 2010) [23].

especially with respect to the significance for the modern of Article 8 ECHR. The article offers an updated assessment that better accounts for the available data and doctrinal evidence. However, it does not claim to authoritatively settle the question of significance for all intents and purposes. Nonetheless, it demonstrates that considering only a limited sample of cases when conducting doctrinal research can and should be avoided through an updated methodology. Otherwise, we risk narrowing attention to a small set of rulings and obscure other decisions that may be crucial to a complete picture of the law.

In this sense, the question arises whether the suggested methodology and cautionary tale of this article reaches beyond the context of environmental human rights cases and the ECHR. This is a difficult question to answer without having first done the necessary data analysis. Certainly, there are some features of this dataset that are idiosyncratic: there is a comparative dearth of cases from domestic and international courts compared to other legal fields and many cases date back to a pre-internet and legal database age. In legal scholarship and courtrooms, this has certainly enhanced the relevance of a smaller group of cases and made it easier for them to achieve greater prominence.

Especially since the climate change conference in Kyoto and the heightened environmental awareness of the 1990s it has become fashionable for environmental law scholarship to call for at times radical departures from established legal categories and principles.⁷⁶ Indeed it may well be necessary for the law to evolve more swiftly to meet the crucial challenges that climate change presents. However, it does risk a convergence on scholarly views that emphasise the potential, rather than the limitations of court rulings. That danger may be more acute in a comparatively small field with fewer court rulings and active scholars, but is in my view by no means unique to environmental human rights. As we have noted, the idea of landmark decisions is ubiquitous in law and often cases may take on a level of significance that is not justified on closer examination. The capabilities of legal databases and data analysis have as yet not been integrated into doctrinal methods across a wide range of legal fields.

Legal scholarship should therefore welcome the fresh perspectives and the increased rigour that data can offer. It permits a greater awareness of preceding cases and allows for a wider evaluation of enduring impact. In an age where courts like the ECtHR routinely issue tens of

⁷⁶ See for instance, Jorge E Viñuales, 'Law and the Anthropocene' [2016] C-EENRG Working Papers 1, 13; Massimiliano Montini, 'The double failure of environmental regulation and deregulation and the need for ecological law' [2016] C-EENRG Working Papers 1; Carol A Casazza Herman and others, 'Breaking the Logjam: Environmental Reform for the New Congress and Administration' (2008) 17 NYU Env'tl LJ 1.

thousands of decisions annually it appears inadequate to base doctrinal analysis exclusively on what has been deemed significant by a majority of scholars and judges on the basis of a limited sample.⁷⁷ At the same time, comprehensively engaging with all cases, even if limited to specific subject matters, goes beyond the capacity of legal scholarship and neglects the core mission of doctrinal work: to carefully analyse *relevant* rulings in order to extract underlying legal rules and principles. Gathering data and combining it with doctrinal analysis holds the promise of squaring this particular circle. This exercise may well confirm widely held views on the relevance and significance of particular cases, or it may chip away at a dominant view that perhaps crystalized prematurely. In this sense, both data and doctrinal analysis complement one another, and an approach relying exclusively on either one is by definition deficient.

If this appears at all controversial, then it should not. The article merely systematises and updates the methodology employed in sound doctrinal scholarship for centuries: engaging with all available cases, determining the ones that are relevant and unearthing from that sample the cases that are important for a particular legal question while not blindly focusing on those already lavished with attention. This approach is the hallmark of research that does not content itself with second hand assessments and instead turns to all relevant cases to independently appraise the law. The new methodology developed here can yield surprising insights, especially when adopted with a healthy level of scepticism both towards convergences of scholarly opinion and pronouncements of doctrinal revolutions.

⁷⁷ The ECtHR issued approximately 42,761 decisions and judgments in 2018, see *European Court of Human Rights - Annual Report 2018* (2019) <https://www.echr.coe.int/Documents/Annual_report_2018_ENG.pdf> accessed 1 October 2019, 167.

6. APPENDIX: METHODOLOGY

Joined decisions	<p>The automated analysis has an important limitation when dealing with joint decisions. Joint decisions arise when Convention entities join multiple applications into one decision, usually because they deal with similar factual circumstances and questions of law involving the same respondent state. This affects the figures and the underlying data analysis in two important ways.</p> <p>First, we require a justification for selecting amongst multiple possible filing dates when calculating the median time from initial application to final decision. With respect to joint decisions, the question arises which year should be relevant if the applications arise from different years: the article has opted for the earliest filing year of a joint decision as the decisive one.</p> <p>Second, joint decisions necessitate a caveat on the number of violations given in Figure 1. The analysis does not separately account for each application covered by a joint decision. This means that the number of violations may in fact be higher than stated, depending on the number of initially distinct applications joined and the specific findings and grounds of a violation found by the Court. To illustrate, suppose that five individual applications are filed against the same respondent state regarding largely similar subject matters. These applications are initially admitted separately, but later joined by the Court. The Court then finds a violation of Article 8 ECHR in three, but not all five applications. The dataset would record this information as follows: five applications filed and one decision issued, both accurate, but only one violation found. The latter is incorrect as there were in fact three violations and thus the number of violations is understated by two.</p> <p>Accounting correctly for distinct conclusions on violations in joint decisions goes beyond the capabilities of the automated data analysis methodology currently employed here. It remains possible to manually account for distinct findings, but integration into the automated analysis has proven difficult and as yet remains an</p>
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	<p>unresolved issue. That being said, instances of joined applications in the dataset are comparatively rare affecting 13 out of 168 decisions. Moreover, the Court only found a violation in eight of these decisions, therefore the divergences in the dataset are minimal. Nonetheless, I hope to remedy this discrepancy in the future.</p>
Cases with no mention of filing date	<p>Where a decision does not give the filing date of the application, this was substituted with an estimate. The filing date was estimated as falling on the 1 January of the year given in the final two digits of the application number.</p> <p>For instance, the filing date for the application number 7407/76 (X and Y v. Germany) is estimated as 1 January 1976 using this method. This approach may in extreme cases result in an error of 364 days, if the actual filing date was in fact 31 December 1976.</p> <p>However, given that the number of affected cases without a missing filing date is low (8 out of 173 applications, less than 5%), these cases are unlikely to significantly alter the median time from initial application to final decision. The cases with a missing filing date were: 7407/76 (X and Y v. Germany); 9234/81 (Weltbund zum Schutze des Lebens eV v. Germany); 9515/81 (X v. United Kingdom); 13728/88 (S v. France); 14563/89 (M v. Italy); 28204/95 (Tauria v. France); 46346/99 (Noak and others v. Germany); 9310/81 (Baggs v. United Kingdom).</p>
Figure 1 – Number of cases and violations per year in category one	<p>The figure presents the total number of environmental cases filed, applications decided and the number of violations found in category one cases per year from 1960 to 2013. The years between 1960 and 1974 are omitted to shorten the represented timespan, as no environmental cases arose in those years. The values given for ‘n’ indicates the sample size represented in the figure.</p>
Figure 2 – Number of environmental applications per annum	<p>The figure represents the number of environmental applications filed in category one per thousand applications filed overall per annum from 1993 to 2013. The number of total applications filed is based on the annual reports of the ECtHR, which are available from 1985 onwards.</p>

Figure 3 – Development of total number of applications filed per year	The figure represents the total number of applications filed per year in thousands pursuant to the annual reports of the European Court of Human Rights from 1985 to 2013. The figures are based on those given in the annual reports of the ECtHR.
Figure 4 – Number of decisions that refer to López Ostra	The figure represents the number of decisions that make at least one reference to the decision, whether approving, disapproving or neutral, as well as the number of environmental cases decided overall and the number of violations found in a given year from 1994–2013. The references made to López Ostra were mapped out in the dataset through successive full text search of the application number and the word ‘Ostra’ in all the judgments in the dataset. Every positive result was then manually examined to confirm that reference was indeed made to López Ostra. Upon confirmation, the application number of the decision was recorded in the dataset in a separate column.
Figure 5 – Number of decisions that refer to López Ostra, Hatton and Guerra	The Figure represents the number of decisions that make at least one reference to the decisions in López Ostra, Hatton and Guerra whether approving, disapproving or neutral in a given year from 1994 to 2013. It employs the same methodology as in Figure 4.

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