

Law Will Find A Way: Legal Research at the Intersection with Palaeontology

Paul P. Stewens¹, Nussaibah B. Raja, Emma M. Dunne

Fossils, the remains of dinosaurs and other extinct creatures, are not an evident concern for legal scholars. Upon closer consideration, however, it becomes apparent that there is a broad range of pressing legal issues that relate to the extraction, transfer, and ownership of palaeontological objects. This contribution outlines Law and Palaeontology as a field of research that applies a material approach and studies legal issues that relate to fossils. A number of examples and case studies illustrate the diversity of legal fields one can draw on for this: among them colonial looted fossils, the environmental law implications of the trade in mammoth ivory, and the legality of excavations in occupied Crimea under international humanitarian law. The relevance of these issues has so far been disproportionate to the little attention Law and Palaeontology has received. In the absence of legal expertise from debates in palaeontology, a culture of disregard for the law continues to thrive. The considerable demand in palaeontology for legal researchers to, *inter alia*, weigh in, to review the provenance declarations of studies on foreign fossils, to contribute research methodologies, and to assist collections to meet their due diligence obligations is far from being met. Therefore, legal researchers should consider Law and Palaeontology as a highly visible, versatile, interdisciplinary, and policy-relevant field of research that would develop legal expertise sorely needed in palaeontology.

Keywords: Law and Palaeontology – palaeontology – fossils – interdisciplinarity

A. . Introduction

Steven Spielberg's 1993 movie *Jurassic Park* has become a staple of modern popular culture. In the film about a theme park populated with cloned

1 The author thanks Gina Manitta for the enlightening exchanges about international humanitarian law.

dinosaurs, three scientists are asked for their professional opinions on the project. One of them, mathematician Dr Ian Malcom, is appalled by the idea of having this kind of control over nature. In his view, life cannot be contained in the way that Jurassic Park attempts. Dr Malcolm condenses his anxiety into one famous formula: “Life will find a way.”

Fast forward to 2018. The U.S. District Court for the Northern District of Texas hears a case on an order of forfeiture for a Mongolian dinosaur skull. Statute of limitations issues are at the heart of the dispute. In a footnote, the judge notes: “Ironically, though Defendant Bataar Skull presumably sat undisturbed in the Nemegt Basin for millions of years, the current disagreement seems to hinge on the Court’s interpretation of actions taking place over a period of just 14 days. But law will find a way. Cf. Michael Crichton, *Jurassic Park* (1990).”²

This provides a first illustration of the odd friction that we can often observe when the law is confronted with dinosaurs.³ Here, such an encounter led a judge to make an ironic remark and even cite a work of popular culture without any substantive bearing on the decision at hand. Tracing such interactions takes us to an odd corner of the law. It is one that only becomes visible if one focuses not on principles, not on doctrines, norms, concepts—but on *material objects*.⁴ Going through a ‘dinosaur phase’ as a child is as common as ‘growing out’ of dinosaurs and other extinct creatures relatively soon afterwards.⁵ Nonetheless, their fossilised remains can fascinate legal scholars in a broad range of ways.

The palaeontological community itself is growing increasingly sensitive to legal issues—mostly as a result of both palaeontologists and journalists drawing attention to illicit fossil trafficking on social media⁶ and in several high-profile news media⁷. The recent example of the Brazilian dinosaur

2 *United States v. One Fossilized Tyrannosaurus Bataar Skull*, 365 F. Supp. 3d 759 (N.D. Tex. 2018).

3 Donna Yates, ‘Creative Compliance, Neutralization Techniques, and Palaeontological Ethics’, 11 *The Geological Curator* (2022) 428.

4 For an object-based approach to international law see: Jessie Hohmann and Daniel Joyce, ‘Introduction’, in Jessie Hohmann and Daniel Joyce (eds.), *International Law’s Objects* (2017) 1.

5 W. J. T. Mitchell, *The Last Dinosaur Book: The Life and Times of a Cultural Icon* (1998), at 232.

6 Juan Carlos Cisneros et al., ‘Digging Deeper into Colonial Palaeontological Practices in Modern Day Mexico and Brazil’, 9 *Royal Society Open Science* (2022) 210898.

7 Rodrigo Pérez Ortega, ‘Retraction Is ‘Second Extinction’ for Rare Dinosaur’, 374 *Science* (2021) 14; ‘Research on Amber from a War-Torn Part of Myanmar Is Surging’, *The*

“*Ubirajara jubatus*,” smuggled into Germany and eventually repatriated,⁸ has become an international icon of problematic research practices in the field. Similarly, legal and ethical issues around fossils in amber from Myanmar have divided the palaeontological community: between those that are pushing for stricter policies to curtail continued extraction of—and even research on—this material⁹ and those who vehemently proclaim that knowledge production should outweigh ethical and legal concerns, even in the face of war and a humanitarian crisis¹⁰. Several other regions and countries in the world have also suffered a drain of fossil resources through illicit channels, not only for research but also for commercial purposes, such as adorning the mantelpieces of celebrities and the ultra-wealthy.¹¹

Despite being a long-established discipline centred around fossil collecting, the training of most modern palaeontologists does not focus on adequate and responsible navigation of the legal issues related to the extraction and international transfer of fossils. If at all, junior researchers might encounter such issues when preparing for their first fieldwork in a jurisdiction that protects its fossil heritage by law. Others might simply ignore foreign legislation—out of ignorance or naïvety, or even consciously and vocally.¹² Such behaviour creates a culture of lawlessness that not only impoverishes source countries but also harms science.¹³

Against this backdrop, our contribution outlines Law and Palaeontology as a field of study that considers the legal issues that relate to the extraction,

Economist (2022), available at <https://www.economist.com/graphic-detail/2022/09/22/research-on-amber-from-a-war-torn-part-of-myanmar-is-surgin>.

8 Meghie Rodrigues, 'Prized Dinosaur Fossil Returned to Brazil after Controversy', *Nature* (2023).

9 Emma M. Dunne et al., 'Ethics, Law, and Politics in Palaeontological Research: The Case of Myanmar Amber', 5 *Communications Biology* (2022) 1.

10 Joachim T. Haug et al., 'Comment on the Letter of the Society of Vertebrate Paleontology (SVP) Dated April 21, 2020 Regarding "Fossils from Conflict Zones and Reproducibility of Fossil-Based Scientific Data": Myanmar Amber', 94 *Paläontologische Zeitschrift* (2020) 431.

11 Nussaibah B. Raja and Emma Dunne, 'Fossil Trafficking, Fraud, and Fakery', in Donna Yates and Naomi Oosterman (eds.), *Art Crime in Context* (2022) 61.

12 Consider, for example, palaeontologist Dave Martill who, after facing criticism about the legal provenance of a Brazilian fossil which he studied, declared: 'Personally I don't care a damn how the fossil came from Brazil or when': Sid Perkins, *Four-Legged Snake Fossil Stuns Scientists—and Ignites Controversy*, 23 June 2015, available at <https://www.science.org/content/article/four-legged-snake-fossil-stuns-scientist-s-and-ignites-controversy>.

13 Juan C. Cisneros et al., 'The Moral and Legal Imperative to Return Illegally Exported Fossils', *Nature Ecology & Evolution* (2021).

transfer, and ownership of palaeontological objects. Through case studies, we highlight the diversity of legal fields under which questions related to palaeontology arise, and we discuss both the need for legal expertise in palaeontology as well as the promises of interdisciplinary research in this emerging field.

B. Case Studies

The following case studies illustrate the diverse legal questions that arise with respect to fossils. The constraints of this piece do not permit us to provide a comprehensive legal analysis of the respective phenomena. Instead, we hope to showcase examples of both past and potential research in Law and Palaeontology in order to highlight the versatility of an object-based approach and to provide points of departure for future research.

I. International Human Rights Law: The Return of Fossils Removed Under Colonial Rule

Debates about the restitution of colonial looted artefacts have strongly proliferated and attracted considerable public attention in past years. In Germany, they have centred around the Benin Bronzes, many of which have recently been returned to Nigeria.¹⁴ A less known dimension of this issue is the considerable number of fossils removed under colonial rule, often in connection with extraction through mining. A prominent German example is the Tendaguru dinosaurs. Between 1909 and 1913, over 250 metric tons of fossil material were excavated in modern-day Tanzania near Tendaguru mountain and transferred to Berlin. Some of these bones now make up the centrepiece dinosaur exhibit at the *Museum für Naturkunde*.¹⁵

Seeking legal redress for colonial injustices is often complicated by the principle of intertemporal law. In the field of cultural property restitution, it is often argued that removals in colonial times were not illegal, which is

14 Deutsche Bundesregierung, *Rückgabe der ersten Benin-Bronzen*, 21 December 2022, available at <https://www.bundesregierung.de/breg-de/suche/rueckgabe-benin-bronzen-2155038>.

15 Ina Heumann et al. (eds.), *Dinosaurierfragmente: Zur Geschichte der Tendaguru-Expedition und ihrer Objekte, 1906-2018* (2018).

why they cannot give rise to a return claim in the present. This obstacle has brought about an alternative approach based on the right to participate in cultural life,¹⁶ which has been developed into a right to access cultural heritage. Instead of focusing on the (il-)legality of the takings, the approach conceptualises the refusal to return cultural objects as an ongoing human rights violation.¹⁷

Applying this approach to fossils requires addressing issues which, *inter alia*, relate to the extraterritoriality and justiciability of ESC rights and the question of standing, or who (if anyone) can claim a fossil as their cultural heritage. Equally pressing is the question of the human nexus, or how close a fossil must be to humankind in order to be covered by Art. 15(1)(a) ICESCR. In any case, there is both a lot of space and a lot of need for creative legal thinking in order to help law find a way to address past and ongoing inequities.¹⁸

II. Environmental Law: The Trade in Mammoth Ivory

Siberia's permafrost is thawing, with multiple worrying implications ranging from the displacement of Indigenous groups to the release of huge quantities of carbon dioxide.¹⁹ Another side effect is the discovery of an increasing number of woolly mammoths, conserved in a frozen state for thousands of years—often with their tusks. When cut down into pieces, it is difficult to distinguish mammoth ivory and elephant ivory, making the former an equally precious material. Indeed, people in the economically deprived region of Yakutia (Russia) depend on 'hunting' mammoth tusks to sell to Chinese buyers as a kind of 'fossil cash crop.' Tusk hunters often use intrusive techniques, digging tunnels into the permafrost and using large

16 Art. 15(1)(a) of the International Covenant on Economic, Social and Cultural Rights of 19 December 1966 (entry into force: 3 January 1976), 993 UNTS 3.

17 Evelien Campfens, 'The Bangwa Queen: Artifact or Heritage?', 26 *International Journal of Cultural Property* (2019) 75.

18 An in-depth discussion of these questions is provided in: Paul P. Stewens, Nussaibah B. Raja and Emma M. Dunne, 'The Return of Fossils Removed Under Colonial Rule', 8 *Santander Art and Culture Law Review* (2022) 89.

19 *If You're Not Thinking about the Climate Impacts of Thawing Permafrost, (Here's Why) You Should Be*, 30 January 2022, UN News, available at <https://news.un.org/en/story/2022/01/1110722>.

water hoses to flush out fossils,²⁰ thus contributing to the destruction of the permafrost—a little studied issue from an environmental law perspective in itself.

Another key issue is elephant conservation. Some see mammoth ivory as a “cruelty-free alternative to elephant ivory”²¹, while others are less optimistic. They fear that mammoth ivory “is instead sustaining the market’s appetite for [elephant ivory].”²² An additional concern is the possibility of elephant ivory being passed off as mammoth ivory, thus ‘laundering’ it. This is a function of the highly fragmented legislation on ivory across countries. While the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)²³ has led to a ban on the trade in elephant ivory in many countries, comprehensive prohibitions that also cover mammoth ivory are rare.²⁴ In 2016, Israel submitted a pertinent report to the Conference of Parties and proposed a draft resolution urging CITES parties to take measures to combat mammoth ivory trade. The Secretariat, however, refused to recommend the adoption of a resolution relating to an extinct species.²⁵

We are thus confronted with a complex regulatory issue, marked by considerable environmental stakes and complicated by the intricacies of tackling an illicit market. It is composed of harmful actions and their consequences taking place both at the local and the global level. Intrusive tusk mining in Yakutia, fostered by demand for ivory from abroad, potentially threatens elephant populations and contributes to environmental and

20 Pavel Toropov, *Mammoth Ivory: Curbs on the Siberian Trade May Be Good News for Elephants*, 1 June 2021, China Dialogue, available at <https://chinadialogue.net/en/nature/mammoth-ivory-curbs-on-the-siberian-trade-may-be-good-news-for-elephants/>.

21 Tammana Begum, *Why Woolly Mammoth Ivory Could Spell Trouble for Elephants*, 15 July 2021, available at <https://www.nhm.ac.uk/discover/why-woolly-mammoth-ivory-could-spell-trouble-for-elephants.html>.

22 Michael Price, 'Booming Trade in Mammoth Ivory May Be Bad News for Elephants', 378 *Science* (2022) 696.

23 Convention on International Trade in Endangered Species of Wild Fauna and Flora of 3 March 1973 (entry into force: 1 July 1975), 993 UNTS 243.

24 Exceptions include some U.S. states such as New York and New Jersey: Vladimir S. Luzan et al., 'History of World and Russian Mammoth Studies', *Journal of Siberian Federal University. Humanities & Social Sciences* (2020) 1163, at 1170.

25 CITES, Identification of elephant and mammoth ivory in trade, CoP17 Doc. 38 (13 June 2016). Equally unsuccessful was Israel’s proposal for an inclusion of the woolly mammoth in Annex II of CITES in 2019: CITES, Consideration of Proposals for Amendment of Appendices I and II, CoP18 Prop. 13.

cultural destruction. Effective regulation will only become attainable once conservationists, criminologists, and legal experts join forces.

III. International Humanitarian Law: Excavation of Fossils in Occupied Crimea

In 2018, a cave was discovered during the construction of a highway in Central Crimea.²⁶ Taurida Cave contained fossils from the time when modern humans first migrated into Europe: hyenas,²⁷ bears,²⁸ saber-tooth cats²⁹. Since this discovery, large amounts of fossil material have been extracted, transferred to Russia, and extensively studied and published on by Russian scientists, often even in international journals.³⁰

This raises not only ethical concerns but also a range of legal issues under the international humanitarian law (IHL) of occupation. First, we consider the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict.³¹ With regard to its material scope, it gives considerable leeway to parties in their designation of what has “great importance to the cultural heritage of every people” in good faith.³² Ukrainian legislation on cultural property protection does contain provisions that regulate the excavation³³ and transfer³⁴ of palaeontological objects, so applying the Convention to the fossils from Taurida Cave seems reasonable.

26 A. V. Lopatin et al., 'The Taurida Cave, a New Locality of Early Pleistocene Vertebrates in Crimea', 485 *Doklady Biological Sciences* (2019) 40.

27 A. V. Lavrov et al., 'Giant Hyena *Pachycrocuta Brevirostris* (Hyaenidae, Carnivora) from the Lower Pleistocene of Taurida Cave, Crimea', 496 *Doklady Biological Sciences* (2021) 5.

28 Dmitry Gimranov et al., 'Ursus Etruscus from the Late Early Pleistocene of the Taurida Cave (Crimean Peninsula)', 35 *Historical Biology* (2023) 843.

29 A. V. Lavrov et al., 'Saber-Toothed Cats (Carnivora, Felidae, Machairodontinae) from the Lower Pleistocene of the Taurida Cave, Crimea', 495 *Doklady Biological Sciences* (2020) 272.

30 Some of these are published by renowned publishers such as Springer or Taylor and Francis.

31 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954 (entry into force: 7 August 1956), 249 UNTS 215.

32 Roger O'Keefe, *The Protection of Cultural Property in Armed Conflict* (2006), at 105 ff.

33 Art. 35(2) Law of Ukraine No. 1805-III on the Protection of Cultural Property of 8 June 2000.

34 Law of Ukraine No. 1068-XIV on Exportation, importation and restitution of cultural values of 21 September 1999.

Proposals to make excavations in occupied territory unlawful under the Convention or its Additional Protocol failed during the *travaux préparatoires*.³⁵ That both Art. 32 of the UNESCO Recommendation on International Principles Applicable to Archaeological Excavations and Art. 9 of the Second Additional Protocol³⁶ do contain such a prohibition indicates that these instruments close a gap in the Convention which “does not, on its face, include a prohibition on the conduct, sponsorship or authorisation of archaeological excavations by an Occupying Power”³⁷.

One might revert, however, to Art. 4(3) of the Convention, which requires Contracting Parties “to prohibit, prevent and, if necessary, put a stop to any form of theft, pillage or misappropriation [...] of cultural property”. The 1994 Subsoil Code of Ukraine³⁸ declares the part of the Earth’s crust below the active (organic) layer to be “the exclusive property of the Ukrainian people” (Art. 4). Materials extracted from it can only be acquired upon prior authorisation (Arts. 15 in conjunction with 20). There is little reason to believe that Russia consults Ukrainian authorities regarding excavations on Crimea, which would indicate that Russia violates its obligation under Art. 4(3) 1954 Hague Convention.

Second, the First Additional Protocol to the Convention³⁹ and customary international law⁴⁰ oblige Russia “to prevent the exportation, from a territory occupied by it during an armed conflict, of cultural property” (para. 1). The export of “cultural values of Ukraine” (such as discoveries made on Ukrainian territory) requires a permit.⁴¹ Since Russia does not consider Crimea as occupied Ukrainian territory but rather as part of the Russian Federation, it does not apply Ukrainian legislation, including provisions on the export of cultural property. That arguably makes not only the removal

35 Jan Hladík, 'Archeology in Conflict and UNESCO: Legal Aspects', 9 *Archaeologies* (2013) 4, at 5.

36 Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict of 26 March 1999 (entry into force: 9 March 2004), 2253 UNTS 172. Ukraine has been a party to this protocol since 2020 whereas the Russian Federation is not.

37 O’Keefe, *supra* note 32, at 138.

38 Code of Ukraine No. 132/94-BP on Subsoil of 27 July 1994.

39 Protocol for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954 (entry into force: 7 August 1956), 249 UNTS 358.

40 Jean-Marie Henckaerts, Louise Doswald-Beck and Carolin Alvermann (eds.), *Customary International Humanitarian Law* (2005), Rule 41.

41 Law of Ukraine No. 1068-XIV on Exportation, importation and restitution of cultural values of 21 September 1999.

of the fossils from Taurida Cave unlawful, but also their removal from Crimea. Russia's failure to apply Ukrainian legislation on cultural objects (incl. fossils), their ownership, export, excavations etc.⁴² furthermore violates its obligation as an Occupying Power to respect the local legislation of the occupied territory "unless absolutely prevented" from doing so (Art. 43 Hague Regulations⁴³).

Third, property as such enjoys a certain protection under occupation. Private property must not be confiscated (unless dictated by imperative military necessity) and public property may only be confiscated if it can be used for military operations.⁴⁴ Such a military exception is untenable with respect to fossils, which therefore may not be seized by an Occupying Power. For Russia to violate this obligation, however, the taking of the fossils would need to be imputable to it, and too little is known about how the excavations in Taurida Cave proceed(ed) to come to a definitive conclusion on attribution.

All this suggests that the excavation and removal of fossils in occupied Crimea violates IHL in several respects. This adds severe legal concerns to the ethical issues involved in studying and publishing on these fossils—all of which remain virtually unaddressed.

IV. An Intra-Disciplinary Field

The material, object-based approach of Law and Palaeontology thus creates immense potential for intra-disciplinary transgression. *Law and Palaeontology means: to follow the fossil with the eyes of a curious lawyer*, and to identify and study legal issues that arise along the way. When taken seriously, this approach will almost inevitably lead a researcher outside of the comfort zone of their specialisation, and to collaborate with legal researchers whose expertise is relevant to the issue one has encountered through a problem-oriented approach that transcends the confines of the legal field one specialises in.

42 O'Keefe, *supra* note 32, at 32, 340.

43 Convention (IV) Respecting the Laws and Customs of War on Land, and Its Annex: Regulations Concerning the Laws and Customs of War on Land of 18 October 1907 (entry into force: 26 January 1910), 2 *American Journal of International Law* 90.

44 Henckaerts, Doswald-Beck and Alvermann (eds.), *supra* note 40, Rule 51.

C. The Need for Legal Expertise in Palaeontology and the Promises of Interdisciplinary Research

These and other case studies highlight that palaeontology is operating within a vacuum of legal expertise. In the most extreme instances, certain palaeontologists have even advocated for breaking laws for the sake of science.⁴⁵ Many palaeontologists view their discipline as purely scientific in focus, leading them to, for instance, declare ethical issues “a difficult topic that many palaeontologists might think was better dealt with by philosophers and intellectuals”⁴⁶. Some further assert that fossils are entities that defy political borders and so should not be beholden to national and international laws.⁴⁷ However, developing and sustaining interaction between palaeontology and legal expertise will help to curb illegal and unethical practices, turning the tide on such harmful viewpoints.

In scientific publishing, there is a noticeable trend towards including provenance declarations in papers describing new fossils, particularly those that have become known in the palaeontological community as controversial.⁴⁸ These declarations, initiated and written by the authoring palaeontologists, supplement the prescribed content of a scientific paper. However, they often run the risk of becoming declarations of ‘non-illegality’ that try to argue that the respective specimen was not obtained in violation of the law, without confronting any ethical concerns *stricto sensu*.⁴⁹ The current absence of legal experts from such discussions leaves doubtful legal arguments unchallenged, and makes deferring to hypothetical but absent ‘intellectuals’ and lawyers an effective strategy for palaeontologists to get away with unethical and/or illegal research practices.

At the same time, editorial boards composed of scientists are typically ill-equipped to ensure an acceptable standard of rigour as far as such declarations are concerned. Very few journals provide guidance on these statements, yet fewer on what they expect in legal terms when it comes to

45 Dave Martill, ‘Why Palaeontologists Must Break the Law: Polemic From an Apologist’, 10 *The Geological Curator* (2018) 641.

46 John Martin, ‘Dodgy Fossils: International Legislation and the Meaning of ‘Cultural Property’’, 10 *The Geological Curator* (2018) 607, at 610.

47 Martill, *supra* note 45.

48 See above, Introduction.

49 Consider as an example the ‘Ethics Statement’ in: Marco Schade et al., ‘A Reappraisal of the Cranial and Mandibular Osteology of the Spinosaurid Irritator Challengeri (Dinosauria: Theropoda)’, 26 *Palaeontologia Electronica* (2023) 1.

studies on fossils from abroad. Currently, these statements are accepted by the community at face-value as correct unless challenged post-publication. Interdisciplinary collaboration between palaeontologists and legal experts is already leading to changes in some journals' editorial policies, including more rigorous reporting structures for provenance and acquisition.⁵⁰ Continued input from legal experts could help editorial policies become more rigorous, substantial, and even standardised across the discipline, further fuelling increasing demand for legal expertise.

Moreover, museums must act with due diligence when acquiring new fossils.⁵¹ This expressly extends to their legal provenance. Complying with this obligation will, however, often prove difficult for museums if there are no experts in Law and Palaeontology for them to consult. Museums also often house fossils of dubious—or even unknown—provenance. The resolution of the case of “*Ubirajara jubatus*” benefited from moral arguments being supplemented with legal ones,⁵² which ultimately resulted in the specimen being repatriated. Arguably, the same will hold true for the current controversy around *Irritator challengeri*, a Brazilian fossil housed in Stuttgart which shares many characteristics of the *Ubirajara* dispute.⁵³ Resolving cases such as these hinges on input from legal experts, as does dealing with return claims for colonial looted fossils.⁵⁴ As museums across the world become increasingly aware of legal issues in palaeontology and as calls for change continue to amplify, the need for legal expertise in the discipline will grow exponentially.

Significant leaps towards widespread change in practices can only be achieved once legal experts weigh in on discussions in palaeontology and challenge the current climate. Even palaeontologists opposing these arguments and advocating tirelessly for a more equitable palaeontology face

50 Cisneros et al., *supra* note 13.

51 This is provided for in Section 3(D) of the ICOM Code of Ethics for Natural History Museums, which calls upon institutions that collect or purchase fossils to follow the due diligence procedure laid down in Section 2 of the ICOM Code of Ethics for Museums.

52 Landtag von Baden-Württemberg, Kleine Anfrage "Umgang mit dem Fossil *Ubirajara jubatus* aus dem Naturkundemuseum Karlsruhe" vom 19.9.2022, Drs. 17/3222.

53 Júlia Putini, *Estudo sobre fóssil 'roubado' do Brasil é retirado do ar por revista científica; editor diz apoiar devolução do crânio*, 17 May 2023, G1, available at <https://g1.globo.com/ciencia/noticia/2023/05/17/estudo-sobre-fossil-roubado-do-brasil-e-retirado-do-ar-por-revista-cientifica-editor-diz-apoiar-devolucao-do-cranio.ghtml>.

54 An in-depth discussion of these questions is provided in: Stewens, Raja and Dunne, *supra* note 18.

significant challenges as they lack the expert authority that comes with formal legal training. Thus, legal research has a critical contribution to make, and lawyers need to begin to live up to this responsibility.

D. Conclusion

Law and Palaeontology might currently be one of the largest uncharted territories in the legal landscape. While many would point to, say, space law as the most exciting, up-and-coming field of legal research,⁵⁵ Law and Palaeontology shares virtually all the characteristics usually pointed to with respect to space law (an academic niche, drawing on many fields of the law, abundant opportunities for junior researchers, interdisciplinarity) while still standing at its very inception as an area of study which can be crucially shaped by anyone willing to engage with it.

Research in Law and Palaeontology is genuinely novel, it is highly interdisciplinary, has an impact on policy, society, and science, and can be approached from almost any given legal specialisation. There is a substantial demand for legal expertise in palaeontology, but legal researchers have so far been reluctant to supply it. This urgently needs to change. Only once lawyers begin to dedicate attention to Law and Palaeontology to an extent that is proportionate to the need for legal expertise can change towards a more ethical, law-abiding palaeontology come about. Only then will law find a way.

55 Maximilian Bertamini, *The Most Exciting Field of International Law: What to Look Out for in the Law of Outer Space*, 5 June 2023, Völkerrechtsblog, available at <https://voelkerrechtsblog.org/the-most-exciting-field-of-international-law/>.