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Environmental Justice

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Abstract. This article addresses some of the power asymmetries which divide mankind, the so-called "we" in the discourse about the Anthropocene. Humanity is beset with long-running cleavages between Northern and Southern countries, just as between the wealthy and the poor across countries. Power is wielded environmentally, too. First, responsibility for greenhouse gas emissions around the world is highly skewed towards the Global North, while impacts of climate change on society and biosphere fall disproportionately onto the Global South. Second, human rights of indigenous, rural and fishing communities are in danger, when mining, terrestrial and marine resources are exploited. Third, unequal trade relations in terms of raw materials, land, fisheries and gene patents continue to exist from colonial times until today. And fourth, restoring justice for possible victims is an arduous process without a world government and judiciary. Structural power is largely unaccountable.

In the historical accounts of the Anthropocene, the industrial revolution is regarded as a landmark, launching the fossil age. But the very same event was also something of a big bang that catapulted parts of humanity into a world of rising incomes and economic growth, while the majority of world population stood still (Milanovic 2016, 2). Since then Western Europe and North America have sprinted forward, only to be caught up by East Asia in the past thirty years. As a result, a huge income inequality arose between countries: just by being born in the United States rather than in the Congo, a person enjoys an income 93 times higher (ibid, 133). However, most theories of justice have a handicap: they are devised for territorially bounded societies. In a globalized world, however, the class differences between the haves and have-nots across countries become ever more evident. Still, the dimensions of resource justice are valid in a transnational world: justice as redistribution, recognition, reciprocity, and as redress (Sachs and Santarius 2007, pp.119).

Justice as redistribution aims at overcoming inequality. Inequality of what? Income inequality is largely reflected in carbon inequality. In this perspective, inequality runs the whole gamut of climate change, from mining over emissions to impacts. Looking at the world population by income class and their share of CO_2 emissions, a huge disparity emerges: In 2015, half of the world population, those who earned income, caused a staggering 93 % of CO_2 emissions, while the other half of the poor accounted for only 7 % (Kartha et al. 2020, 6).[1] What a striking gap! Of the global emissions of the middle/ high-income earners, 35.9 % come from North America and Europe, 24.8 % from China, 13.6 % from the rest of Asia including India, 13.3 % from the Middle East and Russia/ Central Asia, 3.5 % from Latin America and 1.7 % from Africa (ibid. 2020, 11). In contrast, the other half of the world population, the one with minor emissions, is mostly found in India, China, Africa and Latin America. Equally, in 2015 the top 10 % of the income pyramid emitted 45% of global emissions, while the other 55% of emissions were distributed among the remaining 90 % (Chancel and Piketty 2015, 10). The distribution of carbon emissions follows the economic division of the world. Air travel, real estate, and steaks set the tone in the global upper class (Ivanova and Wood 2020),

[1] Other researchers arrive at similar but slightly different figures: Hubacek et al. 2017: well-off 85 %, the poor half 15 %; Chancel and Piketty 2015: well-off 87 %, the poor half 13 %).

while used cars, washing machines, and air-conditioning are common in the middle class. And then there is the class of have-nots, who have to be content with standing in packed buses, suffering malnutrition, and sharing outhouses. Yet, equality is a treacherous concept in times of limits. Both securing human dignity and maintaining the planetary boundaries claim priority over equality.

Furthermore, impacts of global warming, such as drought, storms, rising sea level, melting of glaciers, are not distributed equally. To be sure, no country, no classes of people will be able to shield from the impacts. But they will not affect everyone equally — not in the same way, not at the same time, not at the same magnitude (UNDP 2019, 175). People of all over the world will face the consequences in terms of human health, agricultural yield, changes in flora and fauna, but in spite of this, the poorer countries and poorer people will be hit earliest and hardest. Some countries could quite literally disappear. Children, women, and elderly people are the most vulnerable, in particular in economically weak regions. Inequality breeds injustice, when the situation of the victim is permanent, and injustices are cumulative. Besides, global warming has already led to more inequality of nations, somehow wiping out the progress made in human development (ibid. 183; Diffenbaugh and Burke 2019). In a nutshell, climate change is a classical showpiece for shifting environmental loads to other countries and to other people. Those who are the least responsible, carry the heaviest burden.

Justice as recognition aims at equal dignity, not equal distribution (Fraser and Honneth 2003). People desire to be treated with decency and respect, they strive to have full rights in society. On the contrary, people hate to be discriminated and disenfranchised. Due recognition is not just a courtesy, but a vital human need. Accordingly, it is also a collective need for all those who are treated condescendingly in the prevailing hierarchy - for women and persons of color, for Muslims as well as Mayas. The human rights charter builds on that, identifying people as a moral community, whose members hold equal and inalienable rights preceding the jurisdiction of a nation-state. People are citizens in a transnational legal space, this has been the revolution of human rights.

For herders in the savannas of Tanzania, for fisherfolk along the coast of Ghana, for peasants in the Andes, for rice farmers in Vietnam, for indigenous communities all over the globe, to have free access to land, rivers and oceans is a matter of survival and self-esteem. This regards, roughly speaking, a quarter of the world population. But the territories of life (ICCA Consortium 2021) are under threat. At least since the time of colonialism fertile land and mineral deposits have always attracted the “omnivores” (Gadgil and Guha 1995) domestically and globally, undermining livelihoods of the “ecosystem people”. Resource extraction continues, enforcing quite often the displacement and dispossession of inhabitants. For instance, there are approximately 17,000 large-scale mining sites in 171 countries, mostly managed by international corporations (IPBES 2019, 28). And the number of dams has increased rapidly in the past 50 years, there are now about 50,000 large dams (higher than 15 m) worldwide (ibid, 30). Moreover, the expansion of agriculture in the tropics has smashed precious ecosystems and removed forest-dwellers for cattle-ranching in Latin America and for plantations in South-Asia. Soy, palm oil and beef are the commodities with the largest embedded tropical deforestation imported into the EU, followed by wood products, cocoa and coffee (WWF 2021, 5). The Environmental Justice Atlas (ejatlas.org) tells the story of about 3500 cases, albeit not all of them on human rights violations (Temper et al. 2015). Even in nature conversation areas, the original inhabitants were driven away, despite the fact that they are mostly caretakers of the natural world (Boyd and Keene 2021).

It is therefore not surprising, that a further dimension of justice is neglected: the reciprocity of ecological trade relations between nations. With globalization, consumers are largely separated from producers through global commodity chains. For example, lithium is mined in Bolivia and shipped into South Korea to make batteries which are then exported to German automakers as equipment for electric cars destined for the US market. As the links in the commodity chains are widespread over the globe, so are the ecological impacts of resource depletion, manufacturing and consumption. Trade relations are unequal in ecological terms, if nations are asymmetrically affected by the consequences of resource exploitation and waste sinks. This is largely the case between the Global North and the Global South, the power of the former imposes an inferior position on the latter.

However, this is crucial when the finitude of nature is becoming more and more apparent. An undeclared war is on: Who owns the remaining biosphere? After Europe and North America have removed in the past centuries an immense amount of raw materials together with flora and fauna from theirs territories, the resource hunger of the global upper-middle class is now largely directed toward the Global South. As a global input-output study shows (Dorninger et al. 2021), high-income countries net appropriate a disproportionately large share of materials, energy, land, and labor through international trade. This unequal distribution grew from 1990 until the 2008 global financial crisis, stabilizing thereafter (ibid. 5). With regard to biodiversity, rich economies have more than 50% of their biodiversity footprint outside of their territorial boundaries, mostly in middle-income and poor countries. Those, in turn, are in danger to lose a large part (35-60%) of domestic species because of the production and export of coffee, tea, sugar, fish, textiles or manufactured items in international commodity chains (Wiedmann and Lenzen 2018, 317).

Finally, justice needs to account for the dimension of redress. High-income countries (and classes) are seldom held accountable for violating global injustice, be it historically or in the present. The deeper reason for this failure that international law is based, except for human rights law, on the sovereignty of states. However, issues of climate, biodiversity or ocean governance go beyond state sovereignty, they involve the Earth as global commons. Up to now, the global environment is still largely regarded as *res nullius,* waiting to be exploited by private or state interests. In contrast, states should also act as trustees for the common natural assets and for the future generations (Bosselmann 2017). Multilateral policymaking is the arena of the never-ending tug-of-war between trusteeship and sovereignty.

The Global South, however, suffers a double injustice: to be humiliated and to be without legal remedies. More precisely, there are tiny attempts to achieve redress through international and human rights law, but they are both rudimentary and fragmentary. For instance, in the UN Climate Convention the principle of “common but differentiated responsibilities” is laid down, just as the compensation payments for historical emissions as well as damages and losses. Furthermore, under the UN Biodiversity Convention fair and equitable sharing of genetic resources is proclaimed or the security of indigenous territories in the UN Declaration on the Rights of Indigenous Peoples. But these agreements are full of holes, even mostly lacking in implementation. In sum, they do not live at all up to the injustice done. No wonder that the cry for justice is so popular with the actors of the civil society. They attempt to hold the governments accountable, like bringing increasingly litigation before the courts. They appear to be inspired by the British philosopher C.S.Lewis, who once said about technology, “What we call Man’s power over Nature turns out to be a power exercised by some men over other men with Nature as its instrument” (2001, 55).

Bosselmann, Klaus. 2017. Governing the Global Commons: A 'Planetary Boundaries' Approach. *Political Quarterly* 13:1, 37-42

Boyd, David S., and Stephanie Keene. 2021. *Human Rights-Based Approaches to Conserving Biodiversity*. A Policy Brief from the UN Special Rapporteur on Human Rights and the Environment. Geneva.

Chancel, Lucas, and Thomas Piketty. 2015. *Carbon and Inequality: From Kyoto to Paris*. Paris: School of Economics

Diffenbaugh Noah S., and Marshall Burke. 2019. Global Warming has increased Economic Inequality. *PNAS* 116 (20) 9808-9813

Dorninger, Christian et al. 2021. Global patterns of ecologically unequal exchange: Implications for sustainability in the 21st century. *Ecological Economics* 179:106824

Gadgil, Madhav, and Ramachandra Guha. 1995. *Ecology and Equity. The Use and Abuse of Nature in Contemporary India.* London: Routledge

Fraser, Nancy, and Axel Honneth. 2003. *Recognition or Redistribution? A Political-philosophical Exchange*. London: Verso

Hubarek, Klaus et al. 2017. Poverty Eradication in Carbon-constrained World. *Nature Communications* 8:912

ICCA Consortium. 2021. *Territories of Life. Report*. www.iccaconsortium.org

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. *Summary for policymakers of global assessment report*. Bonn: IPBES

Ivanova, Daniela, and Richard Wood. 2020. The Unequal Distribution of Household Carbon Footprints in Europe and its Link to Sustainability. *Global Sustainability*, 3, 1-12

Kartha, Sivan et al. 2020. *The Carbon Inequality Era.* Report of the Stockholm Environment Institute/Oxfam

Lewis, Clive S. 2001. [original edition 1943]. *The Abolition of Man*. New York: Harper One

Milanovic, Branko. 2016. *Global Inequality: A New Approach for the Age of Globalization*. Cambridge, MA: Harvard University Press

Sachs, Wolfgang and Tilman Santarius (eds.) 2007. *Fair Future. Resource Conflicts, Security and Global Justice*. London: Zed Books

Temper, Leah, Daniela del Bene and Joan Martinez-Alier. 2015. Mapping the frontiers and front lines of global environmental justice: the EJAtlas. *Journal of Political Ecology*, 22: 255-278

United Nations Development Programme (UNDP). 2019. *Human Development Report 2019*. New York: UNDP

Wiedmann, Thomas, and Manfred Lenzen. 2018. Environmental and social footprints of international trade. *Nature Geoscience* 11, 314–321

World Wide Fund for Nature (WWF). 2021. *Stepping up? The continuing impact of EU consumption on nature worldwide.* Brussels: WWF

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