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**GLOBAL CONSTITUTIONALISM,
POST-COLONIALISM, OR PLURALISM?
EXPLORING INTERDISCIPLINARY APPROACHES
TO GLOBAL ENVIRONMENTAL LAW AND
GOVERNANCE**

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Global constitutionalism, Post-colonialism, or Pluralism? Exploring Interdisciplinary Approaches to Global Environmental Law and Governance¹

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E8. Nuevas tendencias en la construcción jurídica de la gobernanza: la idea del de constitucionalismo global

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1 Introduction

Under the paradigm of sustainable development, current international law has neither been able to shape a real, nor an equitable, answer to the global ecological crisis. Echoing a growing debate in civil society and academia, this paper starts from the assumption that any serious attempt to meet the aforementioned challenge requires a profound review of global governance making concessions to central tenets of cosmopolitanism. Indeed, there seems to be widespread scientific consensus that governmentality² and governance of the Earth System³ require a major overhaul if the

1 The present paper draws from some sections of A Pigrau et al., *International law and ecological debt. International claims, debates and struggles for environmental justice. EJOLT Report No. 11*, 2014, pp. 1-132, <http://www.ejolt.org/wordpress/wp-content/uploads/2014/01/140128_EJOLT11-low.pdf>.

2 M Foucault, 'Governmentality' in G Burchell, C Gordon and P Miller (eds), *The Foucault Effect. Studies in Governmentality with Two Lectures by and an Interview with Michel Foucault* (University of Chicago Press 1991), 87.

3 On the distinction between the notions of governance and governmentality, Lövbrand et al. sustain that 'while the governance concept is concerned with the loci and modes of governing, the governmentality concept draws attention to the systematic thinking that

international community hopes to meet that challenge.⁴ Starting from these assumptions, this paper seeks to explore new interdisciplinary perspectives on old theoretical and methodological debates about the role that international law plays in order to cope with the global ecological crisis.

Focusing on the issue of the burden-sharing for global environmental protection, which has defined the major fault line in global environmental diplomacy over the past decades, section 2 will argue that narratives and notions developed in the realm of social movements, such as 'environmental justice' or 'ecological/climate debt', need to be taken into account. Despite the scepticism that predominates in present legal scholarship, the point is made that an enhanced dialogue with environmental activism may be useful for grasping counter-hegemonic vindications, and feed them into mainstream legal discourses. Accordingly, from a methodological perspective, section 3 ascribes a pivotal significance to less normative, more analytical approaches (viz. law in context) that acknowledge the legal pluralism of the global society and open up legal scholarship to interdisciplinarity. Such a nuanced approach is thought to enrich a debate that has so far been carried out mainly in terms of global constitutionalism and Third World approaches to international law. This awareness of the global society's heterogeneity is considered to be essential to the development of a relevant analytical and empirical jurisprudence that allows forging tools and concepts for meaningful comparisons of legal phenomena and describing processes of diffusion across legal systems, traditions and cultures.⁵

Based on these premises, sections 4 and 5 will seek interdisciplinary insight from anthropology, sociology and ecological economics through notions such as 'global social metabolism', 'material flow analysis' and 'ecologically unequal exchange', which will be portrayed as interesting tools to reassess critically the role of equity, or other more specific criteria (entitlements, capacities, needs, historical responsibilities, valuation, incommensurability, etc.), for the (re)conceptualisation and (re)interpretation of core principles of

renders different governing strategies possible'. See E Lövbrand, J Stripple, and B Wiman, 'Earth System governmentality: Reflections on science in the Anthropocene' (2009) 19 *Global Environmental Change* 7.

4 See AD Barnosky and others, 'Approaching a State Shift in Earth's Biosphere' (2012) 486 *Nature* 52; PR Ehrlich, PM Kareiva and GC Daily, 'Securing Natural Capital and Expanding Equity to Rescale Civilization' (2012) 486 *Nature* 68. See also F Biermann and others, 'Earth System Governance: A Research Framework' (2010) 10 *International Environmental Agreements: Politics, Law and Economics* 277.

5 W Twining, 'Law, Justice and Rights: Some Implications of a Global Perspective' in J Ebbesson and P Okowa (eds), *Environmental Law and Justice in Context* (CUP 2009), 76.

international law and, hence, the obligations that states assume in the conduct of international relations. Ultimately, this interdisciplinary excursion will lead to the assessment that the theoretical and discursive premises of current international (environmental) law hinder it from being efficient in addressing the ecological crisis. Therefore, the paper suggests the need to promote a global (trans-civilizational) consensus on the protection of the ecological integrity of the environment as a common value and concern of humankind that informs governmentality, or even, environmentality.⁶

2 The Issue of Fairness in the Burden-Sharing Arrangement for Global Environmental Protection: Critical voices from academia and social movements

Despite temporary compromises such as the one enshrined in Principle 7 of the Rio Declaration,⁷ there has been a persistent dissonance in international environmental dialogue between the North and the South that may be traced back to the days of the 1972 Stockholm Conference. As Lavanja Rajamani put it, '[a]t the root of the divergence between them lies a struggle to influence the values underpinning international environmental law and therefore the burden-sharing arrangement for global environmental protection.'⁸ While the developing countries' claims are based on the culpability/entitlement premise,⁹ which derives from a vested right and is rooted in obligation and liability,¹⁰ developed countries rely on the consideration/capacity premise,¹¹ which in turn derives from benevolence and is rooted in morality, humanity and goodwill.¹² However, as Rajamani stresses, despite presenting itself as neutral, the consideration/capacity premise is fundamentally flawed, in that 'it seeks to wipe the colonial past

6 Timothy W Luke, 'Environmentality' in JS Dryzek, RB Norgaard and D Schlosberg (eds), *The Oxford Handbook of Climate Change and Society* (OUP 2011), 96.

7 Principle 7 says literally: 'States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.' See *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (Vol. I)*, UN Doc A/CONF.151/26/Rev.1 (Vol. I).

8 L Rajamani, *Differential Treatment in International Environmental Law* (OUP 2006), 71-2. Footnotes omitted.

9 *ibid.*, 72.

10 *ibid.*, 86.

11 *ibid.*, 79.

12 *ibid.*, 86.

from our collective memories, and start afresh, as if past patterns of exploitation have little bearing on current inequities ...¹³ The culpability/entitlement narrative, for its part, is also profoundly ideology driven, but highlights 'that contemporary environmental problems must be viewed in context, and that appropriate mechanisms must be developed by the international community to recognize and right certain historical wrongs.'¹⁴

This debate has defined the major fault line in global environmental diplomacy over the past decades, and will certainly continue to do so in the future. However, the debate about the burden-sharing for global environmental protection cannot be regarded exclusively in its intergovernmental dimension. Social movements, such as the environmental justice movements, also have a clear stake in it. Undoubtedly, this is an area of research in which an enhanced dialogue between the legal (academic) community and social activism is still needed. Despite the significant scepticism that they encounter in present international legal scholarship,¹⁵ we take the view that notions developed in the realm of social movements and later picked up in other (i.e. non-legal) realms of social science, such as 'environmental justice,'¹⁶ which might also imply that of 'ecological/climate debt',¹⁷ have a potential role to play in this context. Nevertheless, the gap between these movements' claims and the legal language needs to be bridged.

13 *ibid.*, 87.

14 *ibid.*, 88.

15 In his edited book on Global Justice and Sustainable Development, Duncan French claims to avoid deliberately the term environmental justice in favour of that of global justice. By focussing almost exclusively on incorporating the 'social' within the 'environmental', without properly acknowledging the intrinsic worth of what he regards to be the moral imperative of human development, French does not consider '...that the term [of environmental justice] has ever intended to be sufficiently inclusive to incorporate the entire complexity of human development and, more specifically, the moral-cum-political problematique of North-South in equality'. See D French, 'Sustainable Development and the Instinctive Imperative of Justice in the Global Order' in D French (ed), *Global Justice and Sustainable Development* (Martinus Nijhoff 2010) 3, 5.

¹⁶ On the environmental justice movement, see generally D Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature* (OUP 2007).

¹⁷ On the origins of this social movement and its claims, see JT Roberts and BC Parks, *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy* (MIT Press 2007); JT Roberts and BC Parks, 'Ecologically Unequal Exchange, Ecological Debt, and Climate Justice. The History and Implications of Three Related Ideas for a New Social Movement' (2009) 50 *International Journal of Comparative Sociology* 385.

Debates on claims for environmental justice, and even for the compensation of the North's ecological/climate debt, may be classified among the culpability/entitlement narratives, and represent a partial aspect of a broader political debate that may be traced back to the days of the New International Economic Order (NIEO).¹⁸ The notion of ecological debt was actually advanced by civil society organisations in the Global Forum that was held in parallel to the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in June 1992.¹⁹ On that occasion, the participant NGOs adopted a series of alternative treaties, which included *inter alia* the so-called Debt Treaty.²⁰ In its preamble, the signatory organisations recognized

the existence of a planetary ecological debt of the North; this is essentially constituted by economic and trade relations based on the indiscriminate exploitation of resources, and its ecological impacts..., including global environmental deterioration, most of which is the responsibility of the North;²¹

On this basis, these NGOs pledged to 'work for the recognition and compensation of the planetary ecological debt of the North with respect to the South'²² and devised a series of strategies for action, including 'work with jurists and lawyers to establish regulations and legislation on international transactions [and] put pressure to make them binding to nations and to corporations.'²³ According to Erik Paredis, Gert Goeminne, Wouter Vanhove, Frank Maes and Jesse Lambrecht, from the University of Ghent, despite being a terminology foreign to existing MEAs, '[c]ertain principles of international environmental law address issues that are part of the concept of ecological debt and some of the ideas that frame the concept are, to some extent, already rendered in the wording of existing MEAs.'²⁴ Beyond specific

¹⁸ See Pigrau, Borràs, Cardesa-Salzmann, and Jaria i Manzano, 'International law and ecological debt. International claims, debates and struggles for environmental justice. EJOLT Report No. 11' (n 1), ch2.

¹⁹ K Mickelson, 'Critical Approaches' in D Bodansky, J Brunnée and E Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007), 274-5. See also <www.ejolt.org/2013/05/ecological-debt/> (accessed 20 Oct. 2016).

²⁰

<www.stakeholderforum.org/fileadmin/files/Earth_Summit_2012/1992_treaties/Debt_Treaty.pdf> (accessed 20 Oct. 2016).

²¹ *ibid*, para. 2.

²² *ibid*, para. 16.

²³ *ibid*, para. 34.

²⁴ E Paredis and others, *The Concept of Ecological Debt: Its Meaning and Applicability in International Policy* (Academia Press 2008), 89.

mechanisms established in MEAs that contribute one way or the other to correct historical wrongs, however, the legal status of the polluter-pays and common but differentiated responsibilities principles remains unclear.

Moreover, attempts to substantiate inter-state or transnational legal claims for the restitution of ecological/climate debt have proven complex and disappointing. In addition to the fragmentation and jurisdictional limitations of international courts and tribunals,²⁵ historical claims, such as those typically involved in 'ecological/climate debt', also have to face constraints based on substantive law. As Dinah Shelton suggests based on the experience of victims of the Holocaust, historical claims might only warrant reparations under three quite specific circumstances, namely:

First, many historical wrongs have consequences that continue into the present; these continuing wrongs result in a convergence in the notions of inter- and intragenerational equity. Second, redress is due when the acts were illegal at the time committed and no reparations have been afforded. Third, reparations are justified where reliance on the earlier law was not reasonable and expectations were not settled because the law patently conflicted with fundamental principles then in force.²⁶

Accordingly, one may portray the fate of inter-state claims for the restitution of ecological debt, such as in *Case concerning Certain Phosphate Lands (Nauru vs. Australia)*,²⁷ or transnational claims, as in the *Kivalina* case and the *Chevron-Texaco* case²⁸ —just to mention a few examples— as an accurate illustration of the aforementioned complexity, or even more, of the legal system's reluctance to give up the very premises of the global economic structures in place.

25 Cesare PR Romano, 'The Shadow Zones of International Judicialization' in Cesare PR Romano, Karen J Alter and Yuval Shany (eds), *The Oxford Handbook of International Adjudication* (OUP 2014), 90.

26 Dinah Shelton, 'Intergenerational Equity' in Rüdiger Wolfrum and Chia Kojima (eds), *Solidarity: A Structural Principle of International Law* (Springer 2010) 213, 236. On the difficulties arising out of inter-temporality in compensation claims for historical wrongs suffered by indigenous peoples, see also Dinah Shelton, 'Reparations for Indigenous Peoples: The Present Value of Past Wrongs' in Federico Lenzerini (ed), *Reparations for Indigenous Peoples. International and Comparative Perspectives* (OUP 2008) 47, 62ff.

27 *Case concerning certain Phosphate Lands in Nauru (Nauru v. Australia)*(Preliminary Objections) [1992] ICJ Rep 240.

28 Antoni Pigrau, 'The Texaco-Chevron Case in Ecuador: Law and Justice in the Age of Globalization' (2014) 5 *Revista Catalana de Dret Ambiental* 1 <<http://rcda.cedat.cat/index.php/rcda/article/viewFile/491/2466>>.

Alternatively, social movements also have other ways to express their contestation against a state of affairs that comes close to a systemic exclusion of their claims. Activism and, especially, tribunals of opinion, such as the *Tribunale Permanente dei Popoli*, channel an outcry from the global legal system's periphery against exclusion, by which social movements voice alternative interpretations of existing law and vindicate concrete changes.²⁹ But is this all that is left to social movements to vindicate their contestation? Under these circumstances, an enhanced collaboration between legal scholarship and environmental justice activism may be useful to grasp these 'peripheral' reindications in an attempt to feed them into the mainstream discourses in the global legal system. Indeed, law may be regarded as an instrument at the service of entrenched social power that tends to discard systematically non-hegemonic views and claims. Therefore, such an endeavour demands an effort of creativity, which takes duly into account the trans- or multi-civilizational dimension of the global society,³⁰ so as to devise a post-Westphalian order that overcomes what Rajagopal calls 'the limitations of a Kantian liberal world order based primarily on individual autonomy and rights, and a realist world order based primarily on state sovereignty.'³¹ After all, the necessity to deal with global heterarchy and normative/cultural plurality has been authoritatively regarded as one of the existential challenges of environmental law scholarship and, especially, of international environmental law scholarship.³² In this sense, if international law is 'what international lawyers do and how they think',³³ then social movements advocating for environmental justice and the reparation of the historical ecological debt that the North allegedly owes to the South should be advised to engage in, and bring their ideas into, the constant process of mythologisation, demythologisation, and remythologisation of international law that keeps being carried out within 'a relatively closed circle of professionals.'³⁴

29 A Fischer-Lescano, *Globalverfassung. Die Geltungsbegründung Der Menschenrechte* (Velbrück Wissenschaft 2005), 154-7.

30 See Y Onuma, *A Transcivilizational Perspective on International Law. Questioning Prevalent Cognitive Frameworks in the Emerging Multi-Polar and Multi-Civilizational World of the Twenty-First Century*, vol 8 (Martinus Nijhoff 2010).

31 B Rajagopal, *International Law from Below. Development, Social Movements and Third World Resistance* (CUP 2003), 245.

32 E Fisher and others, 'Maturity and Methodology: Starting a Debate about Environmental Law Scholarship' (2009) 21 *Journal of Environmental Law* 213, 241.

33 Martti Koskenniemi, *The Politics of International Law* (Hart 2011), 293.

34 C Focarelli, *International Law as Social Construct. The Struggle for Global Justice* (OUP 2012), 89.

The following section presents a short review of three doctrinal streams that seek to demythologise and remythologise international law, engaging in a debate on issues of substance and procedure that is of relevance for the burden-sharing for global environmental protection and the social movements' claims for environmental justice. One, global constitutionalism, is a typically Western (and more precisely, European) current, whereas the second one, Third World approaches to international law (TWAIL), may be seen as channelling the views that the Global South has on international law, as well as its shared vindication to overcome its historical biases and cultural premises that continue to hinder them in the full enjoyment of the self-determination of their peoples. Finally, pluralism comes initially as a neutral, descriptive theory on the co-existence and interaction of different legal systems, but reveals potential strengths in articulating constructive solutions for the world's normative heterarchy.

3 Global Constitutionalism, TWAIL, and Pluralism: Reconstructing International Law for Global Justice?

Despite embodying inherently vague political agendas, and having clearly divergent foci, constitutionalism and Third World approaches to international law (TWAIL) do have areas of convergence. For one, constitutionalism has been defined as a 'mindset', a project of political and moral regeneration, according to which international lawyers resort to a vocabulary of institutional hierarchies and fundamental values in the application of law, without being necessarily tied to any definite institutional project.³⁵ However, whereas Koskenniemi regards constitutionalism primarily as a response of (European) international lawyers to the growing fragmentation of international law,³⁶ Focarelli considers that '[i]t is not confined to ensuring the systemic unity, coherence, and completeness of international law [...] [,but] extends to the substance of international norms and decisions, pointing to their legitimacy.'³⁷ In particular, normative conceptions of international constitutionalism reassess the global legal order from the perspective of principles such as democracy, human rights, equality and solidarity, checks and balances, and the rule of law, so as to set up the legal foundation for the allocation of public powers in the international sphere, and submit them to constraint.³⁸ However, beyond and

35 M Koskenniemi, 'Constitutionalism as Mindset: Reflections on Kantian Themes About International Law and Globalization' (2007) 8 *Theoretical Inquiries in Law* 9. See also Koskenniemi, *The Politics of International Law*(n 33), 348.

36 *ibid.* at p. 349.

37 Focarelli (n 34), 123.

38 AL Paulus, 'The International Legal System as a Constitution' in JL Dunoff and JP

in addition to this dimension, as legal and political constraints to power, Poirares Maduro also conceives of constitutionalism as 'a repository of the notions of the common good prevalent in a certain community and as an instrument for organizing power in pursuit of that common good (constitutionalism as an expression of polity).'³⁹ As he continues to argue, constitutionalism also furthers

*a deliberative framework in which competing notions of the common good can be made compatible or arbitrated in a manner acceptable to all, thereby balancing democratic concerns with the control of the political process by a few with the risk of a tyranny by the many (constitutionalism as deliberation).*⁴⁰

Critical legal scholars like Koskenniemi see in this dimension of constitutionalism one of its major flaws, as there is no such thing as a polity in the international or global society; after all, fragmentation of international law may be regarded precisely as the result of a conscious challenge to the features of an international legal system that is unable to articulate a politically meaningful project for the common good.⁴¹ Admittedly, this argument is overwhelming. At this specific point of the debate, however, TWAIL authors come up with a fully-fledged political agenda.⁴²

Regarding the idea of the lack of a global deliberative framework for the discernment of competing notions of the common good, Third World approaches, for their part, pursue an agenda of reconstructing the international legal order to overcome its structural bias toward the interests of Western developed countries. As one of the leading authors of TWAIL puts it, the end of the Cold War meant an acceleration of the process of economic globalization underpinned by bespoke developments in international law and institutions that accommodate the interests of a transnational ruling elite. Within this process, 'international law is coming to define the meaning of a 'democratic state' and relocating sovereign economic powers in international institutions, greatly limiting the possibilities of third world states to pursue independent self-reliant development.'⁴³ Accordingly,

Trachtman (eds), *Ruling the World? Constitutionalism, International Law, and Global Governance* (CUP 2009).

39 M Poirares Maduro, 'The Importance of Being Called a Constitution: Constitutional Authority and the Authority of Constitutionalism' (2005) 3 *International Journal of Constitutional Law* 332, 333.

40 *ibid.*

41 Koskenniemi, *The Politics of International Law* (n 33), 349-50.

42 Focarelli (n 34).

43 BS Chimni, 'Third World Approaches to International Law: A Manifesto' (2006) 8

TWAIL scholars pursue a research agenda that addresses the concerns of marginal and oppressed groups and peoples, suggesting concrete changes in existing international regimes.⁴⁴

We sense that there might be areas of intersection, a series of points of encounter, between the political agendas of global constitutionalism (the strive for systemic unity, coherence, and legitimacy of international law and governance) and TWAIL (the demythologisation of international law as imperialistic and Western-biased and its remythologisation in favour of third world peoples,⁴⁵ towards a fairer, more balanced global legal system). In particular, the agendas of both approaches seem to merge on specific items such as the promotion of transparency and accountability by international institutions and transnational corporations, the enhancement of an effective use of the language of rights by injecting peoples' interests in non-territorialised legal orders, and the promotion of sustainability and equity.⁴⁶ These parallel research agendas therefore seem to converge in what Louis J. Kotzé recently described as 'global environmental constitutionalism'.⁴⁷ He takes the view that a more general idea of global constitutionalism implies *inter alia* the institutionalisation and legitimisation of global governance by: posing limits on single *loci* of power (checks and balances); increasing participation and representation; enacting higher (constitutional) laws based on a common universal value system, including fundamental rights; and identifying common interests of humankind to be pursued as overarching objectives by any public authority.⁴⁸ Indeed, as Kotzé acknowledges, for the time being (environmental) constitutionalism cannot realistically be considered as a globally dominant ideology, nor can this be expected to come about any time soon. Still, in his words

[o]ne could nevertheless reasonably expect that, because of the causal reciprocity and interlinkages between domestic and supranational law and governance regimes, a gradually increased process of domestic constitutionalization of law and governance generally, and environmental law and governance specifically, could contribute in a bottom-up way to

International Community Law Review 3, 7.

44 *ibid.*

45 Focarelli (n 34), 132.

46 Chimni (n 43).

47 LJ Kotzé, 'Arguing Global Environmental Constitutionalism' (2012) 1 Transnational Environmental Law 199.

48 *ibid.*, 216.

*establish global environmental constitutionalism as a dominant prevailing ideology.*⁴⁹

In theory, constitutionalism advocates for a global order in which more open, representative and participative law-making and law-enforcing processes and institutions shape an international economic system that fosters more equal patterns of exchange, which is also more sensitive for values such as ecological integrity and human dignity. Indeed, its deliberative facet actually seems to give way for integrating counter-hegemonic claims —such as those implicit in environmental justice or ecological/climate debt— into the collective discernment of competing notions of the common good. Yet, from a TWAIL perspective, some aspects of global constitutionalism are too close to hegemonic or imperialistic narratives of international law. In this sense, Rajagopal acknowledges that some socio-legal theorists and constitutionalists in Europe and the United States have engaged in critical reviews of liberal theories of rights, justice, and democracy taking into account social movements literature.⁵⁰ Nevertheless, he reproaches international law and mainstream international legal scholarship for an artificially narrow outlook, which ‘remains trapped in a version of politics that is narrowly focused on institutional practice, and an understanding of the ‘social’ that takes the unity of the agent as given.’⁵¹ As a consequence, so his argument goes, extra-institutional social contestation in the Third World is simply not apprehended by international legal scholarship.⁵² For this author

[s]ocial movements arise, then, as a challenge to liberalism and Marxism, and, therefore, by extention, to extant theories of international law... Social movements reverse both these ways of imagining an international order: they seek to preserve the autonomy implied in the positivist vision, but by abandoning the nation state as the collectivity that would guarantee such autonomy; they also share the naturalists’ deep suspicion of the leviathan, but allow a multiplicity of arenas including the community (rather than the individual alone) as political actors. Instead of the unified political space

49 *ibid.*, 229.

50 Rajagopal (n 31), 234. Among the authors he explicitly refers to, he mentions Jürgen Habermas and his discourse theory on law and democracy: see J Habermas, *Faktizität Und Geltung. Beiträge Zur Diskurstheorie Des Rechts Und Des Demokratischen Rechtsstaates* (Suhrkamp 1992).

51 Rajagopal (n 31), 235.

52 *ibid.*

*allowed by these extant theories, social movements seek to redefine the very boundaries of what is properly 'political.'*⁵³

Therefore, international legal scholarship is increasingly ascribing a pivotal significance to less normative, more analytical and empirical approaches – such as law in context⁵⁴ that acknowledge the legal pluralism in the global society, and its trans- or multi-civilizational dimensions. In this sense, Onuma Yasuaki's position seems more than reasonable, when he upholds the fundamental importance of civilizational factors for a thorough, more nuanced and comprehensive understanding of international law in contemporary globalised society. He argues that the international and transnational perspectives under which international law has been predominantly scrutinised need to be complemented by a third, transcivilizational perspective, as a way to overcome analytical approaches flawed by West-centrism and state-centrism.⁵⁵ Such a nuanced approach is thought to dilute and mitigate these connotations, especially in global constitutionalism. From a different, yet largely coinciding perspective, Nico Krisch has also emphasised the problematic character of the 'transfer' approach of Western domestic political models to global postnational governance, making instead the case for pluralism, which he regards not merely as a sociological analysis of the interplay of different legal systems and orders in the present postnational setting,⁵⁶ but as embodying also normative virtues. In particular, Krisch portrays pluralism as having 'significant strengths in providing adaptability, creating space for contestation, and offering a possibility of steering between conflicting supremacy claims of different polity levels.'⁵⁷

Against the backdrop of the aforementioned epistemological debates that reveal how the discipline of law is becoming increasingly cosmopolitan,

53 *ibid*, 243.

54 See William Twining, *Globalisation and Legal Theory* (Butterworths 2000). See also Twining, 'Law, Justice and Rights: Some Implications of a Global Perspective' (n 5), 76.

55 Yet, this author does not conceive of the transcivilizational perspective as an alternative theory or methodology of international law. Rather, he defines it as a 'perspective from which we see, sense, recognize, interpret, assess, and seek to propose solutions to ideas, activities, phenomena and problems transcending national boundaries, by developing a cognitive and evaluative framework based on the recognition of plurality of civilizations and cultures that have long existed in human history.' Onuma (n 30), 81.

56 See e.g. Andreas Fischer-Lescano and Günther Teubner, 'Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law' (2004) 25 *Michigan Journal of International Law* 999.

57 N Krisch, *Beyond Constitutionalism. The Pluralist Structure of Postnational Law* (OUP 2010), 70.

William Twining suggested the need to promote ‘a genuinely cosmopolitan general jurisprudence’,⁵⁸ or in Neil Walker’s terms, global law.⁵⁹ Such an endeavour certainly requires transcending the adamant West-centrism and taking due account of the various complex legal traditions of the world, their respective underlying cosmologies, so as to sustain diversity in law through multivalent thinking.⁶⁰ As H. Patrick Glenn has put it in the concluding chapter to his monograph on the *Legal Traditions of the World*,

*Acting positively to sustain diversity in law should improve communication between lawyers of the world, It should enhance the prospect for peaceful settlement of disputes, enhance the legal mission. Individualistic traditions may borrow, and use, informal notions of normativity to complement themselves. Collectivist traditions may borrow, and use, instruments of self-empowerment, again to complement themselves. All in the limits they judge acceptable. All according to the constraints of context.*⁶¹

One of the specific areas in which Glenn identifies a significant exchange of legal thought concerning mankind’s relationship with the natural environment has taken place between the manifold Chthonic legal traditions and the West. ‘Chthonic’ is a designation that stands for peoples that live ‘in or in close harmony with the earth’ and is preferred by Glenn to other more problematic ones, like ‘aboriginals’, ‘natives’ or ‘indigenous peoples’.⁶² Chthonic thought is portrayed as ‘a radical alternative, intellectually coherent and with thousands of years of experience and application.’⁶³

Perhaps one of the most visible (and maybe also disappointing) experiences of such an exchange has taken place in South America, with the integration of the ‘buen vivir’, or ‘sumak kawsay’ (good living) in the recent Bolivian and Ecuadorian constitutional frameworks.⁶⁴ These rather specific examples,

58 Twining, ‘Law, Justice and Rights: Some Implications of a Global Perspective’ (n 5), 83.

59 Neil Walker, *Intimations of Global Law* (CUP 2014).

60 Probably, the most comprehensive and encyclopaedic publication in this field is Patrick Glenn, *Legal Traditions of the World. Sustainable Diversity in Law* (5th edn, OUP 2014), in which the author identifies and describes seven major legal traditions, namely, the Chthonic, Confucian, Hindu, Islamic and Talmudic legal traditions, in addition to the civil law and common law traditions. On the intrinsic value of legal cultural diversity, especially Chthonic legal traditions, as a repository of tools, ideas and solutions to articulate the societies’ interactions with their natural environments, see also Jordi Jaria i Manzano, ‘Circles of Consensus. The Preservation of Cultural Diversity through Political Processes’ (2012) 8 *Utrecht Law Review* 92.

61 Glenn, *Legal Traditions of the World. Sustainable Diversity in Law* (n 60), 378.

62 *ibid.*, 60 ff.

63 *ibid.*, 90.

64 See A Pigrau (ed), *Pueblos Indígenas, Diversidad Cultural Y Justicia Ambiental. Un Estudio de*

however, do not vary the more general picture according to which the appropriate recognition and accommodation of 'cultural minorities' is an aim that has not been achieved across the various countries that integrate the Global South.⁶⁵ Yet, as Twining also warns, the analysis of such legal cultural exchanges –in form of reception or transplant of legal notions, concepts and phenomena– has often been carried out in an unempirical manner, obeying so to say to a naïve model of reception, in which one 'technically' superior legal culture exports towards a primitive or less developed culture, or borrows from it interesting solutions that merely require technical and scientific upgrade and adaptation to become operational. Therefore, as he argues, the cosmopolitan general jurisprudence that he posits needs to be construed on a sound analytical and empirical basis that contributes to appraise more thoroughly the complex phenomena involved in the diffusion of legal notions, concepts and phenomena across different legal systems, traditions, and cultures.⁶⁶

This brief overview of the constitutionalist, third-world and pluralist accounts of international law sketches out some of the more recent terms in which the global legal epistemic community carries out the perpetual debate on how to conduct the equally perpetual struggle for global justice. This debate implies as well the different approaches toward the issue of fairness in the burden-sharing of global environmental protection: Whereas only TWAIL voices direct political claims for the compensation of historical wrongs of the colonial past,⁶⁷ global constitutionalism and pluralism devise each different methods to foster fairness through compromise, through indeterminacy and adaptation in the latter case, or resorting to the transfer of (Western) domestic experiences to the global setting, in the former.

Yet, this overview also reminds that the aforementioned terms of the epistemic debate only echo the broader terms of a wider global political

Las Nuevas Constituciones de Ecuador Y Bolivia (Tirant lo Blanch 2013). See also Johannes Waldmüller, 'Buen Vivir, Sumak Kawsay, "Good Living": An Introduction and Overview' [2014] *Alternautas. (Re)Searching Development: The Abya Yala Chapter* <<http://www.alternautas.net/blog/2014/5/14/buen-vivir-sumak-kawsay-good-living-an-introduction-and-overview>>.

⁶⁵ D Bonilla-Maldonado, 'Toward a Constitutionalism of the Global South' in D Bonilla-Maldonado (ed), *Constitutionalism of the Global South. The Activist Tribunals of India, South Africa, and Colombia* (CUP 2013) 1, 28.

⁶⁶ Twining, 'Law, Justice and Rights: Some Implications of a Global Perspective' (n 5), 80. More generally, see also William Twining, *General Jurisprudence. Understanding Law from a Global Perspective* (CUP 2009), ch 9; W Twining, 'Diffusion of Law: A Global Perspective' (2004) 36 *Journal of Legal Pluralism* 1.

⁶⁷ Focarelli (n 34).

debate, which includes the claims and vindications of social movements. While acknowledging that legal 'science' can never fully escape an intrinsically political dimension, the remaining sections modestly intend to engage in interdisciplinary analytical jurisprudence, in order to test the usefulness of insights from other disciplines of social sciences, such as anthropology, economics and sociology that may provide interesting tools to reassess the role of law to cope with the global ecological crisis. To this end, the next section will briefly appraise the origins and basic content of two deeply interrelated social science theories –namely, those of socio-economic metabolism and ecologically unequal exchange– before concluding on their potential relevance for (international) environmental legal scholarship in the last section.

4 Seeking Insights from Anthropology, Sociology and Economics: Global Socio-Economic Metabolism and Ecologically Unequal Exchange

Global socio-economic metabolism (in short, global social metabolism) and ecologically unequal exchange are notions that have been developed in the realm of social sciences such as anthropology, sociology and economics over the past decades, particularly since the late 1960s. Whereas both concepts are deeply interrelated, the concept of ecologically unequal exchange focusses on the conditions under which exchanges take place world-wide in terms of ecological equity; for its part, global social metabolism comes as a fully-fledged interdisciplinary paradigm that tries to describe the interactions between the society or societies and their natural environment.

According to Marina Fischer-Kowalski, from the Institute for Interdisciplinary Research and Continuing Education from the University of Vienna, the attempt to cut across the 'great divide' between natural and social sciences and bring together the biological concept of *metabolism* to describe and assess the material and energetic processes within the economy and society *vis-à-vis* natural systems has an (admittedly disperse) intellectual tradition that may be traced back well into the 19th century.⁶⁸ Nevertheless, *material flow analysis* (MFA), which has become one of the methodological cornerstones of social metabolism theory, seems to have its origins in a series of seminal publications from the late 1960s,⁶⁹ especially those

68 M Fischer-Kowalski, 'Society's Metabolism: The Intellectual History of Materials Flow Analysis, Part I, 1860-1970' (1998) 2 *Journal of Industrial Ecology* 61, 64-9.

69 *ibid.*, 70 ff.

authored by Kenneth Boulding,⁷⁰ and Robert Ayres and Allen Kneese.⁷¹ In a nutshell, Boulding argues in his paper that economic theory needs to acknowledge the finiteness of natural resources as an axiom that should foster a much needed transition from what he called a 'cowboy economy' (in which there is always a frontier, a still unknown area, with new natural resources to be exploited, should the known ones become scarce) to a 'spaceship economy', in which '[t]he essential measure of the success of the economy is not production and consumption at all, but the nature, extent, quality, and complexity of the total capital stock, including in this the state of the human bodies and minds.'⁷² In the second of the aforementioned publications, both authors (a physicist and an economist) also criticized that standard economic theory put excessive emphasis on services, almost entirely obviating the underlying flows of materials that are involved in the production and consumption processes. Based on the material flow analysis of the US economy between 1963-65, their core argument was that orthodox calculation methods of economic growth did not properly account for the very significant externalities that those processes have on common and freely available environmental goods.⁷³ As they put it, orthodox economic theories would refer

to the "final consumption" of goods as though material objects such as fuels, materials, and finished goods somehow disappeared into the void... Of course, residuals from both the production and consumption processes remain and they usually render disservices... rather than services. Control efforts are aimed at eliminating or reducing those disservices which flow to consumers and producers whether they want them or not and which, except in unusual cases, they cannot control by engaging in individual exchanges.⁷⁴

In this sense, Ayres' and Kneese's article's most salient contribution was to suggest to tackle environmental decay from the point of view of material flows within (national) economies, thereby implicitly rising the issue of the borderline between the economy, or the social system, and nature. In this

70 Kenneth E Boulding, 'The Economics of the Coming Spaceship Earth' in Henry Jarrett (ed), *Environmental Quality in a Growing Economy. Essays from the Sixth Resources for the Future Forum* (Johns Hopkins Press 1966), 3.

71 Robert U Ayres and Allen V Kneese, 'Production, Consumption, and Externalities' (1969) 59 *American Economic Review* 282.

72 Boulding, 'The Economics of the Coming Spaceship Earth' (n 70), 9. Cited from Fischer-Kowalski (n 67), 70.

73 This obviously links material flow analysis with Hardin's theory of the tragedy of the commons. See Garrett Hardin, 'The Tragedy of the Commons.' (1968) 162 *Science* 1243.

74 Ayres and Kneese (n 71), 284.

way, as Fischer-Kowalski signalled in her literature review, this seminal publication triggered 'a research tradition capable of portraying the material and energetic metabolism of advanced industrial economies',⁷⁵ which extends well into the present. A detailed account of the theoretical and methodological developments of MFA and metabolical analysis of the interaction between societies and their natural environment would go beyond the scope of this paper, and has already been done authoritatively by Fischer-Kowalski and Hüttler.⁷⁶ Suffice it to say, as these authors single out, that a second wave of interdisciplinary academic research in this very concise field dates from the early 1990s and was 'largely European in origin, with the bulk of publications derived from German-speaking or Scandinavian countries and from the Netherlands.'⁷⁷ Among the most relevant contributions from this wave are Peter Baccini's and Paul H. Brunner's *The metabolism of the anthroposphere*, from the early 1990s,⁷⁸ which has been recently reedited in 2012 with a 2nd edition by the MIT Press.⁷⁹ As previously mentioned, the methodological cornerstone of this metabolic paradigm is MFA, which is defined and portrayed as

*a systematic assessment of the flows and stocks of materials within a system defined in space and time. It connects the sources, the pathways, and the intermediate and final sinks of a material. Because of the law of the conservation of matter, the results of an MFA can be controlled by a simple material balance comparing all inputs, stocks, and outputs of processes. It is this distinct characteristic of MFA that makes the method attractive as a decision-support tool in resource management, waste management, and environmental management.*⁸⁰

In sum, as Fischer-Kowalski and Hüttler point out, the metabolical paradigm based on MFA allows to assess the overall material and energetic turnover of national economies, thereby providing 'macroparameters for environmental performance and efficiency that relate well to the established

75 Fischer-Kowalski (n 68), 72.

76 See generally M Fischer-Kowalski and W Hüttler, 'Society's Metabolism: The Intellectual History of Materials Flow Analysis, Part II, 1980-1998' (1998) 2 *Journal of Industrial Ecology* 107.

77 *ibid.*, 109.

78 Peter Baccini and Paul H Brunner, *The Metabolism of the Anthroposphere* (Springer 1991).

79 Peter Baccini and Paul H Brunner, *M*

etabolism of the Anthroposphere. Analysis, Evaluation, Design (2nd edn, MIT Press 2012).

80 Paul H Brunner and Helmut Rechberger, *Practical Handbook of Material Flow Analysis* (Lewis Publishers 2004).

economic macroparameters generated by national accounts'.⁸¹ Accordingly, while keeping cautious with respect to its potential political relevance, they regard this metabolical paradigm as scientifically sound and stringent. Beyond its reception in the fields of cultural anthropology and economics,⁸² however, Fischer-Kowalski and Hüttler saw the need (at the date of publication of their literature review) for further consolidation in the realm of social sciences –particularly sociology– so as to generate a sufficiently complex image of the social system (taking into account its various subsystems)⁸³ and the way it works in its interaction with nature.⁸⁴

In the field of anthropology, the metabolic paradigm has been applied to assess global patterns of exchange. Deeply influenced by the work of Marxist economists like Arghiri Emmanuel,⁸⁵ structuralists like Raul Prebisch,⁸⁶ and Immanuel Wallerstein's world-system analysis,⁸⁷ Alfred Hornborg, from the Department of Human Geography of the Lund University also combines the social metabolism approach with Stephen Bunker's notion of 'ecological unequal exchange' to argue that present

81 Fischer-Kowalski and Hüttler (n 76), 122.

82 See particularly Joan Martinez-Alier and Klaus Schlüpmann, *Ecological Economics: Energy, Environment and Society* (Blackwell 1993); R Muradian and J Martínez-Alier, 'Trade and the Environment from a "Southern" Perspective' (2001) 36 *Ecological Economics* 281; R Muradian, M O'Connor and J Martínez-Alier, 'Embodied Pollution in Trade: Estimating the "Environmental Load Displacement" of Industrialized Countries' (2002) 41 *Ecological Economics* 51; J Martínez-Alier, *The Environmentalism of the Poor. A Study of Ecological Conflicts and Valuation* (Edward Elgar 2003); Joan Martinez-Alier and others, 'Social Metabolism, Ecological Distribution Conflicts, and Valuation Languages' (2010) 70 *Ecological Economics* 153.

83 Fischer-Kowalski and Hüttler (n 76), 115. This is where the authors see a possible connection with Luhmann's social systems theory, as developed in Niklas Luhmann, *Soziale Systeme. Grundriß Einer Allgemeinen Theorie* (Suhrkamp 1987).

84 Fischer-Kowalski and Hüttler (n 76), 123.

85 A Emmanuel, *L'échange Inégal* (François Maspero 1969). For a later English version of this work, see Arghiri Emmanuel, *Unequal Exchange: A Study of the Imperialism of Trade* (Monthly Review Press 1972).

86 Raul Prebisch, 'The Economic Development of Latin America and Its Principal Problems' (1950).. UN Doc E/CN.12/89/Rev.1 (27 April 1950).

87 See generally I Wallerstein, *The Modern World System, Vol I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century* (Academic Press 1974); I Wallerstein, *The Modern World System, Vol II: Mercantilism and the Consolidation of the European World-Economy, 1600-1750* (Academic Press 1980); I Wallerstein, *The Modern World System, Vol III: The Second Great Expansion of the Capitalist World-Economy, 1730-1840's* (Academic Press 1989); I Wallerstein, *The Modern World System, Vol IV: Centrist Liberalism Triumphant, 1789-1914* (University of California Press 2011). See also Alf Hornborg, J McNeill and Joan Martinez-Alier (eds), *Rethinking Environmental History: World-System History and Global Environmental Change* (AltaMira 2006).

cornucopian perceptions of 'development' represent a (Western) cultural and ideological illusion that conceals a global environmental 'zero-sum game', in which the economic and technological expansion of the capitalist core nations necessarily occurs at the expense of the peripheral areas of the world-system.⁸⁸ Mainstream discourses on 'sustainability' or –even worse– 'resilience' are portrayed by this author as a void rhetoric that aims at disarming ideologically the necessary acknowledgment of the world-system's present and historical socio-ecological contradictions.

Among these, Hornborg identifies particularly 'machine-fetishism' and money as an economic instrument that allows quantifying the utility of commodities, while concealing the labour and land (i.e. natural resources) embodied through their production process, thus giving rise to unequal terms of exchange.⁸⁹ As he contends, the notions of 'technology', 'economy', and 'ecology' are, in fact, *cultural* categories that conveniently separate overlapping phenomena, thereby disguising underlying socio-ecological realities.⁹⁰ In his own words,

The notion of 'fetishism' can be applied so as to suggest that the apparent generative capacity of machine technology is an instance of how the attribution of autonomous productivity to material artefacts can serve to conceal unequal relations of exchange. The unequal exchange underlying machine technology can only be revealed by exposing, beyond the monetary price tags reified by conventional market ideology, material asymmetries in the net flows of biophysical resources gauged in terms of alternative metrics such as energy, matter, embodied land (ecological footprints), or embodied labor. The mechanical 'power' of the machine is thus an expression of the economic and ideological 'power' through which it is sustained. Ultimately, what keeps our machines running are global terms of trade.⁹¹

In similar terms, Hornborg regards David Ricardo's science of economics as an intrinsically cultural, and deeply ideological (power-serving), construction that aimed at making invisible unequal exchange of natural resources and

88 A Hornborg, 'Zero-Sum World: Challenges in Conceptualizing Environmental Load Displacement and Ecologically Unequal Exchange in the World-System' (2009) 50 *International Journal of Comparative Sociology* 237.

89 On this issue, see A Hornborg, 'Footprints in the Cotton Fields: The Industrial Revolution as Timespace Appropriation and Environmental Load Displacement' (2006) 59 *Ecological Economics* 74.

90 Hornborg (n 88), 239.

91 *ibid.*, 240-1.

labour in the new era of industrial capitalism. In particular, money –as an instrument to measure and exchange the utility of commodities–

had to create the illusion that machines (capital) can “substitute” for land and labor, rather than acknowledge that capital draws on the appropriation of land and labor from elsewhere in the world system. And it had to make us all believe that the invisible and of free trade operates in the best interests of everybody, and that any attempt to constrain the economy by appeal to moral principles ... should be dismissed as backwardness and repression.⁹²

Against this backdrop, Hornborg regards the discourses of sustainability or sustainable development as too entrenched in Western cultural traps (viz. technology-fetishism), obviating the underlying global social metabolism and unequal patterns of exchange, thus remaining unable to foster a world-wide consensus on the way to manage and reconcile economic, social and environmental concerns. For its part, the discourse on resilience devises a strategy based on the necessity of modern societies to learn sustainable resource management from ancient/traditional/Chthonic ecological practices. Hornborg, however, regards this so-called (after Paul Nadasdy) *resilience-gospel*⁹³ as naïve and paradoxical, as in a way it re-enacts the old stereotype of the ecologically noble savage,⁹⁴ without providing any meaningful or operative strategies that question the very premises of global unequal exchange.

Therefore, Hornborg regards as one of the possible ways of taking seriously sustainability and tackling ecologically unequal patterns of exchange to transform the very idea and institution of money.⁹⁵ Based on the analysis carried out by the anthropologist Paul Bohannan on the disruption that the introduction of money at the end of WWI caused in the traditional, morally charged, multicentric economy of the Tiv in northern Nigeria,⁹⁶ Hornborg

92 Alf Hornborg, 'Learning from the Tiv: Why a Sustainable Economy Would Have to Be "Multicentric"' (2007) 29 *Culture & Agriculture* 63, 65.

93 Paul Nadasdy, 'Adaptive Co-Management and the Gospel of Resilience' in F Berkes, D Armitage and N Doubleday (eds), *Adaptive Co-Management: Collaboration, Learning, and Multi-level Governance* (University of Washington Press 2007).

94 Besides, following Nadasdy, Hornborg points out that 'the claim to have rediscovered or reinvented indigenous ecological knowledge, legitimized as 'science', has been made repeatedly by resource administrators over more than a hundred years'; in Hornborg (n 88), 253.

95 Hornborg (n 92).

96 See Paul Bohannan, 'Some Principles of Exchange and Investment among the Tiv' (1955) 57 *American Anthropologist* 60.

proposes to relativise the institution of all-purpose money, not to reinstate the specific spheres of exchange that made out the idiosyncrasy of the Tiv economy, but to suggest 'that we could draw inspiration from the very notion of recognizing a moral hierarchy of incommensurable values', as a valuable alternative idea or ideology in the purpose of seeking visions of a sustainable world.⁹⁷

5 In Search for New Paradigms for Global Environmental Law and Governance: Some Concluding Remarks

The previous section has provided an initial, certainly not comprehensive, glimpse of specific theories, methods and paradigms that have been developed in other (non-legal) disciplines of social sciences, allowing for a close collaboration between academia and social movements in the contestation of mainstream scientific and political discourses and the furtherance of counter-hegemonic claims.⁹⁸ Global social metabolism and ecologically unequal exchange combine structuralist and post-structuralist approaches that reveal the intrinsic contradictions and inconsistencies of current global (environmental) governance and, by extension, also of international (environmental) law. While ecological economics applies the concepts and methods inherent to the metabolical approach to provide a structural account of global ecological or environmental injustice,⁹⁹ anthropology and human ecology – particularly in the work of Hornborg – also bring in a post-structuralist appraisal of the cultural premises of the mainstream discourses that sustain the global social metabolism and present patterns of exchange. Such a post-structuralist approach, well-known as it may be in the realm of anthropology, has only recently emerged in the context of (international) legal environmental scholarship. As Bettina Lange posits, such an approach –viz. Foucauldian-inspired discourse analysis– may contribute to the development of 'non-essentialist accounts of the operation of law' as one of the core aspirations of critical legal scholarship. In addition, it might also be expected to open new avenues for research and change in environmental law that complement the so far predominant search for underlying political or economic structures as explaining factors of the operation of this specific field of law.¹⁰⁰

97 Hornborg (n 92), 65.

98 See e.g. the EU 7th Framework Programme Research Project on Environmental Justice Organisations, Liabilities and Trade (EJOLT): www.ejolt.org.

99 Martínez-Alier, *The Environmentalism of the Poor* (n 82); Martínez-Alier and others, 'Social Metabolism, Ecological Distribution Conflicts, and Valuation Languages' (n 82).

100 See Bettina Lange, 'Foucauldian-Inspired Discourse Analysis: A Contribution to Critical Environmental Law Scholarship?' in Andreas Philippopoulos-Mihalopoulos (ed), *Law and*

The research carried out by Andreas Kotzakis, for instance, reveals how environmental policy and law –particularly in the field of international environmental law related to the conservation of biological diversity– has been unable to devise meaningful strategies to tackle the ongoing global environmental crisis. Roughly speaking, conservationism, first, and sustainable development, later, have provided paradigms for environmental policies that, as opposed to their underlying utopian ideals (viz. reconciling conservation and economic exploitation of biological diversity), embody what Michel Foucault coined as ‘heterotopias’,¹⁰¹ that is to say, spaces that ‘expose and oppose, invert and divert, disassemble and upset legal and political choices by casting their preferred spaces in a different light ... [representing] dispersion, uncertainty, discontinuity, difference and, ultimately, impossibility’.¹⁰² Even more, Kotzakis asserts in a recent article that ‘sustainable development’ as the underlying paradigm to current international environmental law is premised on ‘the refusal to acknowledge fully the implications arising from the duality of both nature and value’. As he concludes,

*[t]he effect of this paradox is that law appears to be incapable of dynamically engineering global social change because of the absence of a theoretical framework for understanding change as already occurring across the world, outside the strict assumptions and fixed certainties of environmental discourse.*¹⁰³

In view of the global environmental crisis, the previous reflections hint (quite illusorily) at the ideal of reaching a minimum world-wide trans-civilizational consensus on the intrinsic value of the planet’s ecological integrity for the sake of humankind. In our opinion, this might be the most significant contribution of global constitutionalism, understood as a ‘critical and normative “shaping” activity that seeks to improve current and future constitutional conditions’ in the global realm.¹⁰⁴ Such a consensus, nevertheless, should be anchored on a fair and solid burden-sharing arrangement and also transcend substantially the untenable formula of

Ecology: New Environmental Foundations (Routledge 2011) 39, 57.

101 Michel Foucault and Jay Miskowiec, ‘Of Other Spaces’ (1986) 16 *Diacritics* 22.

102 Andreas Kotzakis, ‘Heterotopias of the Environment: Law’s Forgotten Spaces’ in Andreas Philippopoulos-Mihalopoulos (ed), *Law and Ecology: New Environmental Foundations* (Routledge 2011), 193, 196.

103 Andreas Kotzakis, ‘Change and Subjectivity in International Environmental Law: The Micro-Politics of the Transformation of Biodiversity into Genetic Gold’ (2014) 3 *Transnational Environmental Law* 127, 146.

104 Garrett Wallace Brown, ‘The Constitutionalization of What?’ (2012) 1 *Global Constitutionalism* 201, 227.

'sustainable development'. The environment needs to be globally acknowledged as a common value and concern of present and future generations, so as to feed environmental management concerns and knowledge into the 'ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics' that allow the exercise of the specific and complex form of power that Michel Foucault famously coined as 'governmentality'.¹⁰⁵ This process of greening governmentality, in turn, has been renamed by Timothy W. Luke as 'environmentality', a notion which is thought to mark 'efforts to bring governance of the state, society, and self into the ambit of 'ecoknowledges' and 'geopowers' as human and nonhuman populations are policed to provide and protect environmental biodiversity, resilience, and sustainability.'¹⁰⁶

Admittedly, Foucault himself was not particularly impressed by the emancipatory potential of law *vis-à-vis* entrenched structures of power.¹⁰⁷ Rather, he saw law as instrumental to discourse and, hence, power. Our argument is that the combination of structuralism and post-structuralism in international (environmental) legal scholarship, as carried out in the previously reviewed developments in the fields of anthropology, ecological economics and sociology, signals a way to enrich the scholarly debate by putting the finger into the wound of the intrinsic inconsistencies and contradictions in the conceptualisation and operation of this field of law. More broadly, such a nuanced interdisciplinary approach is also thought to enrich the debate on the burden-sharing of global environmental protection that has so far been carried out mainly in terms of global constitutionalism, TWAIL, and to a lesser extent, also pluralism.

105 Foucault, 'Governmentality' (n 2), 102-3.

106 Luke (n 6), 97.

107 In another of his famous quotes, he stated (apparently against the very core of the Kantian-cosmopolitan tradition of thought) that '[h]umanity does not gradually progress from combat to combat until it arrives at universal reciprocity, where the rule of law finally replaces warfare; humanity installs each of its violences in a system of rules and thus proceeds from domination to domination. The nature of these rules allows violence to be inflicted on violence and the resurgence of new forces that are sufficiently strong to dominate those in power. Rules are empty in themselves, violent and unfinalized; they are impersonal and can be bent to any purpose. The successes of history belong to those who are capable of seizing these rules, to replace those who had used them, to disguise themselves so as to pervert them, invert their meaning, and redirect them against those who had initially imposed them; controlling this complex mechanism, they will make it function so as to overcome the rulers through their own rules.' See Michel Foucault, 'Nietzsche, Genealogy, History' in Paul Rabinow (ed), *The Foucault Reader* (Pantheon 1984) 76, 85-6.

Under these theoretical and methodological premises, by way of conclusion, the counter-hegemonic discourses that are implicit in the notion of 'environmental justice' and—in a much narrower sense— also that of 'ecological/climate debt' have a potential role to play in this context. In the first place, research into the various discourses inherent to 'environmental justice' may clarify the role of equity, or other more specific criteria (entitlements, capacities, needs, historical responsibilities, incommensurability, etc.),¹⁰⁸ as a useful tool to qualify, re-interpret and even re-conceptualize critically core principles of international law and, hence, the obligations that states have in the context of international and transnational relations. Ultimately, this may be a modest strategy for the promotion of corrective, distributional and procedural fairness as a means to achieve international (environmental) justice.¹⁰⁹

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