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Law, Science and Society

THE USE OF BIODIVERSITY IN INTERNATIONAL LAW

A GENEALOGY OF GENETIC GOLD

Andreas Kotsakis



The Use of Biodiversity in International Law

This book presents a legal genealogy of biodiversity – of its strategic use before and after the adoption of the Convention on Biological Diversity, 1992.

This history of ‘genetic gold’ details how, with the aid of international law, the idea of biodiversity has been instrumentalized towards political and economic aims. A study of the strategic utility of biodiversity, rather than the utility of its protection under international law, the book’s focus is not, therefore, on the sustainable or non-sustainable use of biodiversity as a natural resource, but rather on its historical use as an intellectual resource. Although biodiversity is still not being effectively conserved, nor sustainably used, the Convention on Biological Diversity and its parent regime persists, now after several decades of operation. This book provides the comprehensive answer to the question of the convention’s continued existence.

Drawing from environmental history, the philosophy of science, political economy and development studies, this book will be of interest to advanced undergraduate and postgraduate students in Environmental Law, International Law, Environmental Studies, and Ecology.

Andreas Kotsakis is a Senior Lecturer in Law at Oxford Brookes University, UK.

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Andreas Kotsakis

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Oxford, 14 August 2020

Introduction

Backwaters

'Biodiversity is one thing that some people, like point zero zero zero zero zero one percent of the world's population care about'¹

If one were to write a history of the UN Convention on Biological Diversity,² they could trace a genealogy, with the treaty being the key node in a line of evolution that would roughly go like this: *problem – proposal – treaty – institution*. The intrepid scientist discovers a significant problem in the natural order of the world; they develop a theory about the sources of this problem and how to address this; they begin advocating for their theory and solutions; the world finally listens and takes action; new institutions and ways of doing things are instituted; a teleological historical account that can also serve as the script for a Hollywood movie, with the requisite 'happy ending'.

The treaty would be the key turning point of this genealogical account, a sign of acceptance of the existence of the problem and the proposal for its solution, as well as a platform for further action. This is the biodiversity convention, in force for almost 30 years now. Its history can certainly be framed and presented along these lines. The treaty provides vindication of the ecological concern with the problem of generalized erosion of habitats and extinction of species of plants, animals and other organisms across the planet. It provides the basis for taking concerted, global action to address this global problem. Such an account would fit with the field of international environmental law and its self-conception of its own progressive historical role.³ It would fit with the field's own form of internationalism; the universal story of humanity's growing realization of major environmental problems and the valiant efforts of the international community to address them, via the universal instrument of international law. This would ultimately be a story of a noble struggle, another great project for the international community and belief in humanity's capacity to perform 'good'. It would vindicate the existence of the contemporary 'global biodiversity regime' as a natural evolution of the original agreement, suggest ways to reform, improve, and move forward. This book does not present such a genealogy of the biodiversity convention.

Given the dismal state of the world's biodiversity,⁴ the convention and its voluminous formal output would equally be far too easy to 'trash' anew, following the best/controversial traditions of critical legal theory.⁵ One takes the protocols, recommendations, declarations, and statements of the convention seriously and then proceeds to expose their profound inconsistencies and compromises, as well as the lack of tangible effect in terms of the status of the world's biodiversity or even changing state practice. Lawyers that would never self-identify as belonging to that particular school of legal thought have already presented such work, dismissing the biodiversity convention outright.⁶ The disjunction between grand principles and non-existent obligations, between grand strategic goals and absence of any material means to achieve them, the embrace of soft law coupled with the absence of any normative effect permeates the whole edifice of the convention. The only aspect that seemed to be missing was a toxic institutional culture, replete with misconduct and discrimination – and it now appears that somehow the convention acquired this as well in recent years.⁷

The convention lends itself easily to being a target of multiple questionings, in respect of both the conceptual and legal coherence of the treaty, as well as of the overall effectiveness of the resulting endeavour of a global biodiversity regime. Such a critique would have its basis on a subversive and dismissive genealogy, leading to verdicts of irrelevancy or failure. After all, it seems that international environmental law's somehow inherent progressive credentials often shield its institutions from critique. They are peculiar sacred cows, always fledgling and precious, besieged at all times; always to be reformed, never to be abandoned. Resplendent in its Nietzschean fervour, it would be called something dramatic like 'the death of biodiversity', echoing the infamous polemics on the end of environmentalism that have proliferated in recent decades.⁸ This book does not present such a critical genealogy either.

But this book does present a type of genealogy of biodiversity – of a third kind; a genealogy of the use to which biodiversity has been put, conceptually and politically, over several decades and through the instrument of an international environmental agreement, of the instrumentalization of the idea of biodiversity towards certain aims, of its framing so as to achieve certain ends, with the aid of international law. The focus is not on the sustainable or non-sustainable use of biodiversity as a natural resource, but on the political use of biodiversity as a conceptual resource. It is about the utility of biodiversity, politically and legally, rather than the utility of law or politics in protecting biodiversity. A particular use of biodiversity, identified by the term 'genetic gold', is the focus. This is the proposition that biodiversity, predominantly held in the territory of the Global South, has significant economic value as 'raw' genetic resources for the biotechnology industry. The notion that biodiversity constitutes genetic gold made it a useful resource, but also altered both the ecological concern and the international agreement associated with it.

This genealogy neither vindicates, nor subverts the biodiversity convention. It does not vindicate it, because it does not discover some foundational

origin that can restore the treaty's full authoritative glory. It does not subvert it, because it does not seek to throw stones at an empty husk of a legal treaty. Nor does it seek to merely document and build a historical archive of its legal discursive output. Instead, this genealogy seeks to present a type of 'mesh' that surrounds the biodiversity convention and allows it to continue to operate; to make visible a series of linkages, assemblages, struggles, conflicts, and breaks that have built the edifice of the global biodiversity regime, and to present the whole contingent composition of this regime's underlying grid of rationality, which is identified in the book with the term 'biodiversity reason'.

Why should we care about the biodiversity convention, genetic gold and biodiversity reason, these constructs of a decades-long biodiversity project, made out of disparate parts? And why examine them in this particular, genealogical, way? To answer the first question, because the complex/structure/mesh is a type of 'laboratory', where 'technologies' of government have been and continue to be developed. Genetic gold is simply one such technology. In response to the second question, because genealogy is the method, the instrument, that allows for the detection of the operation of this laboratory, guided by biodiversity reason.

The research presented therein is, therefore, a work of excavation and tracing, of bringing this laboratory of biodiversity reason to light. Picking the idea of biodiversity apart, the genealogy cannot but veer towards the idea of genetic gold that dominated the first decade of the treaty's operation, under a notional grand bargain between the Global North and South. By making a clear distinction between the genetic gold rush and its promises, the failed aftermath, and the delayed response of international environmental law in the shape of the Nagoya protocol, this work reaches its main argument that despite its failure, genetic gold contributed to a conceptual structure, a biodiversity reason, that is still in use today.

The celebrated conservation biologist Elliot Norse once likened the biodiversity movement to a rapid river, strengthened by new tributaries and flowing into a growing 'sea' of public attention.⁹ But this was the 1990s, by all accounts the high point of interest, both scholarly and public, in biodiversity. There is no movement now and the sea is parched, as the opening quote acknowledges in a visceral manner. The advantage of this laboratory is thus its hidden location in the putative backwaters of international environmental law. Out of sight, out of the glare of the spotlight of climate change, and the Anthropocene scholarship and scrutiny, the machine is churning.

And as for those who insist that the biodiversity convention does not matter because of its failure to arrest the global rates of biodiversity decline, all I can ask is are you confident that was the intention?

Notes

- 1 Peter Kareiva, chief scientist of the Nature Conservancy, quoted in Jessica Dempsey, *Enterprising Nature: Economics, Markets, and Finance in Global Biodiversity Politics* (Wiley Blackwell 2016), 91.

- 2 Convention on Biological Diversity (1992), 31 ILM 818. (CBD)
- 3 Peter H. Sand, 'The Evolution of International Environmental Law' in Daniel Bodansky and others (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007).
- 4 IPBES, Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (eds.). IPBES secretariat, 2019.
- 5 On the North American variant of critical legal studies see Mark Tushnet, 'Critical Legal Theory (without Modifiers) in the United States' (2005) 13 *The Journal of Political Philosophy* 99; Mark Tushnet, 'Some Current Controversies in Critical Legal Studies' (2011) 12 *German Law Journal* 290. On the British variant see Matt Stone and others (eds), *New Critical Legal Thinking: Law and the Political* (Routledge 2012); Costas Douzinas and Adam Geary, *Critical Jurisprudence: The Political Philosophy of Justice* (Hart Publishing 2005). On 'trashing' as method specifically see Mark G. Kelman, 'Trashing' (1984) 36 *Stanford Law Review* 293.
- 6 Stuart R. Harrop and Diana J. Pritchard, 'A Hard Instrument Goes Soft: The Implications of the Convention on Biological Diversity's Current Trajectory' (2011) 21 *Global Environmental Change* 474
- 7 Karl Mathiesen, 'UN biodiversity chief quits. Documents show she had been accused of misconduct' *Climate Home News* (31/10/2019) at: <https://www.climatechangenews.com/2019/10/31/un-biodiversity-chief-quit-key-summit-accused-misconduct/#:~:text=Earlier%20this%20month%2C%20Cristiana%20Pa%C8%99ca,mixture%20of%20factors%20increasingly%20affecting>. Accessed: 20 July 2020.
- 8 Michael Schellenberger and Ted Nordhaus, *Break Through: From the Death of Environmentalism to the Politics of Possibility* (Houghton Mifflin Co 2007).
- 9 Elliot A. Norse, 'A River that Flows to the Sea: The Marine Biological Diversity Movement' (1996) 9 *Oceanography* 5.



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The ‘undead’ convention and environmental reason

Whatever happened to biodiversity?¹

You see these buildings breaking apart and coming down? He looked at me. You don't think this is what we're supposed to see when we look at these buildings? He wanted nothing to do with this idea. You don't think it's a new way of seeing?²

This chapter argues that the standard motif to international environmental law scholarship – underpinned as it is by a progressive teleology of an active international community that aims to protect the global environment and by an ahistorical urgency to take problem-solving action now in anticipation of a looming catastrophe – is incapable of explaining the paradoxical and persistent existence of the biodiversity convention. This is a convention that has seemingly not achieved anything tangible in terms of its formally stated goals and has in fact allowed the continued decline and loss of biodiversity around the world. The chapter then discusses legal genealogy as an alternative approach, capable of uncovering in more detail the formulation of the biodiversity convention and its underlying rationality, its particular environmental reason.

A snapshot of the biodiversity convention

The biodiversity convention is a framework treaty with the aim of addressing the problem of global biodiversity loss that was concluded in May 1992 and entered into force on 29 December 1993. Two supplementary main protocols to the convention have been concluded and are now operational: the Cartagena Protocol on Biosafety,³ which was agreed in 2000 and entered into force in 2003, and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization,⁴ which was agreed in 2010 and entered into force in 2014. A third agreement, the Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress, was agreed in 2010 and entered into force in 2018.⁵ Collectively, the legal texts, decisions, and plans, along with their elaborate institutional framework, are often referred to as the biodiversity (treaty) regime. A regime in this sense can be defined as ‘a set of norms, rules and procedures that structure the behaviour and relations

2 The 'undead' convention

of international actors so as to reduce the uncertainties they face and facilitate the pursuit of a common goal'.⁶

The treaty defines 'biological diversity' as 'the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems'.⁷ Its thematic scope is thus exceptionally wide, encompassing all three commonly understood levels of genetic, species, and ecosystem diversity. It is a treaty concerned with all life on Earth. The convention's actual jurisdictional scope, however, is limited by the fact that according to the convention biodiversity remains a national resource, under the sovereign control of member states.⁸

There are three main treaty objectives, which are the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from the utilization of genetic resources.⁹ The three objectives form the three 'pillars' of the convention's operation. Arguably, an additional overarching objective, not explicitly stated in the main text of the treaty,¹⁰ is 'to achieve an equitable balancing of the interests of developed and developing states' in the areas of nature conservation and natural resource use.¹¹

Conservation primarily refers to the designation and management of protected areas, but also extends to the general protection and management of ecosystems, habitats, and biological resources within national jurisdiction.¹² This form of *in situ* conservation, prioritized in the treaty,¹³ is traditionally seen as the predominant conservation activity, a perception only heightened by continuous habitat destruction and terrestrial species decline over the decades. This remains the case today. Contemporary thinking maintains that 'protected areas are the cornerstone of biodiversity conservation'.¹⁴ According to the Aichi targets,¹⁵ the strategic aim was to protect and effectively manage 17% of all terrestrial and inland habitats and 10% of all marine and coastal areas globally by 2020.¹⁶ The treaty also includes, as 'complementary measures', *ex situ* conservation of biodiversity components in research facilities and various collections.¹⁷ Article 9 specifically addresses the establishment of new facilities and collections. Given the size of existing collections, this provision significantly reduces the impact of the convention in key areas, such as agricultural/plant biodiversity.

Sustainable use is defined as: 'the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations'.¹⁸ This objective introduces and makes biodiversity conservation 'subject to the greater objective of sustainable development',¹⁹ forming a clear link between biodiversity and the principle of intergenerational equity.²⁰ It also dates instantly the convention as a legal document of the 1990s.

The third objective of fair and equitable benefits sharing is not explicitly defined in the treaty text itself. Based on the Nagoya Protocol, benefit sharing

applies to genetic resources specifically, rather than the broader term biological resources of the first two objectives. In the legal vocabulary of the regime, these genetic resources are to be 'utilized', as opposed to 'used' (the term employed in the context of biological resources). Utilization (as opposed to use) means 'to conduct research and development on the genetic and/or biochemical composition of genetic resources'.²¹ Genetic resources were essentially conceived as the resources needed for the biotechnology industry, defined as 'genetic material of actual or potential value',²² where genetic material 'means any material of plant, animal, microbial or other origin containing functional units of heredity'.²³ This legal category of genetic resources also includes derivatives,²⁴ i.e., naturally occurring biochemical compounds without functional units of heredity, such as scents, colourings, and the like.

The benefits that need to be shared in this way arise from their 'utilization', i.e., the specific use of these genetic resources and applications by biotechnology.²⁵ What constitutes fair and equitable sharing was defined in practice by reference to a number of provisions read together,²⁶ including the protection of local and indigenous communities, knowledge, and lifestyles.²⁷ The Nagoya Protocol is understood as an instrument for the implementation of this third objective, creating a so-called access and benefit sharing (ABS) regime, based on principles of national sovereignty over genetic resources, prior informed consent and mutually agreed terms.

The expansive scope and ambitious objectives are countenanced by the limited jurisdictional scope. The convention itself is not directly charged with the conservation or management of any resources, species, or areas. There are no special provisions or annexes for endangered species or areas, an approach favoured by other nature-related conventions.²⁸ They did exist originally, but were subsequently removed from the draft negotiating text.²⁹ The treaty regime thus relies on national implementation. It provides a framework of soft commitments, based on the treaty text, and relies on national action and legislation to achieve its normative effect. In other words, it has an indirect responsibility, charged with encouraging, supporting, facilitating, and incentivising its member states to implement laws, policies, and plans that in turn encourage, support, facilitate, and incentivize action by states and non-state actors towards the fulfilment of its objectives.

Boasting an extremely wide scope, but non-existent jurisdiction, thus being completely reliant on national implementation to achieve its objectives, the convention possessed no option but to internationalize the main treaty goals of biodiversity conservation, sustainable use, and benefit sharing. The expansive scope and ambitious objectives were controversial from the outset of negotiations, especially related to the third 'pillar' of fair and equitable distribution, and the unstated fourth objective of a grand, North–South balance. Controversy and contestation, recounted in chapter 4 therein, prompted the use of broad and vague language throughout the treaty text, with all commitments being additionally tempered with many qualifications, such as 'as far as possible' or

'as appropriate'. Without this linguistic approach, leading to the dilution of normative effect and the increase in flexibility, the treaty would not have been concluded.³⁰

The primary commitment that a state signing up to this treaty regime (and all the world's states bar the US have done so) assumes is the development or adaptation of 'national strategies, plans and programmes' (and rather pointedly legislation is not part of this short list) for the conservation and sustainable use of biodiversity, using the indicative lists of relevant measures included in the convention as a basis.³¹ These plans have the eloquent acronym of NBSAPs (National Biodiversity Strategies and Action Plans) in the convention's nomenclature. These NBSAPs are conceived as policy instruments. A second concrete and unconditional commitment is to submit national reports to the conference of parties on implementation and progress towards the convention's objectives.³² Beyond these two obligations, every other commitment is heavily qualified.

Spectres of treaty death

The first specialized study of international environmental agreements was a diagram of a set of principles and obligations on the verge of becoming established as a separate sub-field of international law.³³ It was published in 1985. Its normative aspirations, its desire to establish the field's identity are clear. This diagram also contained a stark image of the death that awaits all defective environmental treaties, in the analysis of the *de facto* defunct Western Hemisphere Convention,³⁴ as 'a sleeping convention'. A sleeping convention was empty legal text with no real-world effect, attributed by the author to its lack of institutional machinery (in the shape of regular conference of the parties and the like) capable of applying and maintaining any form of pressure for compliance, implementation, or even attention by member states.³⁵ The Western Hemisphere Convention was still a binding legal treaty, ostensibly creating legal obligations for its signatories, but had become an irrelevant and unused instrument. The image – and fear – of this 'eternal sleep' was thus emblazoned onto the consciousness of the field.

The lesson from the tale of the sleeping convention was swiftly learned. If the problem was their deficient institutional practices, then environmental treaties would be outfitted (or retrofitted) with elaborate institutional and administrative structures (including conferences of the parties, secretariats, standing scientific bodies and working groups, amongst others) to counteract the threat of irrelevancy. This transformed them into dynamic and elaborate *treaty regimes*. The latter were thus seen as a solution, averting the spectre of death. Environmental treaties had to spawn regimes in order to survive.

The spectre of the sleeping convention certainly influenced the institutional structure of the CBD. In addition to standard treaty organs, such as a governing body in the shape of a regular conference of the parties,³⁶ a secretariat,³⁷ and the

scientific body, clearing house mechanism, and financial mechanism discussed earlier, a number of subsidiary bodies and working groups, established by the COP, have complemented the operation. This includes a Subsidiary Body on Implementation,³⁸ which began work in 2016, and a scientific body, the Subsidiary Body on Scientific, Technical and Technological Advice.³⁹ There are *seven* thematic work programmes,⁴⁰ as well as dozens of work programmes on cross-cutting issues.⁴¹ Equivalent structures have also been adopted for the two main protocols to the convention, and the meetings have started to be held concurrently to reduce the costs of participation, particularly for representatives from Global South states.⁴² COP meetings are attended by the UN specialized agencies, the IAEA,⁴³ as well as non-party states,⁴⁴ and any other agencies and bodies, including NGOs, can be observers.⁴⁵ This is an active, lively, dynamic convention.

Dynamism, progress, belief, and indeed hope were hallmarks of early international environmental law. In the 1990s one could indeed still claim that 'the provisions in the new agreements are generally more stringent and detailed than in the previous ones, the range of subject matter broader, and the provisions for implementation and adjustment more sophisticated'.⁴⁶ Excitement about the future was in the air, when an esteemed international law professor would welcome the advent of a 'new world order' uncritically and unironically, and international environmental law represented a new way of international law-making.⁴⁷ Lessons that Simon Lyster first proposed were now seemingly being learned at an accelerated pace by states willing to cooperate at the international level. There was an expectation for more agreements, initiatives, and actions, designed in a more competent and coherent manner. During that era, the biodiversity convention was able to capitalize and deliver on this front, adding a protocol and expanding its institutional machinery.

The sun has now set on this era of progress in international environmental law. Different spectres swiftly emerged, suggestions of 'treaty congestion',⁴⁸ 'ossification',⁴⁹ and 'dissonance',⁵⁰ of a field swiftly reaching 'infirm old age'⁵¹ before its time. To counteract such dismissals, there was the view that the 2000s were simply a period of 'retrenchment and consolidation', whereby the switch from rule and principle creation to the issue of effectiveness was a sign of 'maturation'.⁵²

Despite this gloom in academic analyses of the field, the biodiversity convention seemed to be bucking the trend. Impressively outfitted with elaborate institutional machinery developed over two decades and centrally ensconced as a key node within the wider global biodiversity regime comprised of several multilateral biodiversity-related agreements, 2010 was the year it was supposed to be celebrating. The UN had declared the International Year of Biodiversity, in order to bring renewed global attention and awareness to the problem of biodiversity loss.⁵³ The 10th Conference of the Parties was held at Nagoya in October of that year and produced two significant outcomes: the aforementioned Nagoya Protocol, a belated international legal response to the genetic

gold rush that occurred during the 1990s, and a new strategic plan for the convention for the period 2011–2020, including a set of detailed biodiversity targets (the 'Aichi targets').⁵⁴

This impressive outcome was the culmination of discussions and negotiations (eight years in the case of the protocol) undertaken within a dynamic regime that contained a sprawling collection of mechanisms, working groups, institutions, partnerships, boasting near-universal membership by all states (there are 196 parties to the convention). By adopting the best organizational practices that international environmental law had deemed as necessary, it was able to present to the world the image of an evolving and functioning regime, while the gears of the climate change convention were grinding down. A direct comparison with the difficulties and rancour of the equivalent conference of the parties of the 'other' Rio Convention at Copenhagen in the preceding year, greatly favoured the spirit and effectiveness of the biodiversity convention. The optics were excellent. 2010 was supposed to be a successful, if not triumphant, year. Buoyed by enthusiasm over these achievements, towards the end of 2010 the UN declared the forthcoming 2011–2020 decade as the United Nations Decade on Biodiversity, to further promote the implementation of the convention's objectives, Aichi targets, and strategic plan that spanned the same period.⁵⁵

Yet if one looked carefully, the thin veneer of triumphant success was easy to peel away; it was all bluster and cheap façade. The Nagoya conference was billed in the world's media as a global biodiversity 'summit', with the usual high-level ministerial segment boasting participation by heads of state. Yet ultimately the conference was attended by the heads of state from Gabon, Guinea-Bissau, Yemen, Monaco, and Japan (being the host), while a significant number of states did not send any ministerial-level representation, following what had become a long-term trend of state practice vis-à-vis the convention. This was evidence that biodiversity no longer commanded a significant place or attention in the increasingly congested global agenda. On second glance, the optics were actually not that good, and self-aggrandising 'UN-speak' that 'a new era of living in harmony with Nature (sic) is born'⁵⁶ or the direct historical comparisons with Kyoto made by the Executive Secretary of the CBD⁵⁷ were rather fanciful, if not the wrong note to hit outright. It made the subsequent billing of the Nagoya outcome as a loosely termed 'global deal on nature' tenuous at best. It was, in the words of George Monbiot, a 'ghost agreement' that was not really a substantial agreement.⁵⁸ Although it now appears that every new step of the CBD will be given a similar billing as a global deal – as is the case for the third strategic plan currently being formulated. This appears to be one lesson on overpromising still not learned.

The thin veneer not only extended to secondary issues of diplomatic prestige, field status, or global attention, but also to demonstrating an actual positive effect in terms of biodiversity itself. This was, in fact, the second strategic plan adopted, after the first one had failed to meet its goal. In 2002, nine years

after its entry into force, the convention's operation had been organized for the first time through a strategic plan with the primary objective of achieving, by 2010, 'a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth'.⁵⁹ The CBD were responding to the problems identified with implementation and compliance with the adoption of a strategic target. This plan and target were well-received at the ensuing World Summit of Sustainable Development at Johannesburg in 2002 and incorporated into the existing Millennium Development Goals (MDGs).⁶⁰

Yet the Nagoya Conference could only acknowledge⁶¹ the dismal finding of the third edition of the *Global Biodiversity Outlook* that the 2010 target of this first strategic plan had not been met, and that most indicators pointed towards the continuing decline of genes, species, and ecosystems diversity.⁶² There remained, therefore, a lack of direct, meaningful impact in terms of arresting the decline of biodiversity across the world, a rather central element of the whole project. We now also know that the second strategic plan has also failed in meeting the Aichi Biodiversity Targets at its conclusion in 2020.⁶³ Despite its best efforts, therefore, and two strategic plans, the biodiversity convention has for the past decade at least been experiencing its own brush with the old spectre of the 'sleeping convention', albeit in a modified, modern form. It had followed the recipe, yet the food did not come out as promised.

These cracks in the façade can rather easily be contrasted with the celebratory and aspirational tone of the convention, which seemed, in 2010, to be doubling down on a bet to maintain the illusion of progress. In addition to the Nagoya protocol,⁶⁴ a new – second – strategic plan proposed a grand vision of a future 'living in harmony with nature', with the even grander goal, 'where by 2050, biodiversity is valued, conserved, restored, and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people'.⁶⁵ The strategic plan was not accompanied by any concrete form of national implementation mechanism other than the pre-existing obligation for states to submit National Biodiversity Strategy and Action Plans, a treaty regime practice that dates back to the primary treaty text in 1992. This vision of a harmonious relation still drives the convention to the present day; it drives the current discussions and negotiations for the post-2020 biodiversity framework,⁶⁶ i.e., the third strategic plan that the convention is preparing to adopt. A new 'inspirational and motivating 2030 mission' and 'a coherent, comprehensive and innovative communication strategy' are on the cards for that plan, as an intermediate step on the road to fulfilling the 2050 vision of living in harmony with nature.⁶⁷

And therein lies a peculiar phenomenon, consisting of a combination of absent global interest, declining status within the international community, law and policy failure, with a seemingly unaffected, continuous, streamlined production of consistent institutional output, in the form of decisions, agreements, policies, strategies, and plans. A peculiar phenomenon, where the gulf

between the importance and expression of self-imposed goals and the lack of means, instruments, and institutions to achieve them has only ever grown wider. Certainly not a sleeping convention by any means, but is there any effect to its stream of utterances? Maybe to avoid sleep, it has been awake for too long. It is, in its own particular way as one of the celebrated Rio conventions of 1992, 'too big to fail'.

The paradox of the 'undead convention'

The biodiversity convention has reached the crossroads of a paradox. The convention forges ahead, while biodiversity loss also continues apace. Let the regime grow, and biodiversity decline. Let new plans be agreed, and old targets remain unfulfilled. Decades of operation have resulted in reorientations of approach and additional protocols, building complexity without a concomitant increase in authority. The one salient characteristic of this regime is that it *persists*. In the face of criticism, failure, and irrelevancy, it continues to operate. A strange new spectre can be perceived; a new type of 'sleeping convention' no longer abandoned due to lack of correct institutional practices, but a regime that shuffles on insouciantly despite the presence of such practices, producing a lot in terms of output and little in terms of global purpose or impact. The convention is not allowed to 'die', yet cannot 'live'. An *undead* convention prowls the field of international environmental law.

How can we explain this paradox? The available tools of critical legal analysis appear insufficient. For example, we can talk about the difference between 'law in the books' and law on the ground/in practice. This approach manifests when we discuss the gap between the universal scope claimed by the convention and its absolute reliance on national implementation. We can discuss the gap between aspirational scope and real jurisdiction. We can easily deduce that the treaty regime has been hampered and hamstrung since the very beginning of the agreed text of the treaty. Lamenting the increasingly soft law nature of the convention implies that 'hard', binding law is or may be a solution to its problems. None of these approaches helps us specifically explain the continued existence and persistent, albeit seemingly vacuous, operation of this treaty regime. None of these approaches focuses specifically on the gap between the consistent legal and policy output and the continued biodiversity decline around the world, on the character of the undead convention shuffling on.

This is because these approaches do not go beyond the standard motif of international legal enquiry in the area of the environment, and that motif is an obstacle to our understanding of the paradox. This motif is based on a particular – and fixed – relation to both science⁶⁸ and history;⁶⁹ namely, this motif is about maintaining distance from both.

In relation to the former, there is an acceptance of a form of ecological truth of biodiversity loss. The nature, aspects, and elements – the formulation – of the environmental problem itself is of no interest. The focus is on the response

to the problem, what international environmental law can seemingly provide. The overall sentiment is that, as lawyers, 'we start from the premise that such a threat exists, even though the exact magnitude, the underlying causes of biodiversity loss, and the nature of its impact, may be subject to debate'.⁷⁰

It is easy to observe this motif in action. The legal inquiry starts with the weight of scientific facts on the current extinction crisis. In order to impress the gravity of the problem of biodiversity loss upon its audience, it will have to resort to some scientific facts and metrics: total number of species, rates of extinction and ecosystem degradation, acres of endangered habitats and protected areas, and the like should be paraded for the purpose of establishing urgency. This is then counterposed with the positive image of biodiversity as the web of life and Earth's life support system, providing essential resources and services. Often the declining Amazon rainforest, as the eternal symbol of biodiversity, receives a lament. Any reputable report or scientific study will do as a source for these numbers and figures, the more recent the better; as long as the juxtaposition between decline and wonder is stark, and the alarm is raised.

This initial litany has a dual role, both methodological and substantive. It establishes the ecological context of the legal inquiry, as well as the scientific evidence base for biodiversity as a problem requiring urgent action at the international level. It grounds and frames the legal analysis, which functions under the shadow of perpetual, ahistorical, urgent environmental crisis. The inquiry will analyze and develop definitions, principles, rules, and institutions in response to the notional 'brief' it has received from ecology regarding biodiversity loss and the required action. A normative 'this, then, needs to be done' in terms of remedies and institutional creation or reform will then conclude the successful inquiry.

Legal scholarship's response to an externally defined premise of an environmental problem of biodiversity loss will have been delivered. But this common premise is not to be revisited as part of the legal inquiry. It is, after all, external to law itself and the core of a legal inquiry. The problem, in this case the decline of global biodiversity, can never be questioned as an outcome of any legal inquiry into the biodiversity convention and the global regime that has emerged around it. The environmental problem becomes a closed scientific *a priori*, on which to build normative proposals for reform and remedies. Scientific closure begets legal closure.⁷¹

Consequently, this form of inquiry has nothing to offer regarding the paradox of elaborate normative production, in the shape of new institutions, principles, and rules, based on sound biodiversity knowledge, but yet with no appreciable impact or effect. If both the problem of biodiversity loss and the biodiversity convention constitute separate disciplinary containers, walled-off from each other, no comprehensive view is possible.

In relation to history, the motif reflects an inherent belief in the historical unveiling of progressive reason in the shape of decisive and effective international action to protect the environment (and in the case at hand conserve

biodiversity). The fixed, linear history of the evolution of any international legal instrument follows in three acts. In the first act, the origin: intrepid scientists discover the problem of biodiversity decline, struggle to be heard, but eventually bring this problem to global attention; the international community acts to address the problem through the means of an international, multilateral treaty. In the second act, obstacles emerge with this treaty, states, and corporations often in the way. Disagreements and interests abound; now the intrepid lawyers must work to modify the approach and overcome these. The crisis intensifies, and there is an urgent need to act to address the problem. The odds are not in their favour. In the third and final act, in the final hour, disagreements are overcome, and consensus is reached; a global deal is signed. Crisis is averted at the last instance, and a new dawn of the international community working together can be celebrated. This motif is prevalent because of environmental law scholarship's unacknowledged relation with history and overall lack of historical awareness.

This is a soothing historical narrative that serves the self-imagination of the field of international environmental law as humanity's representative in the heroic encounter with environmental problems. This teleology of progression from ignorance of the environmental problem to universal action, and in the continuous evolution of general principles of international law towards more environmental – or at least sustainable – ends cannot but support the contemporary biodiversity convention as the pinnacle of its evolution. This teleology eternally repeats and mimics the evolution of the field of environmental law itself. It is the continuous playing out of its Rachel Carson's blueprint, on a global stage. A legal-scientific sermon for our troubled times; first, a warning from ecology, then law comes in, before the solution is presented, in the third act. It is always a matter of additions, tweaks, incremental reforms, keeping things going, more binding obligations on states, different decision-making structures, or, in recent years, the addition of economics. International environmental law can only ever do good, and it only needs a small helping hand to realize its lofty, aspirational goals. The broader inability to move beyond a fixed conception of international legal history exposes history as the international environmental law's significant blind spot. It is a field that cannot countenance history, except in very linear narrow terms as legal history – a succession of legal events, decisions, and texts, in response to external problems and processes.

It is, therefore, this standard motif of legal inquiry that has created this paradox. The reality is so far from the model, that the model itself needs to be revisited. The field behaves as if we are basking in the glow of this third and final act, which contradicts the reality of continuing biodiversity loss and the historical lack of impact. Consequently, to understand this paradox, the biodiversity convention needs to be exposed to different kinds of analyses, using different kinds of sources. The motif needs to be set aside, which requires rethinking the relation of the field with science and history.

It is submitted here that the documents produced by the treaty regime should not constitute the primary sources for such analyses. Dating back to 1994 and the first conference of the parties of the biodiversity convention, there are 25 years of meetings and decisions for a legal scholar to analyze; a voluminous formal discourse on global biodiversity and its decline is, of course, available. A focus on such sources would reinforce the disciplinary closure of the standard motif. Nor are so-called secondary legal sources useful in this endeavour. Despite the gloom in the critiques of the biodiversity convention outlined above, there is never a questioning of the formulation of the problem of biodiversity loss itself. The implication is that this is someone else's task – or rather some other discipline from the natural sciences.

A genealogy of the biodiversity convention: description of method

What if, instead, the legal scholar is not satisfied with the *a priori* of environmental problems handed to them by the sciences? What if the problem(s) is never closed? What if they take into account the notion that biodiversity as an idea has its own history and is distinct from, but also irrevocably bound with, the legal history of the biodiversity convention? For that matter, what if there are different ways to write the history of that idea and convention? What if they dig deeper into all of this, using a particular tool, that of genealogy, adapted to the task of explaining the paradox of the undead convention? First, this would present a challenge to the very conception of how a problem is constituted and rendered intelligible for international environmental law. Second, this move would add to our understanding of the operation of the biodiversity convention.

Legal genealogy⁷² is a form of inquiry that proceeds by historicizing and destabilizing certain categories of legal thought and objects of legal analysis. The method is largely adapted from the original work of Michel Foucault⁷³ and subsequent interpretations and applications.⁷⁴ Genealogy is a critical form of inquiry, in that it aims to denaturalize, destabilize, and render contingent these legal categories and objects, by excavating their past and historicizing them. Genealogical historicization thus sets the basis for genealogical contestation, that is, for a genealogical critique of law. According to Ben Golder:

A legal genealogy is a form of historical inquiry that, written from the vantage of the present and emphasizing the contingency and non-necessary status of that present, seeks to demonstrate how a legal object or practice emerged and came to be. In emphasizing contingency, such a historical method problematizes the notion of a singular, determinate origin and challenges totalizing forms of historical narration.⁷⁵

This historicization of the present proceeds through the use of multiple processes of problematization, a methodological tool developed in Foucault's later

work.⁷⁶ The approach identifies a category of legal thought or a legal object that constitutes a problem in the present, and seeks to trace its genealogy, i.e., trace how it came to be understood in the way it is presently understood.⁷⁷ In the case at hand, this problem is the biodiversity convention. An explanation for its paradoxical persistence is being sought, through this genealogical approach. As the quote from Golder above suggests, this first problematization brings about a second problematization, where the stable, universal understanding of this legal object – i.e., the biodiversity convention – within the field is challenged, precisely by revealing the process of its formulation as such a legal object.

Problematization thus entails a key reversal of historical focus; one is not examining solutions or past alternatives to draw lessons from, but the problems themselves that gave rise to these solutions. It entails a focus on the ways phenomena, behaviours, actions, processes, discourses, and the like are rendered problematic; how they become conceived as a problem requiring a solution;⁷⁸ the solution in question being the signing of an international agreement, the creation of a treaty regime, and its continued operation over a number of decades.

In short, then, 'genealogies articulate problems'.⁷⁹ A problem, for the purposes of this genealogical schema, has the specific meaning of a problem of government, meaning a problem that represents a target for governmental intervention by some combination of policy, law, regulation, and governance. In the context of a legal enquiry, the use of problematization collapses the law and politics distinction. Problematization can then be defined in the broadest of terms as the conceptualization of reality into an object of governmental thought. It provides the 'terms of reference within which an issue is cast'.⁸⁰ A proposal of such solutions to a problem, such as the creation of new international institutions, regimes, and strategic plans is made possible by problematizations that link the real-world problems with the solutions.

This is not simply a matter of the expression, representation, or manifestation of reality into abstract, legal, or political discourse; 'in connection with them, [problematization] develops the conditions in which possible responses can be given; it defines the elements that will constitute what the different solutions attempt to respond to'.⁸¹ Problematization is not simply representation, but creates a grid of legible responses that are considered rational. It is a form of governmental thought that structures the possibility of a range of valid and legitimate solutions – new, different, or reformed behaviours, actions, processes, institutions, discourses – that can be derived from a particular framing of a problem of government.

By setting out these problematizations, genealogy can then proceed to the solutions that emerge in response to or provoked by these problematizations. Foucault identifies this second, corresponding unit of the genealogical methodological schema with the term of *practices*. This term serves to emphasize the methodological point that problematizations are not representations of reality

based on ideas or a particular ideology, but emerge from these practices.⁸² Practices are understood by Foucault 'as places where what is said and what is done, rules imposed and reasons given, the planned and the taken for granted meet and interconnect'.⁸³ Koopman defines Foucault's practices as 'complex compositions of techniques, beliefs, styles, powers, knowledges, and ethics... emerging in and through problematizations and the reconstructive responses provoked by these problematizations'.⁸⁴ For example, the advent of goal and target setting in international law, which has reached the biodiversity convention, can be considered as one such practice, in response to concerns over accountable governance.⁸⁵

Assembled together, these practices form 'regimes of practices', that is, 'programmes of conduct which have both prescriptive effects regarding what is to be done (effects of "jurisdiction"), and codifying effects regarding what is to be known (effects of "veridiction")'.⁸⁶ A *programme* is 'a set of calculated, reasoned prescriptions in terms of which institutions are meant to be recognized, spaces arranged, and behaviours regulated'.⁸⁷ It is thus, in the terminology of this book, a governmental programme. Genetic gold is considered in the analysis presented in subsequent chapters as one such programme.

A programme thus can pre-exist a given problematization (that precisely seeks to problematize such a programme) and/or emerge or be shaped by it (as a solution). Genealogy's excavation of the past becomes a multi-layered investigation into the conditions that enabled the emergence of certain practices and programmes as solutions to certain problems, into how these proposed solutions problematize their targets in the first place, and, thirdly, into the assumptions derived from this problematization to which these solutions are designed to respond.

Practices and problematizations, intricately linked, imbricated in forming the conditions of their mutual and contingent emergence and co-existence. As compositions of diverse elements, mutually reinforcing as they intersect and coalesce into assembled programmes, they formulate and disperse based on reformulations of the problematizations that modify the conditions of possibility for their emergence. What constitutes a valid or legitimate proposal (of practices, norms, principles, institutions, rules, actions, behaviours, etc.) to address a problem is already framed by the understanding of what constitutes a problem in the first place. Traditional categories and objects of legal analysis are thus subsumed within this complex schema. In effect, the stable, fixed objects of legal inquiry (jurisdiction, treaty, institution, etc.) are replaced by *relations*.⁸⁸ There is no rationality external to a particular problematization of some aspect of the real world.

Problems and solutions, ideas, theories, institutions – traditional categories and objects of analysis – thus become recast within a genealogical schema of problematizations, practices, and programmes. From a practical methodological perspective, accessing these problematizations, practices, and programmes is undertaken through the study of regulations, policy guides, popularizations

into applied science (books written for a popular audience), what Foucault called 'practical' or 'prescriptive texts', 'whose main object is to suggest rules of conduct'.⁸⁹ This approach facilitates the reading of legal texts (academic commentary, treaties, decisions, resolutions, and the like) within an interdisciplinary context. In the chapters that follow, these texts are placed side by side with texts from a host of other disciplines, read and interpreted in the same exact manner, from the perspective of the problematization they frame. In this way, this genealogy examines how past conservation practices and environmental problematizations in relation to nature and life were 'governmentalized', that is, problematized as the bases for the emergence of a solution from the field of international law in the shape of a multilateral biodiversity convention. These accounts constitute a core element of this book.

A genealogy of problematizations, therefore, is a history of a particular form of thought. The term 'thought' is used here in this governmental sense, following Foucault, to distinguish genealogy from the history of ideas;⁹⁰ 'this was the proper task of a history of thought, as against the history of behaviours or representations: to define the conditions in which human beings "problematize" what they are, what they do, and the world in which they live'.⁹¹ The creation of the whole field of international environmental law, and its individual conventions and regimes, can thus be conceptualized as practices and programmes intrinsically linked to problematizations.

Methodological concerns

Employing a Foucaultian genealogical approach must come with a series of caveats. It is, by now, heavily burdened with the weight of decades of widespread and loosely defined application across the humanities and social sciences. It has become a 'somewhat trendy label in academia... as if anyone who does history is not themselves a historian is eager to describe their work as a "genealogy"'.⁹² In legal studies, in particular, some form of historicization and a broad genealogical 'orientation' have 'become almost axiomatic within vast swathes of contemporary critical legal thought'.⁹³ Genealogy's excavation of the past thus has to proceed with care, clarity, and precision, lest one assumes the role of the proverbial Professor Challenger and digs too wantonly.

I address four major concerns regarding the genealogical approach, as it applies to law. The first concern is the contentious relationship between genealogy and history, and the transposition of this relation into the legal field. The second relates to the decreasing critical potency of the finding of contingency, often promoted by genealogy. The third concern relates to a similar decrease in the critical force of the finding of a 'masked power', i.e., of the political hiding behind formal law, also brought on by the widespread use of the genealogical approach. Finally, I argue that a focus on genealogy as a methodological approach protects the work from a fetishization of Foucault himself as the political philosopher *par excellence*.

The first concern relates to the relation between genealogy and history.⁹⁴ Legal genealogy is generally critical of mainstream approaches to the history of international law, underpinned by a teleological historical understanding. Legal genealogy is not another form of legal history, and genealogical historicization is distinct from other forms of historical enquiries into law. This is because it does not subscribe to the historiographical idea of the historical evolution of ideas, values, institutions, or practices, characterized by some form of immanent progressive reason and developing teleologically towards the present. Its units of analysis are problems, practices, and programmes, and their interplay. Genealogy is thus directly opposed to the inherent teleology that international environmental law has adopted for itself.⁹⁵

The connection between legal history and the idea of precedent or the viewing of history through the lens of establishing legal precedent is also opposed by genealogy. Precedent establishes stability and legitimacy, both of the legal object and category in question, as well as law as a field and method. Genealogy has no interest, acknowledged or unacknowledged, in establishing such credentials through the accumulation of historical evidence. Instead, genealogy focuses on contingent emergence⁹⁶ – local, provisional, contested, and unstable – and the various breaks that precipitate such forms of emergence.

The second concern relates to the fetishization of contingency in scholarship. Showing that our present is 'contingent' and has a history, or that structures, institutions, and values previously thought of as stable and universal are nothing of the sort no longer appears as a particularly critical or radical move. The trope and manoeuvre of 'destabilizing' the present, prevalent in genealogy-flavoured critical scholarship, emerges as a lazy, pernicious, destructive, political dead-end in our contemporary world, where there are plenty of voices, in media and politics, let alone academia, willing to wallow or bask in the darkness of a chaotic, disintegrating late modernity and world order. We do not live in what seems like a particularly or excessively stable world. The most prescient of scholars had realized this blind spot long before our current age of pandemics, post-truth, and generalized anger.⁹⁷

Exposing contingency, therefore, is not what it used to be. Yet genealogy can still have a critical effect if care is taken with the choice of objects towards which it is directed. Not all legal objects of critique are created equal, Golder reminds us; some 'are rather more invested in...their sense of timeless self-evidence and necessity than others'.⁹⁸ The sense of universalism and urgency that characterizes the field of international environmental law, and its objects, such as biodiversity, makes them particularly suited to a genealogical critique that would expose the contingent construction of such understandings. Genealogy stands as an obstacle to their continuous and manic hurtling towards a future, fuelled by historical assumptions about their self-constitution as necessary and self-evident responses to global problems.⁹⁹ It is the force of such conceptions that produces paradoxes, such as that of the undead convention that animates this book.

The crucial element of a properly structured genealogy is not to simply show that the present has a history, is contingent, and could be otherwise; but to show *how* this contingent present has emerged and *how* it could be otherwise.¹⁰⁰ The latter, however, does not mean that a fully formed 'alternative' to the present can be found in the past, only that the past provides sources for rethinking the present. Bewitched by the false emancipatory potential of contingency, genealogies are often understood to be looking in the past for 'alternatives' to our contemporary categories, institutions, and values, committing the fallacy of presentism. This goes against Foucault's own conception of his genealogical project: 'you can't find the solution of a problem in the solution of another problem raised at another moment by other people.'¹⁰¹

The third concern relates to the 'masking' of power. The genealogical constestation adopted in this book is distinguished from most of the genealogical work within the field of critical legal theory. The latter belongs to what Colin Koopman calls 'biopower-hunting' scholarship, whose methodological procedure 'seems to be that of fettering out the nefarious hidden workings of biopower (or disciplinary power, or slavish morality) in some context where its appearance was perhaps unexpected'.¹⁰² But to claim, for example, that power and knowledge underpin international environmental law and global environmental governance is not particularly critical. It is rather trite by this point. In addition to contingency, we are also past the trashing stage and the 'hermeneutics of suspicion'¹⁰³ critique. There is no need for elaborate theoretical apparatus to articulate and support such a claim. Demonstrating the detail of how this has occurred (and, indeed, how power and knowledge came together), however, is still useful, in order to imagine how it could be otherwise. Genealogy unpacks and presents all the 'parts' that make up the 'engine' that drives the self-constitution and self-belief of/in a field such as international environmental law. This is implemented with the proviso that this is not another version of tearing down, trashing, or power-hunting. Given contemporary conditions, genealogy should not lightly and unreflexively join in what has perniciously been called in some quarters the 'postmodernist dance of death on the grave of universal values'.¹⁰⁴ It would be easy to use critique to trash the biodiversity convention and support its dissolution. That would solve the paradox of the undead convention by aligning the reality of failure with a discourse of failure, closing the book on the convention. The genealogical approach adopted here will instead enable us to understand and explain this paradox.

The fourth concern relates to the reception and influence of Michel Foucault in academic circles. It is important to underline that legal genealogy is precisely a methodology; a diagnostic and analytical toolkit.¹⁰⁵ Foucault himself, of course, did use genealogy to great effect, deriving influential new concepts from his inquiries, such as biopolitics, discipline, and governmentality. These concepts are the product of the application of a particular methodology to address his particular enquiries. Yet they often appear to uncritically travel with genealogy as unacknowledged intellectual baggage. Such a methodological

move transforms the work from Foucaultian to *Foucaultianist*. It consists of a Foucaultian terminological onslaught approximating, through its sheer linguistic mass, some form of orthodox philosophical doctrine and political theory all rolled into one. But the transfer of genealogy over to the legal field should not equate automatically with the additional transfer of Foucault's elaborate conceptual apparatus that was developed from his inquiries and methodologies.¹⁰⁶ The following should then be underlined: genealogical historicization, and by extension, contestation and critique is transferred into the legal field because it is argued to be an effective methodological schema for legal enquiry, rather than a parroting of a certain *Foucaultianism*. This clarification serves to distinguish the theoretical framework of this particular approach from its trendy applications within the broader theoretical field, under which it invariably will be housed.

The analytics of environmental reason

The biodiversity convention is an apt target for a genealogical approach because it is a legal object heavily invested in its own sense of ahistorical necessity and urgency, as well as universality. The treaty regime is irrevocably bound to the crisis of global biodiversity in decline; requiring urgent global action in the present, to safeguard the future. It appears invested in producing even more universally accepted 'global deals on nature'.¹⁰⁷ The continued operation of the biodiversity convention and its burgeoning treaty regime appears incongruous to its ultimate lack of effect in terms of arresting global biodiversity decline, a gap between rhetoric and reality that increases after each successive strategic plan.

The historicization of biodiversity and the related international agreement is not an end in itself; nor is the aim to critique the biodiversity convention from a historical perspective, or to locate something pure and forgotten in the origins of the idea of biodiversity that will somehow save this undead convention and make it relevant and effective again. The biodiversity convention does possess a history as a revolving assemblage of problematizations, practices, and programmes, an account that is different from the mainstream legal history of the evolution of an international environmental treaty.

The past holds no fully fledged alternatives; just the elements of what become a composite environmental reason within the structure of international environmental law. Heterogeneous ideas of biodiversity, at various junctures attempting to co-opt, alter, and manipulate biodiversity towards different strategic goals and regulatory interventions, can be located through their use in projects of government, by using the genealogical framework outlined in this chapter. By gathering and organising problematizations, practices, and programmes together, a genealogy is, however, able to define and present a system of thought, a form of rationality or reason¹⁰⁸ that underpins the deployment of international law to address biodiversity decline.

Like problems, programmes are understood as programmes of government. They constitute the practices that they problematize so that they become amenable to governing.¹⁰⁹ They provide the grid of intelligibility and permissibility, a basis upon which a particular governmental thought can flourish; a basis for judging, evaluating, regulating;¹¹⁰ ultimately, governing. Programmes are directly opposed to the notion of scientific *a priori* that environmental law espouses; they are not objective solutions to a pre-formed problem that is external to this thought. They instead bind together the two parts of the normative proposition 'this, then needs to be done', casting the frame, range, and scale for what can be considered a workable solution; what Foucault called effects of 'veridiction'. Following this schema, we can observe how an object of legal thought is a much more constrained entity compared to an object of governmental thought, produced by a specific programme. The goal of a genealogy is to cast the former into the broader terms of the latter; to contextualize international law within a broader logic or *reason* of government.

Genealogy thus gives access to this governmental thought. It is this biodiversity reason that explains the paradox of the undead convention because it charts the emergence of the multiple relations that give rise to and support its continuing operation. In particular, the programme of genetic gold will be examined as a key element of the genealogy of the biodiversity convention.

Since the convention is broadly considered the response to an environmental problem of biodiversity loss, the analysis will begin with the problem of biodiversity loss itself. But this time, there will be no neat closure of the problem supporting a clear, and mutually reinforcing, division between ecology and law. There will be no problem of biodiversity loss to briefly describe and move on, but a problematization of biodiversity loss; in fact, a whole series of these problematizations will be presented in the next chapters; problematizations that languish, contradict, and reverberate with each other over decades.

Notes

- 1 Title of a press release by the CBD secretariat <https://www.cbd.int/doc/press/2010/pr-2010-10-06-ci-en.pdf>.
- 2 Don De Lillo, *Underworld* (1997).
- 3 UNEP/CBD/EXCOP 1/Decision EM-I.3 (2000), Annex.
- 4 UNEP/CBD/COP/10/Decision X.1 (2010), Annex.
- 5 UNEP/CBD/COP/10/Decision BS-V/11 (2010), Annex.
- 6 Philippe G. Le Prestre (ed), *Governing Global Biodiversity: The Evolution and Implementation of the Convention on Biological Diversity* (Routledge 2002), 5.
- 7 CBD, Art. 2.
- 8 CBD, Art. 3 and 4.
- 9 CBD, Art. 1.
- 10 Except indirectly in certain provisions of the Preamble.
- 11 Patricia Birnie and others, *International Law and the Environment* (3rd edn, Oxford University Press 2009), 616.

- 12 CBD, Art. 8.
- 13 CBD, Preamble.
- 14 Eric Dinerstein and others, 'An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm' (2017) 67 *BioScience* 534, 534; Bernard Coetzee and others, 'Local Scale Comparisons of Biodiversity as a Test for Global Protected Area Ecological Performance: A Meta-Analysis' (2014) 9 *PloS one* e105824, 1.
- 15 Further discussed later in this chapter.
- 16 Strategic Goal C, Target 11.
- 17 CBD, Art. 9.
- 18 CBD, Art. 2.
- 19 David M. Ong, 'International Environmental Law Governing Threats to Biodiversity' in Malgosia Fitzmaurice and others (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010), 534.
- 20 Edith Brown Weiss, 'In Fairness to Future Generations and Sustainable Development' (1992) *American University Journal of International Law and Policy* 19.
- 21 Nagoya Protocol, Art. 2.
- 22 CBD, Art. 2.
- 23 CBD, Art. 2.
- 24 "'Derivative" means a naturally occurring biochemical compound resulting from the genetic expression or metabolism of biological or genetic resources, even if it does not contain functional units of heredity'. See Nagoya Protocol, Art. 2.
- 25 CBD, Art. 19.
- 26 CBD, Art. 8(j), 15, 16, and 19.
- 27 CBD, Art. 8(j).
- 28 Ong, 534.
- 29 Alan E. Boyle, 'The Rio Convention on Biological Diversity' in Catherine Redgwell and Michael Bowman (eds), *International Law and the Conservation of Biological Diversity* (Kluwer Law International 1995), 37.
- 30 Birnie and others, 617.
- 31 CBD, Art. 6.
- 32 CBD, Art. 26.
- 33 Simon Lyster, *International Wildlife Law: An Analysis of International Treaties Concerned with the Conservation of Wildlife* (Grotius 1985).
- 34 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (1940), 161 UNTS 103.
- 35 Lyster (n.2), 111. This characterization has been maintained in the newer edition. See Michael Bowman and others, *Lyster's International Wildlife Law* (2nd edn, Cambridge University Press 2010), 242.
- 36 CBD, Art. 23.
- 37 CBD, Art. 24. This function is performed by UNEP.
- 38 UNEP/CBD/COP/12/Decision XII.26 (2012).
- 39 CBD, Art. 25.
- 40 On agricultural, dry, and sub-humid lands, forest, inland waters, island, marine and coastal, and mountain biodiversity.
- 41 Such as impact assessment, invasive alien species, and many others. More information available at: <https://www.cbd.int/programmes/>.
- 42 UNEP/CBD/COP/12/Decision XII.27 (2012).
- 43 For a list of UN agencies, intergovernmental and nongovernmental organizations, industry, and universities, observers, and participants at the most recent COP, see *Report of the Conference of the Parties to the Convention on Biological Diversity on its Fourteenth Meeting*. UNEP/CBD/COP/14/14, Annex I.

- 44 A provision used by the US to maintain observer status, despite its rejection of the treaty.
- 45 'Any other body or agency, whether governmental or non-governmental, qualified in fields relating to conservation and sustainable use of biological diversity, which has informed the Secretariat of its wish to be represented as an observer at a meeting of the Conference of the Parties, may be admitted unless at least one third of the Parties present object.' See CBD, Art. 23(5).
- 46 Edith Brown Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 *Geo LJ* 675, 684.
- 47 Geoffrey Palmer, 'New ways to make international environmental law' (1992) 86 *American Journal of International Law* 259
- 48 Don Anton, 'Treaty Congestion in International Environmental Law' in Erika J. Techera (ed), *Routledge Handbook of International Environmental Law* (Routledge 2012).
- 49 Joanna Depledge, 'The Opposite of Learning: Ossification in the Climate Change Regime' (2006) 6 *Global Environmental Politics* 1.
- 50 Lavanya Rajamani, 'From Stockholm to Johannesburg: The Anatomy of Dissonance in the International Environmental Dialogue' (2003) 12 *Review of European Community and International Environmental Law* 23.
- 51 David M. Driesen, 'Thirty Years of International Environmental Law: A Retrospective and Plea for Reinvigoration' (2003) 30 *Syracuse J Int'l L & Com* 353.
- 52 Daniel Bodansky, *The Art and Craft of International Environmental Law* (Harvard University Press 2010), 35.
- 53 UNGA Res 61/203 (2006).
- 54 The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets 'Living in Harmony with Nature', see UNEP/CBD/COP/10/Decision X.2 (2010), Annex.
- 55 UNGA Res 65/161 (2010).
- 56 Title of a 2010 press release by the Secretariat of the Biodiversity Convention, referring to the CBD's second strategic plan. Available at: <https://www.cbd.int/doc/press/2010/pr-2010-10-29-cop-10-en.pdf>.
- 57 'If Kyoto entered history as the city where the climate accord was born, Nagoya will be remembered as the city where the biodiversity accord was born.' *Ibid*.
- 58 The title is directly borrowed from George Monbiot, 'A Ghost Agreement' (The Guardian 2 November 2010).
- 59 'Strategic Plan for The Convention on Biological Diversity', see UNEP/CBD/COP 6/Decision VI.26 (2002), Annex.
- 60 As Target 7.B.
- 61 'Living in Harmony with Nature' (n.54), par. 7.
- 62 CBD, *Global Biodiversity Outlook 3* (2010), 9.
- 63 Nor will other environmental goals of a similar nature be met 'under current trajectories'. See IPBES, 'Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services' (2019), 6–7.
- 64 The issues surrounding this protocol are analyzed in Chapter 5.
- 65 'Living in Harmony with Nature' (n.54), par. 11.
- 66 E.g., UNEP/CBD/COP/14/Decision 14/34 (2018).
- 67 *Ibid*.
- 68 A. Dan Tarlock, 'Who Owns Science?' (2002) 10 *Penn State Environmental Law Review* 135; John McEldowney and Sharron McEldowney, 'Science and Environmental Law: Collaboration across the Double Helix' (2011) 13 *Environmental Law Review* 169.

- 69 David B. Schorr, 'Historical Analysis in Environmental Law' in Markus B. Dubber and Cristopher Tomlins (eds), *The Oxford Handbook of Legal History* (Oxford University Press 2018).
- 70 Philippe G. Le Prestre, 'Introduction: The Emergence of Global Biodiversity Governance' in Philippe G. Le Prestre (ed), *Governing Global Biodiversity: The Evolution and Implementation of the Convention on Biological Diversity* (Routledge 2002), 3.
- 71 Andreas Philippopoulos-Mihalopoulos, 'Looking for the Space between Law and Ecology' in Andreas Philippopoulos-Mihalopoulos (ed), *Law and Ecology: New Environmental Legal Foundations* (Routledge 2011); Andreas Philippopoulos-Mihalopoulos, "'...The Sound of Breaking String": Critical Environmental Law and Ontological Vulnerability' (2011) 2 *Journal of Human Rights and the Environment* 5.
- 72 The method is partly based in the interpretation found in Ben Golder, 'Contemporary Legal Genealogies' in Justin Desautels-Stein and Cristopher Tomlins (eds), *Searching for Contemporary Legal Thought* (Cambridge University Press 2017).
- 73 A clear and effective example of the genealogical approach in action can be found in Michel Foucault, *The Will to Knowledge: The History of Sexuality Volume 1* (Penguin 1998 [1976]).
- 74 See generally Colin Koopman, *Genealogy as Critique: Foucault and the Problems of Modernity* (Indiana University Press 2013).
- 75 Golder (n.72), 83.
- 76 Problematization features in a reorientation of genealogy after the publication of the first volume of *The History of Sexuality* in 1976. This reorientation, in line with previous changes in direction by Foucault, is malleable and takes many forms, as recounted in Michel Foucault, 'Polemics, Politics and Problematizations' in Paul Rabinow (ed), *Ethics: Subjectivity and Truth* (Penguin 2000); Michel Foucault, 'On the Genealogy of Ethics: An Overview of a Work in Progress' in Paul Rabinow (ed), *The Foucault Reader: An Introduction to Foucault's Thought* (Penguin 1991). For a reworked presentation of problematization as a method see Michel Foucault, *The Use of Pleasure: The History of Sexuality Volume 2* (Penguin 1992 [1984]). Towards the end of his life, Foucault ultimately claimed that 'what serves as a form of work common to the work I've done since *Madness and Civilization* is the notion of problematization'. Michel Foucault, 'The Concern for Truth' in Lawrence D. Kritzman (ed), *Michel Foucault Politics, Philosophy, Culture: Interviews and Other Writings 1977-1984* (Routledge 1988), 257.
- 77 'I set out from a problem expressed in the terms current today and try to work out its genealogy. Genealogy means that I begin my analysis from a question posed in the present'. Foucault, 'The Concern for Truth' (n.76), 262.
- 78 Michel Foucault, *Fearless Speech* (Semiotext(e) 2001), 171; Foucault, *The Use of Pleasure: The History of Sexuality Volume 2* (n.76), 10-11.
- 79 Koopman (n.74), 1.
- 80 Carol Bacchi, 'Why Study Problematizations? Making Politics Visible' (2012) 2 *Open Journal of Political Science* 1, 1.
- 81 Foucault, 'Polemics, Politics and Problematizations' (n.76), 389.
- 82 Foucault, *The Use of Pleasure: The History of Sexuality Volume 2* (n.76), 11-12.
- 83 Michel Foucault, 'Questions of Method' in Graham Burchell and others (eds), *The Foucault Effect: Studies in Governmentality* (The University of Chicago Press 1991), 75.
- 84 Koopman (n.74), 101.
- 85 Frank Biermann and others, 'Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals' (2017) 26-27 *Current Opinion in Environmental Sustainability* 26.
- 86 Foucault, 'Questions of Method' (n.83), 75.
- 87 See *ibid* 80.

- 88 Paul Veyne, 'Foucault Revolutionizes History' in Arnold I. Davidson (ed), *Foucault and His Interlocutors* (University of Chicago Press 1997), 181.
- 89 Foucault, *The Use of Pleasure: The History of Sexuality Volume 2* (n.76), 12–13.
- 90 Foucault defines the former as the 'analysis of systems of representation' and the latter as the 'analysis of attitudes and types of action' in Foucault, 'Polemics, Politics and Problematizations' (n.76), 388.
- 91 Foucault, *The Use of Pleasure: The History of Sexuality Volume 2* (n.76), 10.
- 92 Koopman (n.74), 5.
- 93 Golder (n.72), 80.
- 94 Jan Goldstein (ed), *Foucault and the Writing of History* (Blackwell 1994).
- 95 E.g., Peter H. Sand, 'The Evolution of International Environmental Law' in Daniel Bodansky and others (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007).
- 96 Michel Foucault, 'Nietzsche, Genealogy, History' in James D. Faubion (ed), *Aesthetics, Method and Epistemology: Essential Works of Foucault 1954–1984 Volume 2* (Penguin 2000), 83.
- 97 Golder (n.72), 88–94 discusses the work of Nikolas Rose, Christopher Tomlins, and Susan Marks highlighting the dangers of such critical scholarship.
- 98 Ibid 80.
- 99 As elaborated *supra*.
- 100 Koopman (n.74), 130.
- 101 Foucault, 'On the Genealogy of Ethics: An Overview of a Work in Progress', 343.
- 102 Koopman (n.74), 6.
- 103 Brian Leiter, 'The Hermeneutics of Suspicion: Recovering Marx, Nietzsche and Freud' in Brian Leiter (ed), *The Future of Philosophy* (Oxford University Press 2004).
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- 105 Koopman (n.74), 6–7.
- 106 On this distinction see Colin Koopman and Tomas Matza, 'Putting Foucault to Work: Analytic and Concept in Foucaultian Inquiry' (2013) 39 *Critical Inquiry* 817.
- 107 More recently, the 2020 strategic plan has adopted this mantle, although the Nagoya conference outcomes of 2010 was also described as such, as discussed *supra*.
- 108 Foucault describes his work along these lines in Michel Foucault, 'What is Called "Punishing"?' in James D. Faubion (ed), *Power: Essential Works of Foucault 1954–1984 Volume Three* (Penguin 2002), 383.
- 109 Roger Deacon, 'Theory as Practice: Foucault's Concept of Problematization' (2000) 118 *Telos* 127, 132.
- 110 Thomas Flynn, 'Foucault's Mapping of History' in Gary Gutting (ed), *The Cambridge Companion to Foucault* (2nd edn, Cambridge University Press 2003), 31.

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