Limits of Formalization and Horizons of Urban Citizenship: Insights on Law and Informality through the Lens of Electronic Waste

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Abstract

Pervasive computing (the cultural obsession to computerize almost every imaginable commodity) and planned obsolescence (the ever-shrinking lifecycle of technological products) have led to the massive generation of electronic waste (e-waste). The flow of e-waste across borders is a contentious environmental justice issue governed by international trade and environmental regimes. It is informal recyclers along this lucrative value chain and their communities that assume the most acute health risks of global hi-tech production, consumption, disposal and *reproduction*. In this thesis it is argued that the exclusionary dynamics of contemporary waste governance paradigms, in failing to acknowledge the legal identity of certain stakeholders, and the legal responsibilities of others, have led to a grossly imbalanced and environmentally unjust globalization of electronic waste. In the context of this unjust globalization, we are forced to re-examine the emancipatory role of law. This thesis questions how the expansion of law to informal spheres of the economy may lead to an effective empowerment of informal workers, and who contributes to shaping this new legalism. It is argued that conventional framings of legal empowerment found within the current literature on informality fail to give full consideration to the importance of identifying the voice and place of informality in shaping the legal world. Conversely, the idea of spatial citizenship, inspired by Henri Lefebvre's concept of a 'right to the city', offers an alternative to existing legal empowerment theories, in embracing informality as a counter-space of legal reflexivity that displaces dominant, hegemonic spatializations of the State, through the acts of spatial appropriation and participation. This other legal reflexivity can be seen as manifesting itself in informal populations' struggle for a right to the city, in other words, their social claims over urban space and resources. Spatial citizenship is seen as a social and environmental justice apparatus that surpasses ideological limitations of legal formalization discourse, presenting the epistemological transformation necessary to rework the longstanding conceptual opposition between informality and law.

Résumé

L’informatique omniprésente (l'obsession culturelle à informatiser presque tous les produits imaginables) et l'obsolescence programmée (le cycle de vie de plus en plus réduit de produits technologiques) ont conduit à la génération massive de déchets électroniques (DEEE). Le flux de déchets électroniques à travers les frontières est une question de justice environnementale impliquant les régimes internationaux du commerce et de l’environnement. Ce sont les recycleurs informels impliqués dans cette chaîne de valeur lucrative ainsi que leurs communautés, qui assument les risques sanitaires les plus aigus de notre production, consommation et reproduction de la haute-technologie. Dans cette thèse il est soutenu que la dynamique d'exclusion des paradigmes contemporains de gouvernance de déchets, en omettant de reconnaître l'identité juridique de certaines parties prenantes et les responsabilités juridiques des autres, ont conduit à une mondialisation de DEEE manifestement déséquilibrée. Dans le contexte de cette mondialisation injuste, nous sommes obligés de réexaminer le rôle émancipateur du droit. Cette thèse vise à comprendre comment l'expansion du droit à l’économie informelle peut conduire à une autonomisation effective des travailleurs et qui sera impliqué dans l'élaboration de cette nouvelle légalisme. Il est soutenu que les cadrages classiques d'autonomisation juridique trouvés dans la littérature actuelle sur l'informalité ne parviennent pas à tenir pleinement compte de l'importance d'identifier la voix et le lieu de l'informalité dans le façonnement du monde juridique. Inversement , l'idée de la citoyenneté spatiale, inspiré par le concept d'Henri Lefebvre d'un « droit à la ville », offre une alternative aux théories existantes d'autonomisation juridique, en embrassant l'informalité comme un contre-espace de réflexivité juridique qui déplace les spatialisations hégémoniques de l’État à travers les actes d'appropriation et de la participation. Cette autre réflexivité juridique peut être considérée comme se manifestant dans la lutte des communautés informelles pour un droit à la ville, en d'autres termes, dans leurs revendications sociales sur l'espace et les ressources du milieu urbain. La notion de la citoyenneté spatiale est considérée comme un appareil de justice sociale et environnementale dépassant les limites idéologiques du discours juridique centré sur la formalisation, et présentant la transformation épistémologique nécessaire pour retravailler l'opposition conceptuelle de longue date entre l'informalité et le droit.

Introduction

> "Does the law exist for the purpose of furthering the ambitions of those who have sworn to uphold the law, or is it seriously to be considered as a moral, unifying force, the health and strength of a nation?"
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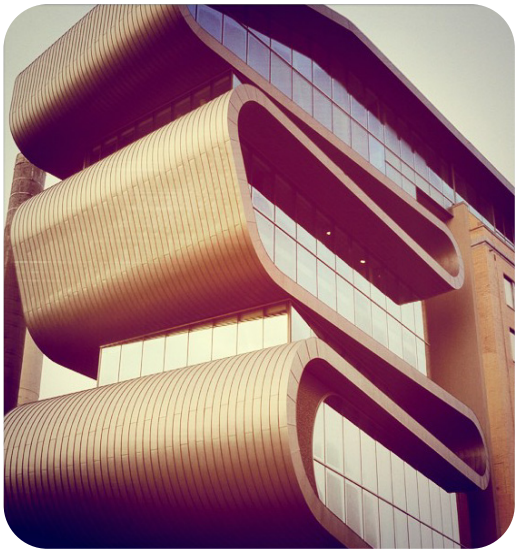
> - James Baldwin. *No Name in the Street.* 1972.



The image on the left shows the Belgium-based headquarters of Umicore, a multinational materials technology company that has invested over 250 million Euro[1] in establishing what is considered one of the world's most state-of-the-art refineries for the recycling of precious metals. The image on the right is of a worker in Agbogbloshie, on the outskirts of urban Accra (Ghana), also in the business of recycling metals. They are both actors at the end phase of the complex global electronic waste value chain along which electronic commodities are designed, produced, consumed, disposed, de-manufactured and re-commodified as gold,

[1] Umicore, *Press Release*, 24 August 2006. Online at: <http://www.preciousmetals.umicore.com/PMR/News/show_pressRelease_EMR.pdfhttp://www.preciousmetals.umicore.com/PMR/News/show_pressRelease_EMR.pdf>.

copper, silver, and other resources. Most electronic wastes in Africa and Asia do not make their way directly from end-consumers to state-of-the-art, environmentally-sound refineries such as Umicore, but instead are treated through informal electronic waste industries.

Over the last twenty years, the exponential increase of electronics in the urban waste stream has led to the emergence of expansive informal e-waste networks in India, Ghana, Nigeria, Pakistan, China, Bangladesh, and many other countries in the developing world. While providing an important source of income for the urban poor, informal e-waste industries have come under global scrutiny for threatening human and environmental health through the use of "crude" or "primitive" treatment processes. These informal urban mining industries are also seen as contributing to the depletion of natural resources through the deployment of recycling practices that constrain them from recovering the highest possible quantities of high-purity metals.

Regulatory responses to curtail the pollution emanating from informal urban mining are on the rise. There is no doubt that emerging, sustainable waste governance paradigms will help in diminishing e-waste pollution and resource depletion, and in securing the economic outlook for state-of-the-art environmentally-sound, ISO-certified multinational recycling firms. The economic and social prospects they carry for informal waste workers are less certain. New environmental sustainability regimes will have an impact on the ownership of wastes, and consequently, on the

flow of wastes into the informal world. Hi-tech corporations are facing new product lifecycle obligations under environmental law, and thus efforts to establish closed-loop industrial systems are on the rise, with evident implications on informal sector access to waste materials.

The resulting interface of informality, multinational corporations, environmental crisis and waste resources poses a complex new regulatory challenge that implicates a variety of stakeholders and various bodies of law (trade law, environmental law, labour law), on all scales (the local, national, transnational, regional and global). This dissertation explores the dynamics of interaction between informality and law, via the lens of the electronic waste stream. My interest lies in understanding the place of informality within emerging waste governance paradigms, in particular, how we imagine the social and environmental realities, processes and outcomes of waste work in the *always higher tech anthropocene*. The anthropocene is commonly understood as denoting the current geological era in which human activities dominantly influence and shape the natural environment and climate.[2] I use the term 'always higher tech' to qualify and emphasize the intensifying aspects of the contemporary anthropocene, an era that is anchored not just in high technology, but propelled by the constant drive for an always higher, faster, and more efficient high technology. How is informality explicitly or implicitly imagined under law in this higher tech epoch? And what does this say about seeking

[2] The idea of the anthropocene as a new geological epoch was introduced by Nobel Laureate Paul J. Crutzen and Eugene F. Stoermer, in P.J. Crutzen and E.F. Stoermer, "The Anthropocene" (2000) 41 International Geosphere-Biosphere Program Newsletter 17.

social and environmental justice for marginalized populations whose livelihoods and futures are linked into digitized urban waste streams?

Informality

The solid waste landfill located in Agbogbloshie doubles as a worksite for roughly 3000 migrants from Ghana's poverty-stricken north, who work laboriously in the sunlight hours to recover precious bits of gold, silver and copper tucked away in trashed electronics. Visiting this soot-laden field in June 2012, I saw young men chop car batteries using an axe, in dish gloves and rain boots, with seeping toxic acid forming puddles around them. Others tended to computer cables and circuit boards that burned in the open air, as women - sometimes with young children following behind them - sold packets of purified drinking water from basins balanced on their heads. The protection of labour law evades these workers, as it does 50-75% of the working population in developing countries.[3]

In the world of work, informality is the prevalent human condition and is only expected to grow with the worsening of global economic crises and the continued degradation of environmental conditions. Broadly encompassing all those individuals who are *working for* without being formally *employed by,* the informal economy is one of globalization's dominating features and its persistent growth has

[3] ILO, *Decent Work and the Informal Economy*, Report VI, International Labour Conference, 90th Session (Geneva: ILO, 2002).

evolved into a prominent social justice concern on the global governance agenda. Still, the linkage of law and informality appears somewhat of an illusory project, considering that the defining characteristic of workers engaged in today's highly diverse and expansive global informal economy is their structured exclusion from the world of law.

Law on Informality

This dissertation seeks to challenge the exclusiveness of law with respect to informal labour. Recognizing that the making of law necessarily implies a delimitation of boundaries, my interest lies in understanding the source of legitimacy of the boundaries which have been drawn in relation to informal work. By creating protective labour law regimes and then excluding a vast majority of the human population from their protective scope, governments ultimately create contradictory labour governance frameworks that bring to the forefront issues of equality, social justice, class struggle, oppression, subversion. My objective is to gain insight into the conditions under which expansion of the culture of juridification[4] to informal spheres of work might lead to an effective empowerment of informal labourers and to what extent the latter contribute to shaping this new legalism.

[4] I use juridification here along the lines of Arthurs and Kreklewich, to mean "the penetration of law and legalism into domains previously governed by other forms of social ordering." Harry W. Arthurs and Robert Kreklewich, "Law, Legal Institutions and the Legal Profession in the New Economy" (1996) 34:1 Osgoode Hall LJ 1 at 18.

These dynamics between informality and law are analyzed in the context of the globalized electronic waste economy. Over the past two decades, an expanding literature on the damaging environmental effects of urban e-waste labour in developing countries in places such as Agbogbloshie has brought attention to the rapidly proliferating dangerous forms of work linked into our global digitized economy. E-waste recycling has become an urban spatial struggle for informal labourers, an area of invigorated environmental law-making, and a site for institutional, transnational and local NGO advocacy for the protection of human rights and environmental health.[5] This combination of factors provides rich and novel terrain for the study of the relationship between law and informality.

Investigating the incorporation of the informal workforce into new legal visions and implementations of sustainable development, I address the question of how emerging regulatory regimes displace, reinforce or otherwise alter informal workers' existing social and spatial claims to productive resources. It is hypothesized that traditionally negative institutional attitudes towards informal workers and the steering of environmental regimes by multinational corporate interests are powerful obstacles prohibiting legal systems from serving the social

[5] See for example, United Nations Commission on Human Rights, *Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights: Report of the Special Rapporteur Okechukwu Ibeanu*, 62nd session, Geneva, 20 February 2006. UN Doc. E/CN.4/2006/42; Jim Puckett et al., *The Digital Dump: Exporting Re-Use and Abuse to Africa* (Seattle : BAN, 2006); K. Brigden, et al. *Chemical contamination at e-waste recycling and disposal sites in Accra and Korforidua, Ghana* (Amsterdam: Greenpeace International, August 2008); Ted Smith, D. Sonnenfeld and D. Pellow, eds, *Challenging the Chip: Labor Rights and Environmental Justice in the Global Electronics Industry* (Philadelphia: Temple University Press, 2006); N. Thakker, "India's Toxic Landfills: A dumping ground for the World's Electronic Waste," (2006) 6:3 Sustainable Development Law and Policy 58.

needs and interests of the informal workforce. I argue that as long as legal regimes consider informal spheres of work as sites of law enforcement without treating them as sites of law-making, juridification is unlikely to ameliorate the socio-economic conditions of informal work. Institutional solutions to informality remain stagnated in formalization discourse, which inevitably reduces law to a state-centric understanding of either regulation or social protection.

As this dissertation illustrates through its exploration of the informal electronic waste sector in Agbogbloshie, formalization discourse can be an innately limiting inroad to the phenomenon of informality. To ponder the "formalization of the informal" is not to question the underlying political and economic dynamic of the recycling world, or the grossly unbalanced distribution of wealth and environmental hazards along globalized cycles of production, consumption and reproduction. Formalization discourse takes place within a neoliberal capitalist framework that ultimately reinforces social and spatial injustices that have come to define the *status quo* of informal working populations. The language of formalization also remains bound by the limitations of labour law and its failure to embrace certain forms of labour as work. Resolving the social and environmental injustices experienced by informal working populations requires epistemological transformations that move away from conventional understandings of law and formality.

Informality on Law

Looking beyond formalization, this dissertation argues that one theoretical construct that is helpful in overcoming the deepening rift between law and informality is Henri Lefebvre's concept of a *right to the city,* understood here as informal working populations' spatial claims to land and productive resources. As an apparatus for differential forms of productive solidarity, spatial citizenship entails transformative possibilities. In this way, the realization of a right to the city can be seen as providing informal populations a horizon towards democratic urbanisms that are *more* emancipatory than the narrowly construed objectives of legal formalization.

While the social protections of labour law can certainly limit the insecurities of informal work to a certain degree, in the era of intensified liberalization and privatization, exclusionary articulations of formalization may also deeply accentuate the marginalization of informal workers as well as deteriorate the conditions necessary to support the autonomy and well-being of poor urban communities. Informal populations' assertion of a right to the city is a way to force powerful economic actors including States and multinational corporations to enter into conversation about the production and transformation of space and law through time, and to reinvigorate the political power of local communities in the era of global neoliberalism.

Overview

This dissertation's main contention, which runs through all chapters, is that informal work, in so far as it is characterized by a lack of recognition, social and economic inequality and poor health and safety conditions, is a global injustice rooted in the denial of spatial citizenship. According to this thesis, the injustice of informality cannot simply be resolved by bringing informal populations under the "Law", through expanded regulation or social protection. Rather, it requires a reversal of the decline in vision that has occurred through binary conceptual framings of the formal and informal, and State-centric understandings of law. To look at informality from the perspective of spatial injustice is to throw light on the invisibilities of our legal systems. The notion of a right to the city dislodges the State's exclusive power over law, as claims to spatial appropriation and participation are understood as expressions of law not controlled by the State, but by human collectivities. The spatial dimension to marginalization and belonging that is highlighted by the notion of a right to the city is one that formalization discourse often overrides.

This study embraces a plural understanding of law. The idea that multiple legalities co-exist, conflict or mutually influence one another is widely deliberated in the literature on legal pluralism. The question of space makes a presence here mostly as *scale* or *boundary*, in matters of linkages of law across scales, via networks or constellations, and in matters of defining the boundaries of State legal systems or

other normative orders.[6] Where law and informality are addressed together, it is usually in the context of describing the internal normative system of a certain population and explaining its structural autonomy or interlinkage with the State legal system.[7] In this work, the notion of space is considered to be at once physical, mental and political. The novel aspect of using the notion of a right to the city as a lens into informality and law is that it captures law as a collective spatial demand, a veritable contestation not only to the official legal spatializations of the State, but to the ideologies at the heart of dominant legal paradigms, namely, liberalization and the privatization of land and resources. Official legal orderings confront emerging collective claims that are expressed as new agglomerations of spatially-asserted citizenship. The right to the city invokes an insurgent legal pluralism in its full rejection of the idea that urban inhabitants' claims to inclusivity can be categorized as illegal. Informal workers and communities use space as a dynamic and transformative political tool to overcome dominant governmental views that cast them as urban outsiders and legal misfits.

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[6] See, for example, J. Griffiths, "What is Legal Pluralism?" (1986) 24 J Legal Pluralism 1; S. Falk Moore, "Law and Social Change: the semi-autonomous social field as an appropriate subject of study" in *Law as Process: An Anthropological Approach* (London; Boston: Routledge & K. Paul, 1978); A-M. Slaughter, *A New World Order* (Princeton, NJ: Princeton University Press, 2004); Paul Schiff Berman *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (Cambridge: Cambridge University Press, 2014).

[7] For example, see B. De Sousa Santos, "The Heterogenous State and Legal Pluralism in Mozambique" (2006) 40:1 Law & Soc'y Rev 39; F. von Benda-Beckmann and K. von Benda-Beckmann, "Ambivalent identities: decentralization and minangkabau political communities" in G. van Klinken and H. Schulte Nordholt, eds, *Renegotiating Boundaries: Local Politics in Post-Suharto Indonesia* (Leiden: KITLV Press, 2007) 417–42; S.E. Merry, "Legal Pluralism and Transnational Culture: the Ka ho'okolokolonui kanaka maoli tribunal" in R. A. Wilson (ed.) *Human Rights, Culture and Context*. (London: Pluto Press, 1997) 28; S.E. Merry, "Human Rights and Global Legal Pluralism: Reciprocity and disjuncture" in F. von Benda-Beckmann, K. von Benda-Beckmann, and A. Griffiths, eds, *Mobile People, Mobile Law. Expanding Legal Relations in a Contracting World* (Aldershot: Ashgate, 2005) 215.

As for the notion of time, the present work supports the idea that the explicit analytical segregation of space and time, or of the prioritizing of space over time is unnecessary and unreal. Law has both its spaces and times in constant interaction, a mutually constitutive relationship that is well captured by Franz and Keebet Von Benda Beckman in their discussion of the "temporalities of space and law."[8] Casting a temporal lens on law's regulation of space illuminates that "law is not simply there; it begins and ends, comes and goes, is anticipated and lingers on."[9]

For Valverde, times and spaces of law are of an inseparable nature, continuously shaping one another. She considers legal entities and processes as "chronotopes", a literary notion that was introduced by Russian philosopher Mikhail Bakhtin to express "the intrinsic connectedness" of time and space: "The term chronotope encourages us to […] explore how different legal times create or shape legal spaces, and how the spatial location and spatial dynamics of legal processes in turn shape law's times."[10] In Valverde's analysis, legal venues such as the courtroom and the agora of ancient Greece, as well as legal entities such as the "home-owning nuclear family […] constituted in part through financial instruments […], real estate practices[…], bricks and mortar[…] and law"[11] are not just spaces (or "legal containers"), but spatiotemporalities.

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[8] F. and K. Von Benda Beckman, "Places That Come and Go" in I. Braverman, N. Blomley, D. Delaney, and A. Kedar, eds, *The Expanding Time Spaces of Law* (Stanford : Stanford University Press 2014).

[9] *Ibid* at 46.

[10] M. Valverde, *Chronotopes of Law : Jurisdiction, Scale and Governance* (New York : Routledge, 2015) at 69.

[11] *Ibid* at 71.

My analysis of informality at Agbogbloshie explicitly points to the coalescence of time and space and to the historical and other temporal dynamics[12] that frame emerging spatial practices of governance and of exclusion and inclusion, in this contested place. I argue that social systems such as law cannot be reduced to 'State law' without infringing upon the spatial citizenship of human societies. In this respect, the language of formalization presents limitations of knowledge, thought, action and justiciability. Transitions to formalization need to be space- and time-conscious and also, sociospatially conscientious in order to eliminate the risk of violent and persistently unequal outcomes. New and old sociospatial claims of marginalized groups, such as those we see through Holston's conceptualization of an "insurgent citizenship"[13] and Bayat's "silent encroachment of the ordinary,"[14] should be integrated into prospective urban governance and planning. Lefebvre's "right to the city" elicits visions of such integration.

Building on this argument, my dissertation draws out the emancipatory political possibilities that emerge from informal populations' spatial citizenship claims, in

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[12] For example, in the context of legal phenomena these other temporal dynamics include the distinct temporalities of the workplace, of property rights, zoning laws, financial instruments (credits, mortgages), delays and procedures. Many of our legal modes, methods and practices have their own temporality. See for example, Valverde's discussion of legal time in the courtroom, in Valverde, *supra* note 10 at 69.

[13] J. Holston, *Insurgent Citizenship: Disjunctions of Democracy and Modernity in Brazil* (Princeton: Princeton University Press: 2008).

[14] A.Bayat, "From `dangerous Classes' to `quiet Rebels' : Politics of the Urban Subaltern in the Global South," (2000) 15:3 International Sociology 533.

other words, their assertion of a right to the city. I argue that spatial citizenship is a precursor to social and environmental justice, without which there is no sure way for human communities to protect their dignity, health and livelihoods.

The pluralist perspective set forth here draws upon Valverde's "sociology of legal knowledges"; [15] it is concerned with the investigation of how "truths" about urban order and disorder are produced in official legal realms and affirms their necessarily situated and partial essence. I follow Valverde's consideration of law through knowledges. In addition to examining the formal "epistemological authorit[ies]"[16] through which an urban population and space are indirectly governed and ordered, my work investigates the non-positivist dimension of the "legal complex"[17] that we call urban informality, as a counterspace of legal knowledge and action.

My view of informality as invoking an insurgent legal pluralism aligns with De Sousa Santos' call for "epistemological reconstruction"[18] in its move away from the traditional "grammars and scripts" of the legal discipline, specifically, on the concept of citizenship. Building on the rich literatures of urban and legal geography, I recast

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[15] Mariana Valverde, *Law's Dream of a Common Knowledge* (Princeton, N.J. : Princeton University Press, 2003) at 227.

[16] *Ibid* at 23.

[17] Rejecting the idea of law as a uniform concept or autopoietic social subsystem, Rose and Valverde suggest that law should instead be thought of in terms of the "legal complex", which they describe as encompassing the "assemblage of legal practices, legal institutions, statutes, legal codes, authorities, discourses, texts, norms and forms of judgment." Nikolas Rose and Mariana Valverde, "Governed by Law?" (1998) 7:4 Soc & Leg Stud 541 at 542.

[18] B. De Sousa Santos, *Epistemologies of the South: Justice Against Epistemicide* (Boulder: Paradigm Publishers, 2013).

the concept of citizenship in a novel dimension that requestions the neutrality and limitations of fundamental legal concepts such as public space and private property.

The main aim of the first chapter is to explain the conceptual space of the dissertation. Hence, I begin with a literature review of informality. I trace the origins of, and scholarship on, the concept of the "informal sector" as it was initially conceived. I explain the dominant schools of thought on informality, beginning with the dualist, structuralist and legalist schools, leading the way into an exploration of new paradigms that have emerged from contemporary institutional and scholarly understandings of informality. I show how the literature converges in its portrayal of law as relevant and applicable to the informal economy, and take a critical look at the international community's legalization project – a turn to law that aims to end the longstanding exemption of the informal workforce from being regulated and protected under labour and environmental standards. My analysis brings to light a paradox - that is, the very willingness of institutional actors to represent and protect informal interests, when the exclusion of the informal economy has been structured by the State itself. I argue that that the current literature fails to give full consideration to this problem of identifying the voice and place of informality in regulatory governance, and further elaborate on the relevance of adopting a socio-spatial approach to studying the issues of representation and participation of the informally employed, in law-making and law-enforcing. I present the new citizenships discourse, which is where I situate Lefebvre's theory of a right to the city, Bayat's "silent encroachment" and Holston's "insurgent citizenship", as

surpassing the ideological limitations of formalization discourse. The inquiry that emerges from this opening chapter is whether the notion of spatial citizenship presents the epistemological transformation necessary to rework the longstanding conceptual opposition between informality and law.

In Chapter 2, I contextualize this inquiry into informality and law through the lens of the global trade in electronic waste. I discuss the transformation of global perspectives on waste, from unwanted 'trash' to coveted 'resource', examining the regulatory issues brought upon by this shift, and the resulting implications for the traditional social claimants of waste: the urban informal. I address how the informal sector is implicated in the e-waste industry in different world regions, and highlight the human and labour rights implications of this burgeoning area of global trade. Outlining the human dignity and health issues that permeate the ever-expanding informal waste economy, I suggest that any prospective legal project in relation to the global waste economy must work towards the recognition of informal livelihoods and the emancipation of informal workers from social marginalization and dangerous work.

I then travel to Agbogbloshie, an urban periphery that has been identified as one of the top ten most polluted places on Earth, focusing on the local e-waste industry. Agbogbloshie provides a real-world example of the conceptual opposition between informality and law, and the latter's emancipatory limitations with respect to the former. I explore Ghana's prospective national e-waste regulations, pinpointing the

highly exclusionary dimensions of the formalization agenda currently proposed. My objective in studying Agbogbloshie is to gain an understanding of the actors and interests entwined in the *everyday* and *faraway* governance of this excluded place, from informal labourers to international institutions. A comparison of local realities with national and international discourse and legal ideologies reveals that informality retains a physical stronghold within the urban world, but conceptually remains outside it. In fact, from the formalist legal perspective, the urban informal world of Agbogbloshie simply does not exist. This leads the way into a discussion of the multilateral governance frameworks that fuel the globalization of e-waste as well as the invisible growth of precarious informal e-waste economies, by ultimately failing to acknowledge the human and labour dimensions of the booming trade in global waste resources.

Chapter 3 moves the analysis towards the international laws of the e-waste trade to understand their implications on the informal e-waste economy. I demonstrate that the conceptual opposition between law and informality is reinforced in the current international legal landscape. Despite its sustainable development and human health protection objectives, international laws regulating the e-waste trade remain strictly focused on the economic possibilities of waste, not the social or environmental injustices that afflict the informal workers at the heart of the global waste economy. I illustrate how regulatory oversights in the current legal framework catalyze the growth of high-risk informal e-waste economies in developing nations. The main argument of this chapter is that the relevant

international treaties fail to recognize the central place of people and work within waste trading and environmental management systems. International environmental laws pertaining to e-waste seek to ensure the international circulation of recyclable waste resources without concerning themselves with the real social or environmental conditions in which wastes are produced and reproduced. While securing the participation of informal economies in transnational recycling chains, the current global environmental regime reinforces the economic and political dominance of elite economic actors and provides minimal benefits to workers at the base level of the e-waste economy. This chapter concludes that current international legal frameworks surrounding the waste trade are fixed in an absolute form of State-centricism that generally works to propel economic over human health interests. These regimes are reflective of a broader system of multilateral governance which supports the free flow of goods and capital across borders, while simultaneously distancing itself from humanity's multifarious demands for equality, dignity and recognition. The human, the labourer, remain but abstract and distant concepts under current international legal regimes that propel a liberalized waste trade.

Chapter 4 seeks to overcome law's blind spots with respect to informality, by undertaking an analysis of the global e-waste trade that is centered on the notions of place, people and the lived experiences of informality and law. The question of justiciability for the informal population is rescaled from the state-centric "international" and "national" to the urban sphere, and at the same time reframed,

that is, pulled out of law's dominant discourse of formalization and embraced instead under the notion of a right to the city. In this Chapter I revisit Agbogbloshie to perform a historically-informed social and spatial reading of this informal place with the aim of understanding the determinative role played by the denial of urban space in the proliferation of precarious, exploitative and dangerous forms of labour, and the complicity of the legal regime in this denial. Using the two pillars of Henri Lefebvre's notion of the right to the city, namely, the right to inhabit and to participate in the urban, and developing them further with the help of De Sousa Santos' notion of subaltern cosmopolitanism, this final Chapter posits that the enhancement of the quality of life of informal e-waste workers in Agbogbloshie requires the recognition of their urban citizenship, in other words, their claim to space and productive resources.

Studying informality under this rescaling and reframing offers novel insights into how informal populations carve out legal spaces that contest the contours of formalist law. It is argued that the concept of the right to the city extends beyond the narrow and technical confines of formalization discourse. While state-centric formalization discourse insists upon law as regulation and social protection, the notion of spatial citizenship emphasizes the plurality of law as it is actually lived, in particular, law as it emerges from the informal world. The final argument is that the notion of a right to the city rehabilitates the informality and law divide. It does so by embracing law as an expression of human agency in contestation to official legal orders that, in a forcible and uninclusive manner, attempt to shape social space.

This dissertation contributes to the advancement of knowledge by capturing the limits of formalization discourse to address structural injustices that lock the informal economy into places of social and environmental oppression. It questions the authoritative frameworks within which law is made and new institutional orders encapsulated, offering novel insight into the debate over whether a presumption of the neutrality of the official legal world hides its complicity in displacing other social structures and economic interests. From this body of work emerges an epistemology of law that engages in a novel way with the themes of informality, labour, citizenship and environment - all of which constitute reinvigorated and urgent concerns of contemporary social, economic and political life. This dissertation ends on the horizon of urban citizenship, the right to the city, as a promising apparatus to traverse the ever-expanding ravine that divides informality and law.

Methodology

The arguments set out above are illustrated through an interdisciplinary study into the juridification of the e-waste world. I follow legal geographers in their tradition of investigating the spatial essence of official legal realms. Part of this involves looking at the juridification of the e-waste world from different spatio-legal vantage points: the national, the international and the local. I draw on concepts originating from the spatial theoretical literature of Lefebvre and the legal theory of De Sousa Santos to help frame my socio-spatial interpretive lens into the legal world of e-waste as it is embodied within national legislative texts and international environmental and

trade treaties. Furthermore, I rely on framentation theory and on the case law of the World Trade Organization to highlight the problematic spatial dynamics of traditional international law frameworks. In particular, my approach emphasizes how conventional legal frameworks are based upon and convey skewed spatial representations of contemporary reality. Hence, theoretical resources drawn from the urban geography and legal literatures, along with international treaties, legislation and case law are the main sources my textual analysis is based on. In examining legal instruments, discourse and interpretive techniques through a spatial lens, my intention is to capture the spatiality of law that is imagined and nurtured by state actors.

I chose to anchor my interpretation of the juridification of the e-waste world in Lefebvre's spatial theory for the latter's implicit intimacy with the social phenomenon of law. Lefebvre's writings do not explicitly engage with law and yet his notion of a 'right to the city' is of an inherently legal essence, crafted in a language that is typically exclusive to law. Lefebvre's concept effectively detaches the notion of rights from the exclusive hold of the state, setting forth the idea that law is asserted spatially by urban inhabitants, as opposed to being unilaterally determined by the state. This conception of law removed and rescaled from the state resonates with the geographically-informed sociolegal theory of De Sousa Santos. In this regard, De Sousa Santos' concept of interlegality that is based on a spatial and processual view of law helps to illuminate the relevance of Lefebvrian spatial theory to the discipline of law in the era of globalization. This study

combines spatial concepts advanced by Lefebvre and De Sousa Santos to nurture a different kind of legal insight, one that displaces the state from its traditional role as an exclusive, neutral, law-making entity. In essence, the theoretical conjunction of Lefebvre and De Sousa Santos serves to reconfigure the institutional meaning of law, affirms the contested nature of the spatial reality that is conveyed by state legal systems, and incites a rethinking of familiar legal concepts such as public space, private property, formalization and citizenship.

This study moves beyond a conventional doctrinal legal approach in proposing that the reality of law is not a clearly defined system, or system of jurisdictions as neatly portrayed from within official legal orders, but rather, a complex interplay between the spatially articulated claims of marginalized communities and the spatial constructs of the state. The wilfull spatial blindness of the legal system that is explained conceptually with the help of Lefebvre and De Sousa Santos is illustrated contextually through a study of the spatio-legal struggles of a group of informal workers engaged in the globalized e-waste economy.

In addition to examining historical and current legal developments relevant to the e-waste trade, I carry out an immersive inquiry into the urban geography of e-waste work in Agbogbloshie that involves field observation (through worksite and port visits), participation as an observer in e-waste policymaking forums and by drawing on existing geographical studies on the organizational structure of Agbogbloshie's e-waste workforce.

While some scholars may have approached this kind of study by undertaking an ethnography, I have deliberately chosen a different course. The culture studied here is the culture of law, of juridification. My primary concern is not to convey the worldviews of informal workers, or their perspectives on law (which is perhaps what a traditional legal pluralist approach may have looked like), but to communicate how formalization doctrine disengages, or makes invisible, systemic injustices of globalized neoliberalism.

Scholars across disciplines have been looking at informality through the lens of formalization for decades. The literature has reached a certain stagnation, as formalization has proven to be less than empowering in the era of urbanities coopted by neoliberalization. This dissertation points out that there is another way to read informality. Informality is also a kind of citizenship, an urban spatial demand that resists dominant legalities. In this regard, the present work contests the familiar legal frames through which we *know* informality and alerts us to the fact that reducing law to something that has no spatial awareness dilutes the transformational potential of legal empowerment.

CHAPTER 1. Conceptualizing Informality

1.1. Discursive Beginnings: The Informal Sector Concept

The concept of the 'informal sector' first appeared in the early 1970's, in the writings of anthropologist Keith Hart[19] and in the ILO Report "Employment, Income and Inequalities" detailing the findings of a comprehensive employment mission in Kenya. Though Hart and the ILO are widely credited with having introduced the notion of a two-sector economy divided into formal and informal sectors, the ILO Kenya Report acknowledges the critical contribution of scholars at the University of Nairobi in developing the idea.[20]

While Hart and the ILO did not use the informal sector terminology synonymously, in both cases, their formulations of an informal sector challenged the economic development paradigm of the 1950's and 1960's, which saw the economy dichotomously divided as modern and traditional, respectively productive and unproductive.[21] Cultural anthropology studies from this era, in describing the labour

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[19] Keith Hart, "Informal Income Opportunities and Urban Employment in Ghana" (1973) 11:1 Journal of Modern African Studies 61.

[20] The ILO Kenya Mission Report notes:

"We should record here that the thinking of the mission on these matters has been greatly influenced and helped by a number of sociologists, economists and other social scientists at the Institute for Development Studies at the University of Nairobi. One begins to sense a new school of analysis may be emerging, drawing on work in East and the West Africa and using the informal-formal distinction to gain insights into a wide variety of situations." See International Labour Organization, *Employment, Incomes and equity: a strategy for increasing productive employment in Kenya* (Geneva: ILO, 1972).

[21] See Arthur Lewis, "Economic Development with Unlimited Supplies of Labor" (1954) 22 Manchester School of Economic and Social Studies 139; J. Harris and M. Todaro, "Migration, Unemployment and Development: A Two-Sector Analysis" (1970) 40 American Economic Review 126.

dynamics in developing countries, often reinforced the modern-traditional dichotomy, by adopting a negative view of non-wage employment, and referring to those that worked outside the formal labour market as being inefficient, unorganized and involutional.[22] These perspectives aligned with the post-WWII governance paradigm, under which economic development was viewed as a nation's shift away from the traditional, unorganized subsistence economy, towards the modern, organized capitalist economy. It was at the time of post-war reconstruction that the international community began advocating growth-oriented development policy in developing countries, with the assumption that such a strategy would benefit the 'Third World' the same way it had Europe and Japan.[23] Emergence of the informal sector concept effectively reframed this development agenda.

Keith Hart employed the term 'informal sector' in his study of the migration of the North Ghanian Frafras group to Nima, a slum area in Accra, Ghana. He observed that many migrants, who would be classified in economic surveys as unemployed, were actually engaged in various income-generating activities that escaped enumeration. Although illiteracy, lack of formal education, and ethnic discrimination made it impossible for them to find formal work, Hart noted that the Frafras migrants were far from being unemployed:

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[22] See Clifford Geertz, *Peddlers and Princes; social change and economic modernization in two Indonesian towns* (Chicago: Univeristy of Chicago, 1963); Julius H. Boeke, *Economics and Economic Policy of Dual Societies as Exemplified by Indonesia* (New York: Institute of Pacific Relations, 1953).

[23] Paul Bangasser, *The ILO and the informal sector: an institutional history* (Geneva: ILO, 2000) at 3.

> […] the range of opportunities available outside the organized labour market is so wide that few of the 'unemployed' are totally without some form of income, however irregular. By any standards many of them are poor, but then so are large numbers of wage-earners.[24]

Hart applied the term 'informal' to activities, not to persons themselves. He observed that informal activities encompassed both marginal operations and large enterprises, in primary, secondary and tertiary sectors, sometimes even covering an entire production and distribution chain[25] or involving the provision of essential services to a broader, low-income population. He refuted the "semi-automatic classification of unorganized workers as 'underemployed shoeshine boys and sellers of matches'[…]",[26] stressing the integral role of the informal sector in the day-to-day functioning of the city. In revealing the great diversity of activities that took place in the informal sector, Hart showed that the urban 'unemployed', dominantly viewed as a "passive exploited majority",[27] were autonomous and productive entrepreneurs creatively earning their livelihoods.

Although the very basis for Hart's definition of the informal sector – the distinction between wage employment (formal) and self-employment (informal) – is far too simplistic for the concept to be useful to understanding the real breadth and nature

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[24] Hart, *supra* note 19 at 81.

[25] In discussing barriers of entry into the informal sector (caused by the domination of certain activities by particular ethnic groups) Hart gives the example of meat distribution, controlled by the Islamic Hausa community, from cattle trading to butchering. See Hart, *supra* note 19 at 73.

[26] *Ibid* at 68.

[27] *Ibid* at 61.

of informality,[28] his study on the Frafras migrants did offer valuable insight into the range of occupations comprising the urban informal sector.[29] Most important was his then-novel affirmation of the informal sector as being highly productive. In pointing out the existence of an informal sector, Hart was challenging conventional definitions and measurements of unemployment. In essence, he was questioning the rationale of devoting policymaking efforts towards reducing unemployment, a concept that was entirely misunderstood by development economists:

> What happens if the problem is restated in terms of formal and informal employment structures? The question becomes not 'How can we create work for the jobless?', but rather 'Do we want to shift the emphasis of income opportunities in the direction of formal employment for its own sake, or only to reduce participation in socially disapproved informal activities and in those informal occupations whose marginal productivity is too low?'[30]

Hart's analysis emphasized the need to rethink the transfer of Western-derived economic models and categorizations to traditional and emerging socio-economic structures in developing countries. Of course, by the end of the 1960's, this issue had already become a focal point of investigation of the international development community, who could no longer ignore the discrepancies between the full-employment optimism of the post-WWII development agenda, and the worldwide urban realities of rising informality and poverty in developing countries. By 1969,

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[28] This dichotomous categorization does not take into consideration overlapping realities such as that of the person earning wages within an informal enterprise, or the formal sector employee earning additional income through self-employment.

[29] For example, Hart noted the role of apprentices in small enterprises, and the process of upscaling from one activity to another, more respected activity. See Hart, *supra* note 19.

[30] Hart, *supra* note 19 at 82.

the ILO had established its World Employment Programme (WEP), to assist governments in coping with problems of unemployment. The objective of the WEP was to place the issue of employment generation at the center of development policy, where normally the issue of economic growth took precedence. Under the WEP, a series of country and city-level studies were carried out, in order to analyze employment problems and devise strategies for development that were employment-oriented, instead of being growth-oriented. It is in the context of one of these studies that the ILO first employed the 'informal sector' terminology. As discussed below, the ILO conceptualization overcame some of the weaknesses of Hart's definition. At the same time, both Hart and the ILO Kenya Mission can be seen as having borrowed a dualist structure from economics (modern/traditional) and transposed it to the realm of productive employment (formal/informal), a classification too rudimentary to capture the dynamism of the labouring world.

A retrospective look at the ILO's WEP missions reveals that they suffered what can be regarded as the standard flaws of the time,[31] but they were also revolutionary in that they strengthened the (tripartite) ILO's involvement in development, a sphere traditionally dominated by economists. The ILO's WEP missions aimed to analyze the employment situation in a country (at a generalized, macro-level) in order to

[31] Bangasser points out at least three: (1) No official ILO endorsement of the reports or recommendations that were carried out under the WEP, no institutional follow-up. (2) The WEP missions were technocratic and culturally insensitive, promoting a top-down approach that involved (exclusively male) high-level experts making employment policy recommendations to governments after spending only 6-8 weeks in the country. (3) Policy recommendations were based on economic analyses, with no grounding in the social, cultural, political or institutional contexts. See Bangasser, *supra* note 23 at 7.

formulate guidelines and policy recommendations that would help Governments cope with the most problematic aspects. While other WEP missions focused largely on unemployment, the ILO Kenya mission took an innovative stance in its rejection of the notion of unemployment:

> We identify the main problem as one of employment rather than unemployment. By this we mean that in addition to people who are not earning incomes at all, there is another – and in Kenya more numerous – group of people who we call the "working poor". These people are working very hard and strenuously, but their employment is not productive in the sense of earning them an income which is up to a modest minimum.[32]

In the ILO Kenya Report, the terms informal and formal were used to describe enterprise activity. Informal and formal activities constituted obverse ways "of doing things", with the following characteristics:

Informal Sector	Formal Sector
• Ease of entry into the workforce • A reliance on indigenous resources • Family ownership of enterprises • Small-scale operation in unregulated and competitive markets • Using labour-intensive and adapted technology, and the • Requiring skills acquired outside the formal education system.	• Difficult entry into the workforce, • Reliance on overseas resources • Corporate ownership • Large-scale operation in markets protected through tariffs, quotas and trade licenses • Using imported, capital-intensive technology, and • Requiring formally acquired (often expatriate) skills.

[32] ILO *supra* note 3 at 9.

The Kenya Mission Report emphasized that the informal sector was not confined to the peripheries of large cities, nor to specific occupations or economic activities. In addition, the Mission noted that "informal activities are largely ignored, rarely supported, often regulated and sometimes actively discouraged by Governments."[33]

The Mission saw "growth and vitality"[34] in the informal sector, which it described as "the source of a new strategy for development for Kenya."[35] From the Mission's point of view, development of the informal sector was curtailed primarily due to the "extremely debilitating restrictions"[36] under which it was forced to operate. This included a highly discriminatory social and institutional environment, exclusion of the informal sector from government subsidies and other forms of support provided to formal sector enterprises, and a hostile urban planning policy aimed at eradicating informal sector housing. The Mission encouraged the Government to adopt a "positive attitude" towards the informal sector by shifting its traditional punitive policy of "restriction and harassment"[37] to active support. The main recommendations were to stop the demolition of informal sector settlements, to remove unnecessary licensing requirements, to align research and development with informal sector needs, and to strengthen linkages with the formal sector by creating incentives for subcontracting arrangements.

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[33] *Ibid* at 6.

[34] *Ibid* at 505.

[35] *Ibid*

[36] *Ibid*

[37] *Ibid* at 226.

1.2. An Informal World at Work under Dualism, Structuralism and Legalism

The profound contribution of the dualist economy approach, as advanced by the ILO and Hart, was that it lifted the veil from upon a workforce that had, until then, remained *institutionally* invisible in all respects. The existence of a massive working population ignored in statistical measurements of the economy was finally acknowledged and framed as a source of wealth. In consequence, an alternative development paradigm was beginning to emerge in which the traditional problem of unemployment was recast in terms of the promise of the informal workforce. At the same time, because the duality approach insisted upon the autonomy and separateness of informal and formal sectors, it was quickly criticized as being inconsistent with real-world situations, where formal and informal activities were not so easily segregated, but instead, revealed a deep interaction and mutual constitutiveness.[38] On the other hand, the Hart and ILO conceptions of the informal sector almost completely sidelined the complex web of relationships between the informal, the formal, and the State. Hart postulated that the "sub-proletariat" was a self-contained society in which exchanges were mostly internal. Because the informal workers who provided essential services such as transport were basically catering to a clientele of urban poor, they were not seen by Hart as significantly engaged with the formal economy. He presented the economy as two unassociated sectors that existed side by side, in a neutral relationship. Hart's analysis provided

[38] See Ray Bromley, "The Urban Informal Sector: Why Is It Worth Discussing?" (1978) 6:9/10 World Development 1033.

little insight into the interactions between the informal sector and the regulatory environment.

The ILO Kenya Mission acknowledged the importance of creating significant linkages between the informal and formal sectors, but oversimplified - even strangely beautified - the informal and formal sector dynamics. In recommending that the Government adopt policies to stimulate formal and informal sector engagement, the ILO Mission considered linkages between the sectors to be mutually beneficial, thus completely ignoring the historical and political context in which the informal sector had emerged. In essence, what the ILO Mission left unacknowledged was the Government and formal sector's mutual interest in continually enforcing and reproducing the inequality suffered by the informal sector.[39] The ILO Mission's recommendations, which advocated "spreading the wealth" to the informal sector, ignored the inherent political struggle in the already existing inter-sectoral dynamics. In the Mission's failure to question whether the Government could ever become the mediating, neutral and perfectly democratic entity as required under it recommendations, it overlooked the reality of formal wealth having been gained via Government-assisted subordination of the informal. The Mission's recommendations that the Government abandon its shanty clearance policy "except in cases in which the land is genuinely required for positive housing development and town planning purposes" depoliticizes the questions of demolition

[39] Colin Leys went so far as to call the ILO Mission's recommendations "utopian". See Colin Leys, "Interpreting African Underdevelopment: Reflections on the ILO Report on Employment, Incomes and Equality in Kenya" (1973) 72 African Affairs 419.

and urban planning. Historical realities of Governments justifying often violent displacement tactics under "genuine", albeit discriminatory, forms of development is glossed over as technical oversight, or bureaucratic (*administrate-able*) matter that can be fixed through redistribution. The Mission goes on to highlight certain "consequences" of shanty clearance policy that worsen income distribution between the informal and formal spheres: the increased value of land that is not cleared and consequently higher rents, the "creation of a middle class of property owners and landlords through the tenant purchase system" and "the provision of land with amenities at less than market prices to potential investors instead of to the occupiers […]." The Report's framing of these effects as "consequences" undermines the extent to which they may actually have constituted veritable policy *objectives* from a Governmental perspective. Political dimensions of the Government's role in steering economic flows through shanty clearance policy are left unaddressed, its neutrality assumed.

In general, by treating Government "inaction, restriction and harassment" of the informal sector as something that could be resolved through the adoption of policies integrating the informal sector into the formal economy (for instance, through government procurement or subcontracting requirements), the Mission failed to acknowledge the deeply historical, institutional and cultural dimensions of the exclusion of the working poor from wealthy urban enclaves.

In a poignant critique of the mission, Colin Leys saw the informal sector as defined by the ILO Mission, as being part of a "far larger system of exploitation"[40] which could not simply be altered through policy reforms. He viewed the problems of poverty and inequality as "an expression of, and a condition for, the power structure in Kenya and in the international capitalist system as a whole."[41] Disagreeing with the idea of duality, Leys was the first to insist that the informal and formal were unified.[42] His views of the economy as a continuum catalyzed neo-Marxist scholarship on informality, an approach that places emphasis on the structural nature of informal and formal sector relationships and the global interests that enforce and reproduce exploitative relations.[43] Contrary to views of the informal sector as representing great economic potential, the structuralist school of thought considers the informal sector to be in a state of economic deadlock. At the heart of the structuralist argument is that the informal sector serves to support the globalized capitalist structure of production.[44] From this perspective, commercial and employment regulations are essential to creating a more level playing field and

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[40] Colin Leys*, Underdevelopment in Kenya: the political economy of neo-colonialism 1964 – 1971* (Berkeley: University of California Press, 1974) at 264.

[41] *Ibid.*

[42] Leys *supra* note 39 at 427.

[43] See Caroline Moser, "Informal Sector or Petty Commodity Production: Dualism or Dependence in Urban Development?" (1978) 6:9/10 World Development 1041; Victor Tokman, "An Exploration into the Nature of Informal-Formal Sector Relationships" (1978) 6:9/10 World Development 1065; Chris Gerry, "Petty Production and Capitalist Production in Dakar: The crisis of the self-employed" (1978) 6:9/10 World Development 1147; Chris Birkbeck, "Self-Employed Proletarians in an Informal Factory: The Case of Cali's Garbage Dump" (1978) 6:9/10 World Development 1173.

[44] See Moser, *ibid* at 1057.

equalizing relationships between large firms and subordinated informal producers and wage workers.

The structuralist view contrasts sharply with another school of thought on the informal economy - the legalist school - that also emerged in the 1980's and is spearheaded by Peruvian economist Hernando de Soto. Contrary to the structuralists, de Soto argues that informality is not the result of exploitative patterns of production, but a common-sense entrepreneurial survival strategy invoked by the poor, in order to overcome the barriers to employment created by excessively bureaucratic government regulation.[45] In de Soto's view, solutions to the ever-growing problems of poverty and unemployment require deregulation of the economy, elimination of bureaucratic constraints and subsidies, along with the legalization and promotion of the informal economy through the formalization of property rights (the "deregulation, de-bureaucratization and privatization"[46] agenda). Although acclaimed by international financial institutions and policymakers worldwide, de Soto's neo-liberal approach to bridging inequalities between formal and informal livelihoods by making property rights "universally accessible"[47] has equally been criticized for being empirically challenged, and advocating an overly homogenous agenda of privatization and individualism that

[45] See Hernando de Soto, *The other path: the invisible revolution of the Third World* (New York: Harper & Row, 1989); Hernando de Soto, The *mystery of capital: why capital triumphs in the West and fails everywhere else* (New York: Basic Books, 2000).

[46] de Soto (1989), *ibid* at 242-252.

[47] de Soto (2000) *supra* note 45 at 218.

ultimately benefits the global financial elite.[48] Urban geographer Ananya Roy links the allure and illusion of de Soto's ideas to his promise of wealth transfer through wealth legalization. She notes that a fundamental distinction should be made between the right to participate in property markets (which is effectively what de Soto's legalization agenda guarantees) and actual participation in these markets "in the real space of unequal cities" in which property markets are not free as abstractly implied, but clearly monopolistic.[49]

Structural thinking has incited a more nuanced view of informality than legalist approaches, one that embraces important aspects of both dualist and neo-Marxist characterizations of the informal sector, and constitutes a major shift in scholarly discourse. In the 1980's, understandings of the informal economy moved from 'Third World' condition, to universal process of income generation permeating "the whole social structure."[50] With the revelation that the informal economy was expanding not only in the developing world, but also in cities of Europe and North

[48] See Franz von Benda-Beckman "Mysteries of capital or mystification of legal property?" 41 Focaal – European Journal of Anthropology 187; Daniel W. Bromley, "Formalizing property relations in the developing world: the wrong prescription for the wrong malady" (2009) 26:1 Land Use Policy 20; Alan Gilbert, "On the mystery of capital and the myths of Hernando de Soto" (2002) 24:1 International Development Planning Review 1.

[49] Ananya Roy, "Urban Informality: Towards an Epistemology of Planning" (2005) 71:2 Journal of the American Planning Association 147 at 153.

[50] Alejandro Portes and Manuel Castells, "World Underneath: The Origins, Dynamics and Effects of the Informal Economy" in Alejandro Portes, Manuel Castells and Lauren Benton, eds, *The Informal economy: Studies in advanced and less developed economies* (Baltimore: John Hopkins University Press, 1989) 11 at 12.

America,[51] the informal could no longer simply be characterized as a lingering remnant of the past; it needed to be recognized as a "fundamental politico-economic process at the core of many societies."[52] The informal sector *object* was thus re-conceptualized as the *process* of informalization, whose central feature was identified as the persistent downgrading and vulnerabilization of labour in a vast realm of non-regulated income-earning activities.[53] Castells and Portes' framing of the informal economy succinctly captures the heterogeneity and complexity of the phenomenon:

> The informal economy simultaneously encompasses flexibility and exploitation, productivity and abuse, aggressive entrepreneurs and defenseless workers, libertarianism and greediness. And above all, there is disenfranchisement of the institutionalized power conquered by labor, with much suffering, in a two-century old struggle.[54]

This richer, multi-layered description emphasized the centrality of the experience of labour in defining the informal economy, suggesting that the traditional analytical focus on enterprisal activity was severely misguided. The labour-based approach to defining informality is widely embraced.[55] Contemporary scholarly and institutional

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[51] Saskia Sassen-Koob, "New York City's informal economy" in Alejandro Portes, Manuel Castells and Lauren Benton, eds, *The Informal economy: Studies in advanced and less developed economies* (Baltimore: John Hopkins University Press, 1989).

[52] Castells and Portes, *supra* note 50 at 15.

[53] *Ibid* at 15.

[54] *Ibid* at 11.

[55] In 2003, the 17th International Conference of Labour Statisticians (ICLS) recommended defining informal employment through the unification of the traditional enterprise-based concept, with a broader jobs-based concept. See Ralf Hussmanns, *Measuring the Informal Economy: From employment in the informal sector to informal employment* (Geneva: ILO, 2004).

understandings of informality, led in particular by the ILO, WIEGO and Chen,[56] not only leave behind the original, strict conceptual focus on the enterprise, but further illuminate the employment-like relationships and institutional frameworks that restrict informal workers to highly localized spaces of global economic integration. This dissertation integrates the labour law or worker rights perspectives on informality with the broader body of literatures on informality and citizenship emanating from both the urban and legal geography traditions.

My focus on the informal worker is framed in the language of spatial citizenship, which I see as evoking a universal claim to land, to resources and to recognition that is broader than what could be possibly understood under a traditional labour rights framework. In essence, I consider not only the role of labour rights and the State in the social protection of the informal worker, but also the determinative role played by the spatio-temporal forces of urbanity under contemporary global capitalism. I want to emphasize informality as strategically embedded within the global economic structure, as posited in Saskia Sassen's *Globalization and its discontents* (1998) and David Harvey's *Social Justice and the City* (1973). At the same time, while both Harvey and Sassen draw attention especially to the role of global capital flows in shaping contemporary unequal urbanities, my analysis is targeted on informal

[56] ILO, *supra* note 3*;* Martha Alter Chen, *Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment* (New York: United Nations Department of Economic and Social Affairs, 2007); Martha Alter Chen et al (eds.) *Membership-based organizations of the poor* (London, New York: Routledge, 2007); Elizabeth Hill, *Worker identity, agency and economic development : women's empowerment in the Indian informal economy* (London, New York: Routledge, 2010); Martha Alter Chen, *The Informal Economy: Definitions, Theories and Policies*, WIEGO Working Paper No.1 (Cambridge: WIEGO, 2012).

workers' claims to the urban 'life space'[57], on how their struggles and actions disrupt fundamental legal concepts such as property ownership and public space.

I embrace the defining features of informality that are now widely understood as lack of worker recognition and protection (resulting from an absence of State regulation over income-generating activities) and a high degree of worker precariousness. The ILO Decent Work Report of 2002 provided greater insight into the constantly expanding and diverse groups of workers and enterprises that are found within the global informal economy. It also brought some much-needed coherency on the issue by effectively narrowing in on the exact dilemma that is shared amongst the billions of people in informal situations:

> They are not recognized under the law and therefore receive little or no legal or social protection and are unable to enforce contracts of have security of property rights. They are rarely able to organize for effective representation and have little or no voice to make their work recognized and protected. They are excluded from or have limited access to public infrastructure and benefits.[…][58]

Ironically, informality is widely understood through law, its very definition relying on its relationship to law as its "fundamental category of reference."[59] What are the implications, though, of defining informal employment by reference to a void of State regulation? Surely the informal sphere does not operate lawlessly, recklessly,

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[57] Borrowing from Sassen I consider the life space as a collective embodiment of work, shelter, land, public space, livelihood and participation in social and economic life. See Saskia Sassen, *Expulsions* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2014).

[58] ILO, *supra* note 56 at 3.

[59] Rosemary J. Coombe, "The Cultural Life of Things: Anthropological Approaches to Law and Society in Conditions of Globalization" (1995) 10:2 Am U Int'l L Rev 791 at 805.

chaotically - it is socially ordered. As Guha-Khasnobis, Kanbur and Ostrom have pointed out, the assumption that informality denotes a lack of structure is "conceptually unsound, empirically weak and has led to policy disasters."[60]

Does this separation imply then, that there is a point where State law ends and *informal law* begins? Suppose that informality is spread along a continuum of economic relations that equally encompasses the formal economy, and that there are indeed two or more normative structures. Where is their overlap? The following section attempts to clarify these issues by examining the nature and complexity of the relationship between law and informality.

1.3. The Informal and the Law

A waste collector in Phnom Penh, a *kayayei* in Accra, a street vendor in Brazil, an *Ayi* in Shanghai, a fruit picker in the United States - informal labour comes in a myriad of forms, in places urban, rural and in-between. As outlined above, there is one shared experience that binds all informal workers: their exclusion from the world of legal recognition, protection and regulation by public authorities. The distance between law and informal spheres resonates in all dominant conceptualizations of the informal economy. The now-outdated dualist position assumes that the formal and the informal are separate benign spheres, and that law exclusively concerns the

[60] Basudeb Guha-Khasnobis, Ravi Kanbur and Elinor Ostrom, "Beyond formality and informality" in Basudeb Guha-Khasnobis, Ravi Kanbur and Elinor Ostrom, eds, *Linking the formal and informal economy: concepts and policies* (Oxford, New York: Oxford University Press, 2006)1 at 16.

former.[61] Another version of the dualist school sees an antagonistic relationship between law and the informal, one that needs to be rehabilitated.[62] The structuralist school assumes that more law could be useful to restrain capital power, and to make the latter responsible and accountable towards subordinate actors in the production chain.[63] The legalist school sees the informal workforce as being suppressed by law and thus calls for an elimination of all State-intervention in the market, combined with a highly formalized property regime, the latter being viewed as the single missing component in the informal quest towards economic security, freedom and development.[64]

Like the many different conceptualizations of informality, discussions regarding the role of law in enforcing or eliminating informality have evidently been cast into different and sometimes opposing directions.[65] Overall, the literature converges in its portrayal of law as being relevant to the informal economy.[66]

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[61] See Hart, *supra* note 19.

[62] See ILO, *supra* note 3.

[63] See Bromley, *supra* note 38 and Moser, *supra* note 43.

[64] See De Soto, *supra* note 45.

[65] Noting the prevalence of definitional inconsistencies across the development discourse, Guha-Khansnobi, Kanbur and Ostrom remark that "it turns out formal and informal are better thought of as metaphors that conjure up a mental picture of whatever the user has in mind at that particular time." (Guha-Khansnobi, Kanbur and Ostrom, *supra* note 60 at 3). In essence, the conclusion to be drawn is that the level of universal coherency on the informal and formal concepts is quite low – the literature as a whole does not lead to any precise analytical findings. This is in many ways, not surprising given that economists, industrialists, policymakers, geographers, jurists, have all contributed to the informality discourse.

[66] Kanbur goes further in conceptualizing informality relative to regulation, disaggregating the formal/informal terminology into four conceptual categories, in order to avoid analytical "genericness", and to capture the real diversity of interplay between informal

Moreover, many international labour standards extend to informal workers.[67] In fact, the precarious economic, social and political modes of being that are widely associated with informal work have even propelled the international community towards a legalization project, a turn to law which aims to end the longstanding exemption of the informal workforce from being regulated and protected under labour and environmental standards.[68] Recent adoption of the Domestic Workers' Convention and an ILO Recommendation to assist Member States in "facilitating transitions" from the informal to the formal economy[69] are reflective of this renewed interest in protecting the most vulnerable sectors of the informal economy. This institutional undertaking brings to light a paradox related to the real and aspirational commitments of Governments to represent and protect informal interests – after all, the exclusion of the informal economy from the realms of official law has been structured by the State itself.

National governments may be far less enthusiastic towards the prospects of extending international standards to traditionally unregulated spheres of work than

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spheres and regulatory environments. More importantly, he calls attention to the role of State enforcement of regulations in creating informality, emphasizing that "the conceptualizing of informality is intimately connected to the conceptualizing of enforcement." See Ravi Kanbur, *Conceptualising Informality: Regulation and Enforcement*, Discussion Paper No. 4186, Institute of the Study of Labour (Bonn: IZA, May 2009).

[67] See Anne Trebilcock, "International Labour standards and the Informal Economy " in ILO, *Les normes internationales du travail: un patrimoine pour l'avenir. Mélanges en l'honneur de Nicolas Valticos* (Geneva: ILO, 2004) 585.

[68] See ILO *supra* note 56.

[69] See ILO Recommendation concerning the Transition from the Informal to the Formal economy, 2015, (No. 204).

the tripartite ILO. Consensus over international standards for the protection of informal labour may be achievable in an international tripartite setting where none of the three institutional actors enjoys the status of *primus inter pares*, but to have these rules implemented at the domestic level is a separate, and more complex challenge, which brings out the multiple, changing, and often conflicting personalities of the State, in national and international settings.

At the very least, the new Recommendation on the informal economy is set to strengthen knowledge of the expressions, pathways and conditions of informality. It would not be the first Recommendation to address the informal economy. ILO Recommendation No. 193 on the Promotion of Cooperatives expressly mentions the important role of cooperatives[70] in "transforming what are often marginal survival activities (sometimes referred to as the "informal economy") into legally protected work, fully integrated into mainstream economic life."[71] Recommendation No. 193 calls on Member States to implement legislative and policy frameworks that duly recognize and strengthen the role of cooperatives in the attainment of social inclusion and sustainable development goals. The language of this older Recommendation signals that here, the informal economy is understood as encompassing "marginal survival activities", thus, situated in a non-productive realm and characterized as distant from "mainstream economic life". This portrayal

[70] Cooperatives are understood as autonomous associations "of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise." ILO Promotion of Cooperatives Recommendation, 2002, (No. 193). Section 2.

[71] *Ibid* at section 9.

does not account for the vast internal differentiations of the informal economy. On a deeper level, it ignores the centrality of the informal to the global economy and raises the problematic question of why some forms of earning a living are not qualified as productive work.

The new Recommendation defines the informal economy as broadly as possible, and is centered primarily on social protection. Member States are encouraged to share knowledge on their informal economies and to accomplish this through social dialogue at the national level, with the involvement of all relevant stakeholders. The new Recommendation and global resurgence of the informality debate reveal that despite the traditionally narrow scope of national labour laws, and their limited relevance to the majority of the global workforce, their application to the informal economy is deemed a necessary and hopeful step towards social justice for informal workers.

In the Indian context, Sankaran highlights how labour law's reputed dysfunctionality in regulating the formal economy has not diminished the "magical quality" it seems to hold for 90% of the population who work informally.[72] While outlining some of the radical normative transformations that are needed in order for labour law regimes to come anywhere close to addressing the vulnerabilities of

[72] Kamala Sankaran, "Informal employment and the challenges for Labour Law" in Guy Davidov and Brian Langille, eds, *The Idea of Labour Law* (Oxford, New York: Oxford University Press, 2011) 205 at 223.

the large, heteregenous working masses they have traditionally ignored,[73] Sankaran insists on their burgeoning relevance and expansive possibilities.

What does emerge prominently in the new wave of informality discourse is a focus on worker agency, or self-determination, and the need for Government commitment to strengthening the representation and negotiation capacities of informal workers. The voice and place of informal actors in shaping "transitions to formality" becomes apparent when we take into consideration the risk entailed by exclusionary or paternalistic decision-making realms.[74] The future transformative potential of

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[73] For example, Sankaran cites labour law's historical and continued insistence on the classic employment contract as the central form of work, its failure to "keep pace" with new categories of work that are now recorded by labour statisticians, its inability to recognize the vulnerability and worker status of self-employed employers or individual members in household enterprises. *Ibid* at 230.

[74] For examples in labour law, see Judith Baer, *The chains of protection : the judicial response to women's labor legislation* (Westport: Greenwood Press, 1978); Wendy W. Williams, "The Equality Crisis: Some Reflections on Culture, Courts and Feminism" (1982) 8 Women's Rts. L. Rep. 175; K.R. Willoughby "Mothering Labor: Differences as a Device towards Protective Labor Legislation for Men, 1830-1938" (1993-1994) J L & Pol 445 – 489. In the case of property regimes, see Paul Jenkins, *Regularising "informality": turning the legitimate into legal? Land reform and emerging urban land markets in post-Socialist Mozambique*, Paper presented at ESF/N-AERUS workshop "Coping with Informality and illegality in human settlements in developing cities", Leuven, 2001; Banashree Banerjee, "Security of tenure of irregular settlements in Visakhapatnam" in Alain Durand-Lasserve and Lauren Royston, eds, *Holding their ground: secure land tenure for the urban poor in developing countries* (London: Earthscan, 2002). See also, G. Mundlak, "Industrial Citizenship, Social Citizenship, Corporate Citizenship: I Just Want My Wages" (2007) 8:2 Theoretical Inq L (2007) 719 at 732-733:

> The comprehensive coverage of national collective agreements may also leave a residue of individuals and groups who pay the price for national agreements. The clearest example is migrant workers, but older workers (forced to retire in early-retirement agreements or, conversely, required to postpone their pension), younger workers (for whom compromising entry-level contracts and two-tiered agreements are negotiated) and women (to whom working- time agreements are not sufficiently adapted) often pay a price. Some workers are pushed into peripheral work arrangements. Not only are those who are marginalized in such corporatist arrangements excluded from the main venues of economic representation, but the

labour law will depend largely on the latters' commitment to strengthening the representation and negotiation capacities of informal workers. Precarious workers have always fallen out of the protective scope of this body of law, and out of traditional formulations of industrial citizenship. Labour law systems lead us seamlessly into a hermeneutics of disappearance; the absences, gaps, and silenced relationships between law and informality call for exploration, which the thesis takes up next.

1.3.1. The Mythical Void

Interestingly, while the ILO Report on Decent Work and the Informal Economy highlighted the importance of involving informal economy organizations in public policy debates, and strengthening mechanisms for formal, informal and government dialogues, the Report cast the internal structure of the informal economy into a vacuum:

> The term informal does not mean that there are no rules or norms regulating the activities of workers and enterprises. People engaged in the informal economy have their own […] informal or group rules, arrangements, institutions and structures for mutual help and trust […]. What we do not know is what these informal rules or norms are based on and whether or how they observe the fundamental rights of workers.[75]

The above passage evokes the norms of the informal as the mysterious other, imagining a less-than-legal reality to which the formal institutional world remains oblivious. Such an understanding of the political economy of the informal

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> gap between the majority who are adequately represented and those who are not creates a situation of severe relative deprivation.

[75] ILO, *supra* note 56 at 3.

downplays the fact that norms and actors from informal and formal spheres are in constant interaction, economically and socially intertwined.

Any visualization of informal norms that places them out of contact with the formal regulatory framework is misleading in that it ultimately creates a fictive, hierarchical legal pluralism[76] in which informal law begins where State law ends. A co-existential pluralism where informal law and State law "live" in the same place and at the same time may be more reflective of socio-economic realities. Benton describes early approaches to informality embedded in the dualist conceptualization of a regulated and unregulated sector as having "imported uncritically a structural notion of legal pluralism."[77] According to Benton, the "stacked legal systems"[78] pluralism that she sees echoed in the works of E.P. Thompson and Moore distorts our understanding of how legal orders are viewed and used, and how legal meaning is constructed. Citing Santos' work on Pasagrada (1977) amongst others and drawing on her own discussion of informal employment in Spain's garment sector, she notes that participants in the informal economy do not necessarily perceive themselves to be operating extra-legally, but indeed, as

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[76] Referring to legal pluralism along the lines of Sally Engle Merry who states "according to the new legal pluralism, plural normative orders are found in virtually all societies. […] it places at the center of investigation the relationship between the official legal system and other forms of ordering that connect with but are in some ways separate from and dependent on it. The new legal pluralism moves away from questions about the effect of law on society or even the effect of society on law toward conceptualizing a more complex and interactive relationship between official and unofficial forms of ordering." See Sally Engle Merry, "Legal Pluralism" (1988) 22:5 L & Soc Rev 869 at 873.

[77] Lauren Benton, "Beyond Legal Pluralism: Towards a New Approach to Law in the Informal Sector" (1994) 3 Soc & Leg Stud 223 at 227.

[78] *Ibid* at 224.

being engaged with the law, often using and borrowing from the formal state framework to "legitimize their positions."[79] From this perspective, State regulation operates in the informal sphere as it does in the formal sphere, and thus it is impossible to think in terms of two distinct legal environments. For instance, in Benton's garment industry case, Sate regulation is enacted when informal workers negotiate their salary and other working conditions with reference to pay standards in formal, regulated firms.

The informal workers in Benton's case study do indeed see themselves as having "rights", despite the regulatory disjunctions in their world of work. Their legally grey aura, like that of many other microcases of informality, reminds us that rights arise from agency and resistance, that is, from outside institutionalist realms.[80] Informality should thus be seen as the most integral part - even the birthplace - of the formal world, the origin that has always been subjugated, situated in the shadows. An overlooked and self-managed aspect of the formal sector, the existence of an informal world has been assumed and tolerated, but its belonging to the global economy never fully recognized. The foundational nature of informality is vividly captured by Sassen in her discussion of how a predominantly immigrant, female and

[79] *Ibid* at 223.

[80] See Adelle Blackett, "Emancipation in the Idea of Labour Law" in Davidov and Langille, eds, *supra* note 58 420.

low-wage informal workforce has been critical in providing the infrastructural support to the globalization of capital.[81]

Sewing operators at the heart of multinational clothing companies, harvesters on salt farms that supply the worldwide pharmaceutical industries – these are two of at least hundreds of thousands of possible microspaces of informal labour hidden at the core of the globalized formal economy. Despite their invisibility as global producers, their upstream linkages are well-known. As historian and urban theorist Mike Davis points out "numerous studies have exposed how the subcontracting networks of Walmart and other mega-companies extend deep into the misery of the *colonias* and the *chawls*."[82] In the world of services also, there are intimate, and transparent, linkages between formal and informal sectors, especially in tourism, agriculture and caregiving businesses. Thus, duality or two-foldedness are not realistic representations of the interaction between formal and informal labour. In actuality, these "sectors" live as one, in a porous and sustained interaction. Though there may be discontinuity in terms of the application of State regulatory frameworks to informal and formal spheres, both organizationally and economically, these spheres are continuous. In this sense, informality and formality, as theoretical constructs, are not as useful in differentiating or evaluating the social desiredness, ancientness, efficiency or contemporaneity of economic activities, so

[81]See Saskia Sassen, *Cities in a World Economy* (Thousand Oaks, California: Pine Forge Press, 1994) and *Globalization and its discontents* (New York: New Press, 1998).

[82] Mike Davis, *Planet of Slums* (London; New York: Verso, 2006) at 26.

much as they are helpful in revealing asymmetries of power and political influence in globally-tempered national and local economies.

Instead of interrogating informality in the context of a regulatory void, or as a mysterious other, the question that needs to be asked is whether the interactions and relationships between the formal and informal are complementary or adversarial, exploitative or mutually determined, and whether law plays a role in bridging or polarizing existing inequalities. It is by determining whether the relationship between the informal and formal is one of social and spatial justice[83] that we can begin contemplating what should be the role for law, whether there is a need for more or less legal transformations (or transitions), or whether that is the right question at all.

1.3.2. Property Rights

Thus far I have mainly addressed informality and law in the context of labour and employment. I turn now to another literature on informality, to writings that have explored informality and law as a territorial matter, in the context of housing and land rights, urban planning and development.[84] The urban geographic lens complements labour law approaches to informality, providing an opportunity to explore the intrinsically connected nature of work and land. Informality cannot be

[83] The concept of spatial justice is discussed further below (at 64).

[84] The informal sector concept has been widely applied in the study of settlements, slums and other legally ambiguous or contested occupations of land by rural migrants and the urban poor, in developing countries. As in the case of labour studies, the distinction between informality and formality with respect to housing is generally defined according to the absence or applicability of State regulation.

disaggregated as a labour concern on the one hand and a property or territorial concern on the other; it is always both. The denial of housing and land is an influential factor shaping the work-life existence of informal labourers, contributing to their characteristic vulnerability and urban marginality. As elaborated in the following passages, the literature on urban informality provides opposing perspectives on how law relates to and should respond to informality, but there is never any doubt of the one's relevance to the other.

While some authors contend that the law of informal societies, settlements or slums are separate and distinct from State law,[85] this argument is countered by a number of case studies showing informal communities to be so deeply "entangled" with the law that many do not even perceive themselves as belonging to an unregulated sphere.[86] Still, if there is any perception of an awkward dialectic between law and informality, it is most likely rooted in what can be viewed as the traditionally elite nature of law, its general inaccessibility to the informal world as a tool to exercise rights, and its more widespread use as an enforcing, taxing or constraining mechanism. For instance, in relation to the substandard housing found in informal settlements (colonias[87]) that were established along the U.S. and Mexican border

[85] See de Soto (1989), *supra* note 45.

[86] See for example Benton, *supra* note 77 at 230.

[87] *Colonias* essentially comprise substandard housing (predominantly occupied by first and second-generation Latin immigrants) in the U.S., clustered close to border cities, the majority of them in the state of Texas. They are extra-legal, and not illegal, as existing colonias were created during a period in which housing standards were not applicable in the regions where they developed. See Jane Larson, "Informality, Illegality and Inequality" (2002) 20:1 Yale L & Pol Rev 137 at 140.

from the 1950's and onwards, Larson notes that State-governments' problematization of the situation has consistently been a technical one, related to solving water and wastewater issues, without addressing the broader problematic of the "social marginality and poverty of colonia residents."[88] She notes that policy priorities have been directed towards limiting future growth of the *colonias*, through stricter regulation of property sales and subdivisions, and enhanced enforcement of these rules, with little effort going to the provision of services that would "draw the colonias into the political and economic life of the municipalities they surround."[89]

Further on, Larson argues that the very ideals of law and the realities of the informal world are irreconcilable. She does not equate legitimizing informality with the extension of social protection or transition to formalization, but with accepting "substandard conditions for some that violate generally applicable norms of dignity, health, safety and fariness"[90] and consequently concludes that the adoption of such a double standard would constitute a "hallmark of illegitimacy in our legal system."[91] This proposition, that law and informality are irreconcilable, is perplexing, bringing back into question the issue of legal boundaries. If the legal system itself excludes some part of the population from its protections and regulations, does that demarcation in itself not legitimize informality? In other words, in creating multi-tiered systems for labour, residency and housing that only serve to perpetuate the

[88] *Ibid* at 149.

[89] *Ibid*

[90] *Ibid* at 159.

[91] *Ibid*

social and economic marginality of informal populations, the State itself moves away from the foundational principle of equality, and becomes a participant in the polarization of informal and formal livelihoods. The emergence, permanence and continued regulation of the *colonias* in the United States is a vivid exemple of the fact that even though informality is assumed to exist off the State radar, law and the State are in fact omnipresent.

The question of whether we need more or less legalization depends on the nature of legalization. There is certainly broad institutional consensus that access to property rights is essential to enhancing informal livelihoods.[92] Yet the experiences of formal land titling programs in many Asian, African and Latin American cities have shown that the allocation of private property rights can easily fail to provide informal settlers with a lasting sense of legitimacy and secure land tenure, especially in the context of advanced global capitalism. The widespread realities of inefficient or corrupt land administration institutions, exclusionary credit and land markets, and landgrabbing practices by real estate developers and other powerful actors, are significant obstacles under which property rights cannot guarantee security of

[92] For diverse perspectives that nonetheless all underscore the importance of access to property rights in the transition to formality, see Chen (2012) *supra* note 56; ILO (2002) *supra* note 56; Commission on Legal Empowerment for the Poor, *Making the Law work for Everyone* (New York: CLEP and UNDP, 2008), World Bank, *Land Policies for Growth and Poverty Reduction* (Washington DC : World Bank, 2003); and WIEGO, "Rethinking Formalization: The WIEGO Perspective" (Washington, WIEGO) online: WIEGO < http://wiego.org/informal-economy/rethinking-formalization-wiego-perspective>.

tenure.[93] As Vendryes notes, in the context of the privatization of rural land rights in developing countries:

> [P]rivatization is not neutral. Privatizing land rights can only lead to redistributing them, and the surplus generated by successful privatization can be reaped by individuals who are maybe not the first target of agrarian reforms, such as the wealthiest farmers, urban elite or capital lenders.[94]

Whether legal formalization secures property rights more effectively and justly than alternative land systems is intensely debated. Bromley argues that "formalisation erodes and displaces existing social networks and arrangements that do offer security."[95] On the gendered dimensions of land titling, Payne et al. note that the experiences of land titling programs in many countries have shown that women's rights in property continue to be

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[93] For a discussion on the disjuncture between the theoretical aspirations and empirical realities of land titling, see Rosalee Kingwill et al., "Mysteries and myths: De Soto, property and poverty in South Africa" (2006) International Institute for Environment and Development Gatekeeper Series 124; Franz von Benda-Beckmann, "Mysteries of capital or mystification of legal property? (2003) 41 European Journal of Anthropology 187; Daniel Bromley, *The empty promises of formal titling: Creating Potemkin villages in the tropics.* (Madison: University of Wisconsin, Department of Economics, 2005); A.G. Gilbert, "On the mystery of capital and the myths of Hernando de Soto: What difference does legal title make?" (2002) 24:1 International Development Planning Review 1; Daniel Bromley, "Formalising property relations in the developing world: The wrong prescription for the wrong malady"(2008) 26 Land Use Policy 20; Geoffrey Payne, Alain Durand-Lasserve and Carole Rakodi, "Social and Economic Impacts of Land Titling Programs in Urban and Periurban Areas: A Short Review of the Literature" in Somik V. Lall et al, eds, *Urban Land Markets: Improving Land Management for Successful Urbanization* (Dordrecht: Springer Netherlands, 2009) 133; Alain Durand-Lasserve and Harris Selod, "The Formalization of Urban Land Tenure in Developing Countries" in Somik V. Lall et al, eds, *Urban Land Markets: Improving Land Management for Successful Urbanization* (Dordrecht: Springer Netherlands, 2009) 101; Alan Gilbert, "DeSoto's *Mystery of Capital*, Reflections on the book's public impact" (2012) 34:3 International Development Planning Review V.

[94] Thomas Vendreyes, "Peasants Against Property Rights: A Review of the Literature" (2014) 1 Journal of Economic Surveys 971.

[95] See Bromley (2008), *supra* note 93.

adversely affected by legal, procedural and cultural obstacles.[96] It appears that although tenure security and empowerment of the poor are widely perceived as the prevailing objectives of land titling programs, the latter have often been crafted so as to invigorate real estate and private investment markets, with little attention to protecting the poor.[97] Bromley points out that development institutions' emphasis on land titling and access to credit as predominant solutions to poverty eradication undermine the more fundamental problem at the heart of poverty, which is the lack of opportunities for meaningful work:

> Without a word about gainful employment, there are now confident assertions that titles will suddenly legitimize the poor and render them essential participants in the economy. The mere claim of becoming an "owner" is offered up as the magic solution to poverty. […] In fact, such assured prescriptions seek to mislead us into believing that individuals now embedded in communities and villages and clans and neighbourhoods suffer from the debilitating effects of insecurity. However, the poor now stand protected against exclusion from their social networks. They are poor not because they are not owners. They are poor because flawed economic policies have not provided them with gainful employment[…].[98]

Opposing views regarding the real and intended impacts of the legalization of property rights should not be interpreted as putting into question the significance

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[96] Payne et al, *supra* note 93 at 139. The authors also remark that in order "to address the differential gender impacts of tenure reform, other legislation, including that governing marital relationships and inheritance, must be considered at the same time.[…] At present, the literature does not enable policy makers or administrators to anticipate what role titling can play in the wider objectives of promoting social and economic development, reducing urban poverty, or increasing social and gender equity and inclusion." At 156.

[97] Durrand-Laserve & Selod, *supra* note 93.

[98] Bromley (2008), *supra* note 93.

or transformative role of property law within informal communities. Informal communities themselves have complex normative orderings in which property rights may very well be established and protected.[99] Common perceptions of the absence or lack of law within informal settlements are more reflective of cultural ideologies than realities. Across the developing world, enhancements in the quality of life and social security of informal settlers have been achieved as a result of social solidarity, community organizing and through the development of informal legal norms. For instance, Gonzalez cites the Ciudad Bolivar's Jerusalem neighborhood (Bogota, Colombia) as an example of innovative legal strategizing within the informal sphere. In the absence of formal title, neighborhood residents developed a system of notarized promissory notes and developed a register of plots to prove ownership.[100]

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[99] See for example, Boaventura de Sousa Santos, "The Law of the Oppressed: The Construction and Reproduction of Legality in Pasargada" (1977) 12 L & Soc Rev 5. In this empirical work, De Sousa Santos shows that the legal system of a favela in Rio de Janeiro ("Pasargada Law"), not only encompasses complex property laws and dispute settlement procedures, but also inverts, interacts with, and selectively borrows from the official law of the Brazilian State. Examining contracts of sale that are selectively framed to apply to transactions of houses and shacks but not to the land upon which they rest, De Sousa Santos notes:

> Although these transactions are officially invalid, because a house cannot legally be transferred without the land on which it stands, and favela land cannot be privately owned, this official label of invalidity remains inoperative among Pasargadians as long as these transactions and the social relations create are kept within Pasargada and under the jurisdiction of Pasargada legal institutions and mechanisms. Thus the basic legal fiction permits two mutually contradictory ideas of legality to coexist without interference so long as their jurisdictions are kept separated. (At 53-54).

[100] See Carmen G. Gonzalez, "Pirates, and Entrepreneurs: Is Informality the Solution to the Urban Housing Crisis?" (2009) 40:2 U Miami Inter-Am L Rev 239 at 245.

Where legal systems in developing countries have contributed to improving the social and economic security of informal populations, this progress has not resulted from the direct adoption of traditional Western legal models or development strategies, but from antiformalist legal thinking and innovation. Examples of these innovations include judicial upholdings of Latin American Constitutions' imposition of affirmative duties on Government in relation to the recognition of economic, social and cultural rights, and judicial development and support for the social function doctrine, which obliges land owners to use land in socially beneficial ways, at the risk of expropriation.[101] Hence, it appears that where law and informality have engaged positively with one another, this has resulted from experimentation and transformation within the formal legal system, away from traditional or *Western* formalism, and towards the embracing of informality as a site for legal innovation.

1.4 Contesting Invisibility through Interlegality

Identifying the voice and place of informality within the legal system is critical to legitimating the latter's socially protective commitment towards the former. And yet, much of the literature on informality has been mainly concerned with

[101] *Ibid* at 256. See also Thomas T. Ankersen & Thomas Ruppert "*Tierra y Libertad*: The Social Function Doctrine and Land Reform in Latin America" (2006) 19:1 Tulane Envt'l L J 69. On the antiformalist sociological origins of the social function doctrine see M.C. Mirow, "Origins of the Social Function of Property in Chile" (2011) 80:3 Fordham L Rev 1183.

identifying and measuring the informal, describing the tense dynamics between the informal and State law, or strategizing the formalization of the informal. The need and significance of formalization for informal workforces and settlements remain relatively misunderstood, under a persistently lingering uncertainty as to whose voices formality echoes.

Whether or not formality misses the perspective of the informal *other* is a crucial point of analysis given that formalization efforts have not always been beneficial to the people they aim to protect. For example, the formalization of property titles has been noted, in many cases, to lead to "less social justice and less legal security."[102] Implementations of de Soto's ideas show that in spite of possessing legal title to land, poor people remain under the risk of exploitation by private and government interests.[103] Like formalized property markets, formalized credit markets may also counteractively exacerbate poverty. Ananya Roy's critical assessment of microfinance schemes reveals contradictory ideologies and practices at work in the implementation of what is widely regarded as one of the most effective pro-poor development strategies. Roy's work illustrates how the potential of microfinancing for the working poor is drastically undermined by the prevalence of patriarchal and predatory lending arrangements designed by profit-driven development institutions.[104]

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[102] See F. von Benda-Beckman *supra* note 48.

[103] See note 93.

[104] Ananya Roy, *Poverty Capital: Microfinance and the Making of Development* (New York: Routledge, 2010).

The political space and capacity for negotiation of the informal, in formalization discourse, cannot be ignored. In fact, it is through locating voice and place that we begin unraveling the inclusiveness of law with respect to informal labour, and deepening our understanding of the ways in which informal workers contribute to shaping new legalisms[105] that affect them. The current chapter engages in this exploration of the interpenetration of informal and formal legal worlds, but not for the mere descriptive purpose of identifying and describing the effects of distinct and isolated legal orders acting upon the same subjects and spaces. Instead of focusing on the dichotomies of informal and formal legal systems, or their potential complementarities, the interest here lies in mapping their *interlegality*, a conceptual move which effectively sheds the binary lens that has traditionally been applied to the study of informality, and at the same time overcomes the doctrinal limitations of law, in acknowledging the various interactional scales on which law operates. As Santos explains:

> […]sociolegal life is constituted by different legal spaces operating simultaneously on different scales and from different interpretive standpoints. So much is this so that in phenomenological terms and as a result of interaction and intersection among legal spaces one cannot properly speak of law and legality, but rather of interlaw and interlegality.[106]

[105] I use legalism here in the sense of juridification, referring to legal regimes, state policies, administrative norms - in brief, rules, procedure and discourse emanating from the official legal order.

[106] Boaventura De Sousa Santos, "Law: A Map of Misreading, Toward a Postmodern Conception of Law" (1987) 14:3 Journal of Law & Sociology 279 at 288.

Emphasizing the heterogeneous, dynamic and unstable[107] nature of law, the concept of interlegality draws attention towards the *real-life* mixing together of informal and formal social orders, practices, philosophies and norms, through which emerge creative, hybrid, cross-scalar versions of law and justice. The process of interlegality necessarily implies a rejection of the notion that sovereign States are the exclusive actors of law making. Non-State actors, both formal and informal, assume a significant role in the creation and orientation of interlegality; it is a concept rooted in a pluralist understanding of law. However, contrary to hierarchical or dichotomous, reifying[108] pluralist approaches, the concept of interlegality calls for an indeterminate, dialectic and always *relative-to-space* understanding of law. In essence, it is because interlegality advances a spatial and processual - over a textual or doctrinal - idea of law, that it provides an ideal point of departure from where to begin an inquiry into the justiciability of the formal and informal divide.

Informality is inherently spatial, a lived experience that may or may not appear in text, or register on official legal radars. Though it is certainly a space constructed by the demarcation of regulatory boundaries, more often than not, informal work takes place in invisible spheres, barely (if ever) leaving an official trace of its existence. However, this so-called regulatory void is at the same time an ever-dynamic space of human as well as legal dimensions, and it is precisely by looking at the movements

[107] *Ibid* at 298.

[108] I am referring to pluralist approaches that objectify law into the product of overlapping, closed, competitive normative systems. For a discussion of how pluralist approaches imagine law, see Desmond Manderson, "Beyond the Provincial: Space, Aesthetics, and Modernist Legal Theory," (1995-1996) 20 Melb U L Rev 1048.

and interactions within, into and out of this space, that sites of inequality, vulnerability, marginality and oppression are to be uncovered. The spatial perspective provides a portal into the material reality of pervasive inequality and exploitation that affect the informal workforce. The adoption of an integrated temporal and spatial view can highlight problematic conditions and oppressive relationships that formal legal perspectives have traditionally neglected, or at least kept at jurisdictional distance. It is only by taking into account both spatial and temporal knowledges that law becomes more than a symbolic abstraction.

While formal legal theorists view space merely as an object that law organizes and controls,[109] Santos' concept of interlegality unveils the mutual constitutiveness of law and space. In his work, he uses the metaphor of the map to convey law's contingent and distortive[110] nature, its necessarily interpretative essence. He appears to reject the notion of law as a system, or even as plural systems, in locating "legal life" in the "transitions", "trespassings" and "intersection" of legal *spaces*.

This spatial consciousness of the in-between that underlies the notion of interlegality exposes the openness and fluidity of law, a concept that has traditionally been treated as binary (legal/illegal). In the context of informality, spatial knowledge uncovers the interlegal relational processes through which formal and informal actors create and manipulate and develop a mutual sense of

[109] See Manderson's discussion of Austin, Weinrib and Dworkin, *ibid* at 1054-1056.

[110] Santos identifies three mechanisms through which maps, and law, distort social reality: scale, projection and symbolization. See De Sousa Santos *supra* note 106.

obligation towards alternatives to the classic binary division of law. Comparing the relations constitutive of interlegality to those recognized and regulated under State law may bring to the surface everyday justice struggles that permeate the core of social and economic life, but ever so discreetly remain hidden underneath official legal structures.

Santos' spatial and processual theory of law captures the narrowness and fallacy of applying doctrinal legalist thinking in response to contemporary global problems such as informality. The social reality of law is never just limited to State law, but is a mesh of constant and ever-changing alternative, multiscalar legalities. The concept of space is particularly useful in bridging the gaps between strictly labour-based or land-based analyses of informality, where there is a tendency to investigate and explain phenomena from the vernacular of either labour law or property law. Dissecting informality in this way results in major knowledge gaps, and more importantly, undermines the multiple dimensions in which the informal workforce's vulnerabilities propagate. For instance, going back to Larson[111] and Gonzalez,[112] the issue of labour makes but a fleeting appearance in their respective discussions of informal settlements. While informal housing and informal labour are not synonymous issues, they are so intimately related that it is difficult to see how the formal legal system could develop a coherent, productive policy towards either one, in ignorance of the other. Undoubtedly, globalized urbanism's rising demand for

[111] *Supra* note 87.

[112] *Supra* note 100.

informal labour and the increasing flexibility of labour regulation play a role in the production and reproduction of informal settlements, yet the depth of these linkages has not been explored. Informal labour and informal housing together should be treated in scholarship as parts of a totality, to avoid what David Harvey has referred to, in relation to research on urbanism, as a "tendency to retreat to partial analyses, usually framed within the safety of some disciplinary womb."[113]

The spatial frame can help us transcend disciplinary obstacles and blind spots. Drawing inspiration from Edward Soja's idea of "seeking spatial justice,"[114] we can imagine a less constricting conceptual framework for understanding the dynamics between informality and the law, one that enables the convergence of both labour and property rights concerns without being limited by the formal, internal limitations of either of these separate fields of law. For example, what I see as one of the doctrinal limitations of labour law is that labour law regimes have always divided the workforce (with low-wage migrant labour at the bottom and elite professionals at the top), without questioning the reasonableness of drawing those particular boundaries. Informality challenges the core principles of labour law, exposing the way labour law regimes serve to ambiguously compartmentalize society and maintain a certain class structure.

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[113] David Harvey, *Social Justice and the City* (Athens : University of Georgia Press, 2009 [Baltimore: John Hopkins University Press, 1973]) at 303.

[114] Edward Soja, *Seeking Spatial Justice* (Minneapolis: University of Minnesota Press, 2010).

Although Edward Soja has never formally defined what it means to seek spatial justice, it can, in its most general sense, be perceived as the quest, or struggle, for "greater control over how the spaces in which we live are socially produced."[115] Soja's use of the term is founded upon the understanding that justice has a geographical dimension, and upon the assertion that injustices such as oppression and inequality result from the production, manipulation and impact of space. In essence, geography serves as a political instrument. French philosopher and spatial theorist Henri Lefebvre is recognized as having originally introduced the idea that space is not a neutral container or *tabula rasa*, but is socially constructed and in turn, constructs social relations. He writes: "Space and political organization of space express social relationships but also react back upon them".[116]

The analytical shift from the closure of conventional legal categorizations to the more fluid and inclusive reality of space allows us to move beyond textual rules, into the emergent materiality of informality, as it unfolds in spatial arrangements, interactions and manipulations. Here, the focal point of analysis does not centre upon objects, institutions or people *in* space, but on the evolution of space itself over time, specifically, with a view to unmasking discriminatory social relationships and practices of domination that are embedded within it.

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[115] *Ibid* at 7.

[116] Henri Lefebvre, *The Production of Space* (Oxford; Cambridge: Blackwell, 1991) at 8.

To seek spatial justice for the informal workforce implies a recognition of those workers' spatial claim, that is, their right to occupy and participate in the transformation of the spaces they live and work in. The right of informal labour to exist in a place is obviously a necessary pre-condition to the realization of what can be envisioned as "relations of justice"[117] along the informality-formality continuum. Jeremy Webber uses this term in his account of Aboriginal and non-Aboriginal relations in the period of early colonization. He argues that in the early period of colonization, Aboriginal societies and European colonizers governed their relations not according to *the* conception of justice embodied in their distinct moral and legal orders, but, instead, according to a re-conceptualized sense of justice that emerged from their experience of living and interacting with each other over time. According to Webber, aboriginal rights evolved from the "*modus vivendi*" established by the parties following their initial contact, that is, from "trial and error" and "compromises on the ground" rather than from the pre-existing positive law of either people. The emergence of a new, creative justice allowed both parties to maintain their autonomy, dignity and freedom – at least for a short period of time before Aboriginal societies were brutally overpowered. This conception of justice, removed from "transcendental principles" and grounded in cultural, practical wisdom, calls for restraint with respect to the universal application of norms and a heightened sensitivity towards the preservation of differences. I see this

[117] See Jeremy Webber, "Relations of Force and Relations of Justice: the emergence of normative community between colonists and Aboriginal peoples" (1995) 33:4 Osgoode Hall L J 623.

formulation of justice as resonating with Santos' concept of interlegality and with the experience of informality, in the way it locates the origin of law in a lived relationship, removed from formal legal orders. Webber's example shows that not only can 'acting justly' divert substantially from 'acting legally'; it can also have little do to with 'treating indifferently'.

Whether it be in the context of rights to labour, to land or to resources, the political capacity to claim space plays a critical role in counteracting oppression and exploitation. In this regard, it appears that the shared narrative of the global informal workforce is one of invisibility, social exclusion and marginalization[118] - in other words, the forced and excessive imposition of spatial restriction. In almost all states, the spaces of informal street vendors are constrained by local authorities, through the use of zoning laws. In cities such as New York and Shanghai, it is not unusual to see street vendors hurriedly pack their goods when police cars approach – reinforcing the invisible dimension of their livelihoods. For this reason, it is imperative to address informality first and foremost as a matter of political space. The lack of political space, of the authority to make spatial claims, cannot be seen as *other* than a fundamental factor in the prevalence and growth of unprotected, undignified forms of work. Instead of addressing informality in patriarchal contexts that allude to conquest ("formalizing the informal", or "transitioning" the informal), this prevalent

[118] See ILO *supra* note 3. Informal workers are highly spatially restricted. Take for example, migrant labour and residency restrictions in developed and developing countries. The residency permit system in mainland China ("hukou") as well as the prohibition on mainland Chinese nannies to work in Hong Kong, present explicit discriminatory spatial practices towards rural migrant labour.

human condition needs to be approached from the perspective of how the informal, the formal and the State produce and transform spaces and relations of (in)justice. Henri Lefebvre's notion of the *right to the city* (explained in depth below) presents a promising apparatus to initiate the turn from legal formalization towards spatial citizenship.

The right to the city insinuates a turn to the democratization of the urban sphere. In many ways, this turn synergizes with contemporary labour movements that are increasingly centered on worker enfranchisement. Many recent and successful informal labour movements embody forms of democratic control that have little to do with classic Fordism, the most prominent example being the forming of worker cooperatives and their participatory role in local governance.[119] The following section provides a closer examination of Lefebvre's idea of the right to the city, discusses the consequences of reformulating citizenship at the urban level, and outlines how I intend to use the right to the city framework in my analysis of Ghana's electronic waste recycling industry in subsequent chapters.

1.4.1. Lefebvre's Right to the City: Challenging Formalist Conceptions of Citizenship and Law

The essence of Lefebvre's spatial theory is that space is socially and politically produced, in addition to being creatively active - shaped by and shaping in turn, the

[119] See for example, the Self-Employed Women's Association discussed in Elizabeth Hill *supra* note 56. Other examples include the national recyclers cooperative in Brazil (*catodores de lixo*), and Argentina's *fábricas recuperadas* movement, where workers' reclaimed factories following the 2001 economic crisis.

relations that produce it. Understandings of space as being empty or blank are fundamentally misguided as the neutral or impartial character of space is merely illusionary.

> Space is not a scientific object of removed from ideology and politics; it has always been political and strategic. If space has an air of neutrality and indifference with regard to its contents and thus seems to be "purely" formal, the epitome of rational abstraction, it is precisely because it has been occupied and used, and has already been the focus of past processes whose traces are not always evident on the landscape.[…] Space is political and ideological. It is a product literally filled with ideologies.[120]

Lefebvre's conceptual triad of space as a phenomenon that is at once *lived*, *conceived* and *perceived* expresses the multidimensionality of space as more complex and interactional than the traditional, dominant binary understanding of space as either mental or physical. In this triad, perceived space designates the physical and coincides with what Lefebvre calls *la pratique spatiale*, spatial practice. Conceived space evokes the abstract, that is, representations of space (*les représentations de l'espace)*, while lived space captures the social dimension of space, what he refers to as *les espaces de représentation*.[121] Lefebvre explains that the spatial practice of society refers to the daily routine, the physical "production and reproduction" of social space, in other words, the concrete experience of space as an unreflexive environmental encounter.[122] "Representations of space" refers to the mental constructions of space, the space of "scientists, planners, urbanists, technocratic

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[120] Henri Lefebvre, translated by Michael J. Enders, "Reflections on the Politics of space" (1976) 8:2 Antipode at 31. Original French version (*Réflexions sur la politique de l'espace)* published in the inaugural issue of *Espaces et Société* (1970).

[121] Lefebvre's category of *les espaces de représentations* has been translated into English as both "spaces of representation" and "representational space."

[122] Lefebvre *supra* note 116 at 48.

subdividers and social engineers […] all of whom identify what is lived and perceived with what is conceived."[123] The triad is completed by representational spaces, which evoke space "as directly lived through its associated images and symbols […] the space of inhabitants and users, but also of some artists […] writers and philosophers, who describe and aspire to do no more than describe. This is the dominated - and hence passively experienced space – which the imagination seeks to change and appropriate."[124] Representational spaces have also been described as "counterspaces forged through artistic expression and social resistance."[125]

In other words, Lefebvre's spatial theory emphasizes human implication in the production of space. In this triad, space is simultaneously instrumental, ideological, expressive, a means of social agency and social resistance, at once "part of the state's productive machinery of social regulation […] and a site of political struggle and creative appropriation."[126] Space, then, projects the State agenda as much as it embodies emergent political, emancipatory possibilities manifested through different, counter-hegemonic uses of space. Informal settlements are examples of such creative reappropriations of space, by socially and economically marginalized groups.

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[123] *Ibid* at 48.

[124] *Ibid* at 38-39.

[125] Chris Butler, "Critical Legal Studies and the Politics of Space" (2009) 18:3 Soc & Leg Stud 313 at 320.

[126] Lefebvre *supra* note 116 at 13.

Lefebvre locates the struggle for space between State and citizens in the concept of the *right to the city*. He designates the urban space as the *oeuvre* of its people, incapable of being reduced to a mere product of material organization. Situating the city at an *interface*[127] between what he calls *near* and *far orders*, legal code and culture, [128] Lefebvre identifies the city as a *mediation*. He envisions a *right to the city,* emerging from an individual's entitlement to occupy urban space (the right to appropriation) and to participate in decision-making related to shaping the urban space (the right to participation), as a means to counteract the "discriminatory and segregative organization"[129] of urban reality. He writes:

> The right to the city, complemented by the right to difference and the right to information, should modify, concretize and make more practical the rights of the citizen as an urban dweller (citadin) and user of multiple services. It would affirm, on the one hand, the right of users to make known their ideas on the space and time of their activities in the urban area; it would also cover the right to the use of the centre, a privileged place, instead of being dispersed and stuck into ghettos (for workers, immigrants, the 'marginal' and even the 'privileged').[130]

Lefebvre's vision of a *right to the city* does nothing less than radically transform dominant, classical conceptions of citizenship and individual property rights. The *right to the city* rejects the Westphalian paradigm of enfranchisement based

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[127] Henri Lefebvre, translated by Eleonore Kofman and Elizabeth Lebas, *Writings on cities* (Cambridge, Mass, USA : Blackwell Publishers, 1996) at 101.

[128] Lefebvre describes the interface as "halfway between what is called the *near order* (relations of individuals in groups of variable size, more or less organized and structured and the relations of these groups amongst themselves) and the *far order*, that of society, regulated by large and powerful institutions (Church and State), by a legal code formalized or not, by a 'culture' and significant ensembles endowed with powers by which the far order projects itself at this 'higher' level and imposes itself." Lefebvre, *ibid* at 101.

[129] *Ibid* at 195.

[130] *Ibid* at 34.

exclusively on nation-state membership, and furthermore challenges privatization and the absoluteness of individual ownership, in affirming the right of the *citadin* to physically occupy (inhabit) space.

The legal implications of Lefebvre's essentially political and philosophical ideas were not explored in his own work. They have, however, vividly emerged in Brazil, Colombia, and other Latin American countries that have been working towards the legal materialization of a *right to the city* for over the last two decades. The national Constitutions and legal orders in these countries have given concrete legal dimension to the *right to the city*, through their recognition of the socio-environmental function of property and the city,[131] and through the establishment of a broad range of collective rights, including "the right to urban planning; the social right to housing; the right to environmental preservation; the right to capture surplus value; and the right to the regularization of informal settlements."[132] However, the translation of Lefebvre's work into rights-based approaches is not without controversy. Lefebvre himself disassociates the right to the city from an orthodox rights framework:

> Certainly it is not a natural right, nor a contractual one. In the most 'positive' of terms it signifies the rights of citizens and city dwellers, and of groups they (on the basis of social relations) constitute, to appear on

[131] This is the social function doctrine, discussed above.

[132] Édesio Fernandes, "Constructing the Right to the City in Brazil" (2007) 16:2 Soc & Leg Stud 201 at 211. Fernandes interestingly points out the fundamental difference between the right to the city approach that has been mobilized in Latin America and Hernando de Soto's neoliberal approach to development that has been widely embraced by international institutions.

> all the networks and circuits of communication, information and exchange.[133]

Noting the rising popularity of the notion of a right to the city, and in particular increasing advocacy for its formalization into a legally enforceable right, Chris Butler reminds us of the "deep contradiction between the incorporation of urban struggles within state-controlled institutions and the radical contestation with state power envisaged by Lefebvre's version of the right to the city."[134] He further emphasizes that although Lefebvre does not oppose the use of legal strategies to advance political demands, "he explicitly rejects the idea that the right to the city can be reduced to a positivist legal right."[135]

Challenges in the legal articulation of a right to the city can be vividly seen unfolding in Brazil. The City Statute is a federal law adopted in 2001 to implement urban reform provisions of the Constitution of 1988, which essentially institutionalized the social function of the city and of urban property. Establishing the conceptual and instrumental dimensions of the *right to the city*, the City Statute instigated profound legal reform in the country by disrupting the historical civil legal tradition with respect to private property rights, through its juridification of the social and environmental imperatives of urban governance and property use. The City Statute redefined the concept of land ownership, by providing the State with the power to intervene on individual property rights, in the interest of the public and of the

[133] Lefebvre (1996) *supra* note 127 at 194-195.

[134] Butler *supra* note 125 at 148.

[135] *Ibid*

environment. As the first country to have introduced a chapter on urban policy in its Constitution, Brazil has clearly been progressive with regards to linking the universe of local governance with the world of citizenship rights.

At the same time, the first decade of the Statute's implementation reveals that its democratic instruments remain underenforced or ignored in numerous municipalities and moreover, are often misused for neoliberal planning purposes to the benefit of elite private actors and to the detriment of the urban poor.[136] Holston and Caldeira argue that legal innovations democratizing the management of the urban sphere - although powerful - are engaged by marginalized populations, *as well as* by corporate interests, resulting in a mixed outcome of greater democratization along with "the privatization of public space, spatial segregation, social inequality and private real estate gain."[137]

In addition to the legal innovations emerging in Brazil and other Latin American countries, there has been increasing international mobilization for UN approval of a *World Charter of the Right to the City*, which in its current drafting, embodies principles to orient the production and management of urban spaces in accordance

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[136] See James Holston and Teresa P.R. Caldeira, "State and urban space in Brazil: from modernist planning to democratic interventions" in Aihwa Ong and Stephen J. Collier, eds, *Global Anthropology : Technology, Govermentality, Ethics* (London : Blackwell, 2005) 393; B. Reiter, "The limits of popular participation in Salvador, Brazil on Salvador" (2008) 24 Journal of Developing Societies 337. On practical implementation in Niteroi, in the Rio de Janeiro State and references to Brazilian literature on urban policy implementation see Abigail Friendly, "The Right to the City: Theory and Practice in Brazil" (2013) 14:2 Planning Theory & Practice 158.

[137] Caldeira and Holston (2005) *ibid* at 394.

with human and citizenship rights, and constitutes a prospective international law outlining the rights and obligations of the State, the public, and private stakeholders, for a more socially equitable distribution of urban spaces and resources. [138]

These developments point to the international community's growing desire to work towards a set of fundamental legal principles to guide the development of more socially and spatially just urbanities in an era of globalized and increasingly polarizing neoliberal urbanism. This means fostering deeper connections between cities and citizenship, if we are to combat the further proliferation of exclusionary development patterns.[139] The problem of course with placing exclusive importance on the legal framing of a right to the city is that under certain political conditions and practices, constitutional and legal frameworks may remain "merely decorative, *para o inglês ver* (for the English to see)" as Pereira explains, in the context of Brazilian legality which he sees embodying "strong elements of fantasy and desire."[140]

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[138] The *World Charter for the Right to the City* was conceived at the World Social Forum in Porto Alegre, Brazil (2001), by various international civil society organizations with the support of UNESCO and UN-HABITAT, and was elaborated at the Social Forum of the Americas in Quito, Ecuador (2004). The original text is available online: <http://base.china-europa-forum.net/rsc/docs/doc_614.pdf>. The UN-HABITAT report *State of the World Cities 2010/2011: Bridging the Urban Divide* recommends that municipalities protect all forms of human rights by recognizing every resident's right to the city. See United Nations Human Settlement Program, *State of the World Cities 2010/2011: Bridging the Urban Divide* (London: UN-HABITAT, 2011).

[139] Fernandes, *supra* note 132 at 208.

[140] Anthony W. Pereira, "An Ugly Democracy? State Violence and the Rule of Law in Postauthoritarian Brazil" in Peter R. Kingstone, ed, *Democratic Brazil: Actors, Institutions, and Processes* 217 at 220.

Despite the limitations of legal formalization, institutional recognition of an urban citizenship as enshrined in Brazil's Constitution sets a promising path for the social and economic inclusion of the historically marginalized. Holston notes that the City Statute is a result of, and embodies principles developed by, "insurgent citizenship movements"[141] that emerged in Brazil in the 1970's. He views the legislation as "an indication of the ways in which democratization has taken root in Brazilian society and of how the grassroots experiences of local administration, legal invention, and popular mobilization have made their space in law."[142] In essence, Brazil's constitutionalization of the right to the city presents possibilities for a new, transformational citizenship that visualizes citizens not only as legal subjects on the "receiving" end of justice, but as actively implicated in the creation and direction of law at different scales.

Institutionalization of the right to the city has thus fused Brazilian citizenship to the urban, in addition to the nation-state. With its origins in the advocacy, dissent and protest of neighbourhood-based movements for political and social inclusion, the

[141] Holston's notion of insurgent citizenship embodies urban social movements that disrupt state-directed planning agendas and "assumed categories of social life", in essence, capturing various heterogenous and pluralistic struggles of social groups that introduce new spatial and citizenship claims upon the city. He notes: "Citizenship changes as new members emerge to advance their claims, expanding its realm, and as new forms of segregation and violence counter these advances, eroding it. The sites of insurgent citizenship are found at the intersection of these processes of expansion and erosion." James Holston, "Spaces of Insurgent Citizenship" (1998) Making the invisible visible: A multicultural planning history 37 at 48.

[142] Holston (2008) *supra* note 13 at 292.

Brazilian right to the city can be seen as nurturing a cosmopolitanism[143] that strives inwards, in an effort to realize the common humanity of all urban inhabitants, in particular, urban outcasts - the historically, internally excluded. The challenge that lies ahead is to ensure that this emerging citizenship with urban implications is not reduced in practice to institutionalized rights discourse, but rather embraced as a critical, place and people-centred cosmopolitanism, "achieved from below as a collective practice of world-making."[144]

1.4.2. A Right to the City for Informal Labour: Reworking the longstanding conceptual opposition between law and informality

Following the insights above, the *right to the city* is envisioned here as proposing a citizenship-centered strategy for the empowerment of informal labour. This socio-spatial and urban formulation of citizenship challenges the limitations of traditional

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[143] I use cosmopolitanism here in its broadest, most constant sense, invoking the idea of a universal humanity or global community, the notion that there exists a fundamental social bond between all citizens of the world and that this bond transcends the norm of State sovereignty. See generally, Martha Nussbaum, "Kant and Stoic Cosmopolitanism" (1997) 5:1 The Journal of Political Philosophy 1; Seyla Benhabib et al. *Another Cosmopolitanism* (Oxford: Oxford University Press, 2006). See also Patrick Glenn, *The Cosmopolitan State* (Oxford: Oxford University Press, 2013) where it is argued that the historical and contemporary cosmopolitanism of States attests to the impossibility of the homogenous nation-state concept and is vividly reflected in their law and legal instruments.

While cosmopolitanism is generally discussed in the context of international legal ideals and possibilities of a 'world order', the perspective taken here is that an inwards cosmopolitanism (as embodied within the right to the city) is absolutely necessary, as ideals such as world citizenship and global justice, in reality, unfold in local contexts and are either hindered or propelled through the workings of local administrative legal orders, more so than international institutions.

[144] Patrick Hanafin, "A cosmopolitics of singularities: Rights and the thinking of other worlds" in Rosi Braidotti, Patrick Hanafin and Bolette Blaagaard, eds, *After Cosmopolitanism* (New York, Routledge: 2013) 40 at 52.

models of citizenship based on nation-State membership. One of these limitations is the boundary drawn between those individuals that belong as citizens, those that don't, and who decides. As Benhabib remarks, on what she calls the internal paradox of democracy, "every democratic demos has disenfranchised some, while recognizing only certain individuals as full citizens. Terroitorial sovereignty and democratic voice have never matched completely."[145] In a similar vein, Dhawan emphasizes the fluctuating meanings and imbalanced workings of postcolonial political systems:

> Large sections of the rural population and the urban poor in the postcolony have the formal status of citizens, but they cannot access the organs of the state in the same way as "proper" members of civil society can. Thus even as their moral claim to survival is acknowledged by the ruling elites, their calls for relief are not regarded as being based in justiciable rights.[146]

Indeed, the relevance and meaning of national citizenship have come under greater scrutiny in an era marked by a vanishing public and private divide, and a mixing of Governments and corporations in ways that drastically efface the neutrality of 'public interest' agendas. Still, the power of citizenship is undeniable as Linda Bosniak reminds us, it is an ideal perceived as communicating status, identity, rights, duties and committments of "the highest political value".[147]

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[145] Benhabib, *supra* note 143 at 35.

[146] Nikita Dhawan, "Coercive Cosmopolitanism and Impossible Solidarities" (2013) 22:1 Qui Parle: Critical Humanities and Social Sciences 139 at 150.

[147] Linda Bosniak, "Citizenship Denationalized" (2000) 7:2 Ind J Global Legal Stud 447 at 451.

The national citizenship lens does not however prove to be particularly useful in addressing or even recognizing pervasive spatial inequalities suffered by society's internally excluded groups in our epoch of 'global' and 'meta' neoliberalized cities. The globalized reality of overcrowded poor working neighborhoods, gentrification and increasing homelessness suggest that space is perhaps the fundamental denial towards informal populations. However, this denial is one that Statist visions do not necessary make visible.[148] Refusal of the rights to inhabit and to participate in the 'urban' - in its total sense, as philosophy and as force extending into and shaping rurality – is at the source of the production and reproduction of informal, insecure, dangerous forms of work. It is precisely invisibility at the urban level that limits opportunity to the immediate surrounding, prohibiting access to and participation in, a greater share of national and global economies. It is when individuals are denied a *right to the city* that they become confined to the informal sphere. From this perspective, overcoming the precariousness of informality would require, as a pre-condition, the recognition of a *right to the city*. This does not simply imply a legal declaration of a set of rights, but entails the embodiment of excluded peoples' claims to reproduce urban spaces and resources.

The *right to the city* brings to light the imminence of spatial recognition and inclusion in framing urbanities that embrace historically excluded groups, such as

[148] See James Scott, *Seeing Like a State* (New Haven : Yale University Press, 1998). See also Irus Braverman, on the limits of legal sights and technologies, and how they produce spaces of invisibility, "invisible legal geographies": I. Braverman, "Hidden in Plain View: Legal Geography from a Visual Perspective" (2011) 7:2 Law, Culture and the Humanities 173.

informal workers. Embodying labour, land and environmental rights dimensions, the *right to the city* provides a revolutionary contemporary framework for the protection of dispossessed urban groups. Law gains contemporary relevance, evolving beyond its formal, traditional form and content, embracing itself as interlegality - spatial and processual.

The democratic deficit that affects the urban working poor is lived in all cities. Indeed, informality thrives in globalized urbanisms, not only in developing countries. The continuous global growth of informal labour in urban cores and peripheries indicates an urgent need for effective mechanisms to implement international human and labour rights at the urban level, and to strengthen the role of public interest law in urban development. A stronger linkage is needed between law and the *urban outcasted*, meaning, people and places that are at once constitutive of and outside the philosophy of the urban, the central sphere.[149] The right to the city presents an opportunity to shift from the exclusionary logic of institutional urban governance towards a newly articulated, civil society-driven legal paradigm. In other words, understandings and practices of law integrating new and old sociospatial claims that are steadily expanding in the current era of globalized capitalism. This is an era that is marked by what Sassen calls

[149] This argument draws from Ananya Roy, who uses Jacques Derrida's language of the "constitutive outside" to describe the relationship between megacities of the South with global cities of the North: "the 'constitutive outside' is not a dialectical opposite but rather a condition of emergence, an outside that by being inside creates 'radical undecidability'." Ananya Roy, "Slumdog Cities: Rethinking Subaltern Urbanism" (2011) 35:2 International Journal of Urban and Regional Research 223.

"expulsions"[150] – the systematic displacement of a vast number of differently situated and seemingly disconnected people from their social and economic spaces, homes, livelihoods and neighbourhoods (the "life space").

Like Holston's concept of "insurgent citizenship" describing the political and social movements of Brazil's urban poor, Asef Bayat's notion of "quiet encroachment" that is meant to capture the "silent, protracted but pervasive advancement of the ordinary people on the propertied and powerful in order to survive and improve their lives"[151] vividly elucidates a specific strain of the spatial activism of marginalized groups. Both conceptions raise questions on how we establish and transform senses and practices of belonging, consequently disrupting dominant legalities. Bayat draws attention to the subversive power within the everyday practices of migrants, squatters, hawkers and other marginalized groups ("the floating social clusters"):

> This type of quiet and gradual grassroots activism tends to contest many fundamental aspects of the state prerogatives, including the meaning of order, control of public space, of public and private goods[…].[152]

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[150] Sassen uses the term expulsions to evoke the broader dynamic (a "global systematicity") underlying various societal exclusions and environmental destructions that are generated by what she calls "predatory formations" involving specialized knowledges and powerful economic actors. Her examples from the spheres of global environmental protection (hydraulic fracturing), foreign land aquisitions (land grabs) and finance (homeclosures) are explained as some of many existing instantiations of the highly organized destruction of human life and the biosphere, the "material moment of a more elusive and complex dynamic - the conceptually invisible subterraneous trends that cut across the familiar meanings and concepts through which we explain our economies and societies." Sassen, Expulsions *supra* note 57 at 216-217.

[151] Bayat *supra* note 14.

[152] *Ibid* at 546.

Just like these "floating clusters", the dense and pluralist notion of informality is also packed with differentiated and geographically spread identities and distinct subjectivities. At its core, informality does not simply raise the problem/solution of formalization, but instead recasts the concept of citizenship, of belonging. The plight of slum dwellers, waste pickers, the homeless and other dispossessed social groups forces us to go deeper than the question of formalization, into a requestioning of the neutrality and limitations of fundamental legal concepts such as public space and private property.

The chapters that follow explore the longstanding conceptual opposition between law and informality in the context of the global electronic waste industry. Pervasive computing (the cultural obsession to computerize almost every imaginable commodity) and planned obsolescence (the ever-shrinking lifecycle of technological products) have led to the massive generation of electronic waste (e-waste). Today's urban waste streams are embedded with gold, silver, copper and other resources. The generate a multibillion-dollar globalized waste value chain that implicates multinational corporate actors as well as expansive informal recycling economies made up of the most marginalized segments of society. The flow of e-waste across borders is a contentious environmental justice issue, governed by international and regional trading regimes (e.g. WTO, NAFTA) as well as environmental law (e.g. the Basel Convention). It is informal recyclers along this lucrative value chain and their communities that assume the most acute health risks of global hi-tech production, consumption, disposal and *reproduction*. As such, the persistent growth of the

informal e-waste economy has evolved into a prominent concern on the global governance agenda.[153] At the same time, the exclusionary dynamics of contemporary waste governance paradigms, in failing to acknowledge the legal identity of some stakeholders, and the legal responsibilities of others, have led to a grossly imbalanced and environmentally unjust *globalization of e-waste*.

In the context of this unjust globalization, we are forced to re-examine the emancipatory role of legislation. Can the expansion of formal legal frameworks to informal spheres of the economy lead to an effective empowerment of informal workers? Who contributes to shaping this new legalism? I argue, through a case study of Ghana's informal e-waste economy, that social and environmental injustices linked to informality cannot simply be resolved by bringing informal populations under the "Law", through expanded regulation or social protection.

Under dominant legal empowerment approaches, informality is largely regarded as a social reality that may be woven into law through a generous extension of the latter's protective mechanisms ("formalizing the informal"). Legal empowerment of the poor is envisioned as a combination of labour rights, property rights, and business rights. I argue that we need to re-examine these State-centric

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[153] See *Nairobi Ministerial Declaration on the Environmentally Sound Management of Electrical and Electronic Waste*. Conference of the Parties to the Basel Convention, 8th meeting. UNEP/CHW.8/CRP.24 (1 December 2006); *Decision BC 10-3 Indonesian-Swiss country-led led initiative to improve the effectiveness of the Basel Convention*. Conference of the Parties to the Basel Convention, 10th meeting; *Call for Action on e-waste in Africa: Set of Priority Actions*, Pan-African Forum on E-waste. Nairobi, AMCEN/14/INF/3 (16 March 2012).

understandings of legal empowerment, as they undermine the brutal legacy of the State's complicity in marginalizing the urban poor. Conventional framings of legal empowerment found within the current literature on informality fail to give full consideration to the importance of identifying the voice and place of informality in shaping the legal world. Conversely, the idea of spatial citizenship, inspired by Henri Lefebvre's concept of a *right to the city*, offers an alternative to existing legal empowerment theories, in embracing informality as a counter-space of legal reflexivity that displaces dominant, hegemonic spatializations of the State, through the acts of spatial appropriation and participation. This *other* legal reflexivity can be seen as manifesting itself in informal populations' struggle for a right to the city, in other words, their social claims over urban space and resources.

The notion of spatial citizenship evokes a social and environmental justice apparatus that surpasses the limitations of legal formalization discourse, presenting the epistemological transformation necessary to rework the longstanding conceptual opposition between informality and law. The proceeding chapter illustrates this conceptual opposition by turning to one particular site of urban marginality - the informal electronic waste industry of Agbogbloshie on the outskirts of Ghana's capital Accra, a place commonly referred to by its residents, the media, the courts and the broader urban population as 'Sodom & Gommorah'.[154]

[154] See in particular, *Issa Iddi vs. Accra Metropolitan Assembly* [2002] Misca 1203/2002 (Ghana, High Court of Justice). In this eviction case filed by Agbogbloshie residents against the Accra Metropolitan Assembly, the plaintiffs identified themselves as "traders and residents of Sodom & Gomorrah."

CHAPTER 2. Geographies of E-waste Informality: Justice Distorted, Denied

This chapter explores the dynamics of informality and law in the globalized e-waste recycling economy. Its aim is to foster a deeper understanding of the various environmental justice narratives that are linked to the global e-waste economy, understood as the globalized trade in used electronic commodities intended to be recycled for the recovery of precious metals and other secondary resources. As explained in depth below, e-waste is the fastest growing waste stream worldwide and constitutes both an environmental hazard and a critical economic resource for practically all sectors of the global manufacturing economy. I argue that while the regulation of e-waste flows must be informed by an understanding of e-waste's multidimensionality, it is precisely this characteristic of e-waste that forces governments to make compromises between the protection of economic interests on the one hand, and human health on the other. Waste law landscapes are fixed in an absolute form of State-centricism and technocracy that often works to propel economic over human health interests. The way that the world of waste has been brought into the language of law has greatly benefited the waste commodity, while the labourer has been long lost in translation.

In the first part, I describe the waste worker in the high-tech economy and explore popular narratives that pinpoint the problem of the global waste trade as being the illegal dumping of wastes from the Global North to the Global South. Building on contemporary geographical scholarship, I argue that the global waste economy must

be viewed beyond the traditional unidirectional environmentalist lens according to which developed countries discard worthless objects in the developing world. This vague and overly broad environmentalist perspective ignores the social and economic significance of wastes as resources in the global cycles of production, consumption and reproduction. This distorted vision also fails to recognize the massive informal workforce that is engaged in waste recovery at the heart of our global manufacturing economy.

While welcoming contemporary perspectives that regard the material thing of waste as a valuable resource, I point out that there can be no assumptions that States will interpret or implement new realizations about the economic and environmental significance of waste stewardship in any way that is beneficial to informal waste workers. Legal agendas for waste stewardship have historically excluded informal labour as relevant stakeholders in waste management, opposing and even criminalizing their traditional social claims to waste. As the value of waste rises, so does the tension between new environmental legalisms and informality.

Emphasizing the human dignity and health issues that permeate the ever-expanding informal e-waste workforce, I suggest that any prospective legal project in relation to the global waste economy must work towards emancipating informal workers from social marginalization and dangerous forms of work. My focus on the e-waste trade shows how, spatially and processually, the informal and formal worlds of waste work are intimately tied together. I then show how the State's prospective

regulatory agenda dismisses informal e-waste workers, reinforcing urban inequalities and further marginalizing the most vulnerable urban inhabitants, in the name of environmental stewardship. Agbogbloshie provides a vivid example of State law's distortion, homogenization and abstraction of space, and of its stern oppositional stance towards recognizing, or legitimating, differential spaces created by the informal working population.

2.1. Informal waste work in the globalized, technological era

The e-waste trade is a booming international business realm that embodies important social and environmental risks and implicates both expansive informal sectors in developing countries and multinational high-tech industries in the North. Part of the globalized system in which electronics are produced, consumed, disposed, recycled, transformed, re-consumed, and re-produced into all kinds of material objects, the contemporary e-waste economy has been challenged for its unequal imposition of environmental and human health costs onto informal recycling workers in developing nations.

2.1.1. The Emergence of E-waste Economies

a. The Waste Worker

Across the world, waste workers have historically been treated as the most inferior segment of the informal economic sector, commonly suffering discrimination on the

multiple levels of ethnicity, administrative status, gender, caste and indigeneity.[155] Often attracting rural migrants, minorities and other social groups who do not have access to the formal labour market, informal waste work is an adaptive livelihood strategy for thousands of disadvantaged urban poor in developing countries. The actual work of informal waste recycling may take on several forms, such as itinerant (door-to-door) waste buying, recovering waste from streets or street bins, picking waste off municipal waste collection vehicles and waste picking from dumpsites.[156] Individuals performing these activities occupy the most vulnerable and exploitable positions in what are hierarchically-structured recycling networks involving a chain of both informal and formal stakeholders, including intermediate waste dealers, brokers, wholesalers, processors and manufacturing industries.[157]

Of course, distinctive local and regional contexts make it impossible to narrow down recycling chains to a generalized, exhaustive list of relevant stakeholders. Sometimes, actors and sites are at once formal and informal, and the notion of legality becomes indeterminable. Take for example, the informal recycling network

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[155] United Nations Human Settlements Program *Solid Waste Management in the World's Cities: Water and Sanitation in the World's Cities 2010* (UN-HABITAT/Earthscan: London, Washington D.C., 2010); Poornima Chikarmane and Lakshimi Narayanan "Transform or Perish: Changing Conceptions of Work in Recycling" in Judy Fudge; Shaye McCrystal and Kamala Sankaran (eds.) *Challenging the Legal Boundaries of Work Regulation* (Hart Publishing: Oxford and Portland, Oregon; 2012) 49; Christine Furedy, "Social Aspects of Solid Waste Recovery in Asian Cities" (1990) 30 Environmental Sanitation Reviews; Maike Didero, "Cairo's Informal Waste Collectors: A multi-scale and conflict sensitive perspective on sustainable livelihoods" (2012) 66:1 Erdkunde 27; Martin Medina *The World's Scavengers: Salvaging for Sustainable Consumption and Production* (AltaMira Press: Lanham, 2006).

[156] David C. Wilson, Velis Costas and Chris Cheeseman, "Role of Informal Sector Recycling in Waste Management in Developing Countries." (2006) 30:4 Habitat International 797.

[157] *Ibid*

that has formed around the international-donor funded Jam Chakro dumpsite on the outskirts of Karachi (Pakistan). This network includes a self-proclaimed (informal) landlord who rents out plots of the municipality-managed landfill to individual informal waste pickers, who then make further payments to truck drivers to dump waste on their plots.[158] Regarding the legal title held by the informal landlord at Jam Chakro, Rouse notes that although the municipality does not formally recognize his tenure, "his presence is acknowledged and understood."[159] Indeed, it is easy to understand how local authorities could view such a stakeholder positively, as a necessary peacekeeping intermediary between the municipality and the thousands of waste pickers who unanticipatedly came to live and work on the dumpsite immediately after it was constructed in 1996. At the same time, a self-appointed informal landlord could also be seen as contributing to the excessive corruption and bribery[160] that define the working conditions of Jam Chakro's waste pickers. This type of informal landlordism tolerated by local government evidently keeps waste pickers in a legally illegible state of insecurity.

The situation at Jam Chakro illustrates that the traditional disconnect between formal government waste planning initiatives and local informal realities. The internationally funded dumpsite was planned without taking into consideration the existence of the informal sector. This type of failure to include informal waste

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[158] Jonathan R. Rouse, "Seeking Common Grounds for people: Livelihoods, Governance and Waste" (2006) 30:4 Habitat International 741.

[159] *Ibid* at 744.

[160] *Ibid*

pickers in the modernizing of waste policy and infrastructure is in fact widespread.[161] Even though informal waste workers contribute immensely to society, namely, by filling the void left by public health authorities in waste management, they have been continuously denied worker status, rarely recognized as equal stakeholders in governance, harassed and intimidated by local governments, and outcast from official waste management plans.[162] While it is promising that in some regions, particularly in South American countries, the contribution of informal workers in the waste economy has been inscribed in national legal text, even in these places their struggle for recognition and access to waste resources has been continuously challenged. [163]

Despite common definitional understandings of 'waste', which link the latter to notions of unwantedness, uselessness, worthlessness and impropriety, in the real world, the myriad of things which may be designated as waste are highly coveted substances and objects generating a multibillion dollar global industry.[164] As Chikarmane and Narayanan remind us, "waste is a misnomer for resources that are

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[161] See UN-HABITAT *supra* note 138. For an example similar to Jam Chakro, see the case study of Sousse, Tunisia at 81.

[162] Birkbeck, *supra* note 43; Medina, *supra* note 155; WIEGO, *The Urban Informal Workforce: Waste Pickers / Recyclers, Informal Economy Monitoring Study (IEMS) Sector Summary* (WIEGO, 2014).

[163] Medina, *supra* note 155.

[164] According to a market research report by US-based consulting company MarketsandMarkets, global revenue from the e-waste management market alone was estimated at 9.15 billion USD in 2011 and is expected to rise to 20.25 billion USD by 2016. *See Global E-waste Management Market 2011-2016,* MarketsandMarkets, August 2011. Online: < http://www.marketsandmarkets.com/Market-Reports/electronic-waste-management-market-373.html>.

by-products of human activity or man-made resources, for want of a better term. […] Resources have claimants and competing claims have to be negotiated."[165] In essence, informal workers' struggle for access to waste is a competition for resources, a struggle that continues to intensify in the era of privatization.

Although the work of the informal waste economy can be seen as supporting, and saving costs for the larger waste management system, a looming shortage of natural resources combined with rising financial insecurity has significantly increased competition for waste between informal waste workers and formal industries. Corporations are continuously facing new legal responsibilities for the environmental impacts of the products they introduce into the market, and consequently global efforts to establish closed-loop industrial systems have increased, with evident implications on the ownership of waste, and on informal sector access to waste materials. Legal interests collide with customary social claims, as corporate groups assuming new lifecycle management obligations under environmental and product policy legislations confront and contest the flow of waste into the informal world. The resulting interface of informality, multinational entities, environmental crisis and 'waste resources' poses a complex new regulatory challenge that implicates a variety of stakeholders in all world regions.

Complicating this struggle further is the manifestly technological dimension of the contemporary waste stream, which has added far greater occupational and

[165] Chikarmane and Narayanan *supra* note 155 at 61.

environmental risk to waste recovery. The use of toxic compounds in the manufacturing of a vast array of contemporary consumer products entails potential health risks for those who are involved in the manufacturing *and* in the end-of-life treatment of these objects. Improper waste management can lead to the release of dioxins and furans into the environment, exposing workers and the communities in which they live to higher risks of cancer and other life-threatening illnesses.[166]

b. The Waste Worker in the High-Tech Era

Due to the increasing chemical complexity of waste, many recycling methods applied by informal waste sectors pose long-term local and international health concerns, which often serve to motivate and justify government and private sector efforts to interrupt informal waste workers' activities. The most problematic waste stream in this regard is electrical and electronic waste (e-waste or WEEE[167]).

There is no universal definition of electronic waste. In its broadest sense, e-waste may be understood as "any appliance using an electric power supply that has reached its end-of-life."[168] Every country establishes its own list of end-of-life

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[166] See David N. Pellow, David Sonnenfeld and Ted Smith, eds, *Challenging the Chip: Labor Rights and Environmental Justice in the Global Electronics Industry* (Temple University Press: Philadelphia, 2006); Five Winds International, *Toxic and Hazardous Materials in Electronics: An Environmental Scan of Toxic and Hazardous Materials in IT and Telecom Products and Waste* (Five Winds International: Ottawa, 2001).

[167] In European countries, e-waste is commonly referred to as Waste Electrical and Electronic Equipment (WEEE).

[168] OECD, *Extended Producer Responsibility: A Guidance Manual for Governments* (Paris : OECD, 2001).

consumer products that are considered to be e-waste, and there may be a great degree of variation between national classification lists. It is impossible to define e-waste in absolute terms, or even to narrow it down to an exhaustive list of consumer products (as is the common national regulatory approach), because electronic components are continuously being integrated into an increasing scope of commodities that were not traditionally computerized, such as running shoes, greeting cards and clothing. There is a massive, open-ended scope of commodities that may be considered electronic waste at the end of their lifecycles. National legal categorizations aside, the term e-waste ultimately encompasses all discarded objects embedded with an electronic chip.[169]

The introduction of defunct electrical and electronic equipment (EEE) into common urban waste streams over the course of the digital era has rendered these waste streams more complex in their material nature, making them both more toxic from a human health perspective, as well as more economically valuable in terms of the resources they contain. Globally generated e-waste streams contain a significant portion of the world's entire supply of valuable metals, such as gold, silver and copper, along with a wide range of environmental contaminants including lead, mercury, beryllium, BFR's[170] and PBDE's[171]. Far from being worthless, or useless,

[169] L.M. Hilty, "Electronic Waste – An Emerging Risk?" (2005) 25 Environmental Impact Assessment Review 431.

[170] Brominated flame retardants.

[171] Polybrominated diphenyl ethers.

these post-consumed objects present significant economic value for both informal and formal waste systems.

The rapid rate at which urban societies have been producing e-waste over the hi-tech generation has led to the emergence of a global 'urban mining' industry, a business sector that involves both formal and informal actors and is based on the economic, social and environmental logic of extracting the precious, non-renewable resources embedded within e-waste, in order to transform waste materials into tradeable secondary commodities, for future use in all types of manufacturing.[172]

The recovery of metals from waste objects found in the environment constitutes the only other source of precious metal resources aside from primary mining. For this reason, the transformation of e-waste into tradeable secondary materials contributes to reducing the environmental impacts of the global mining industry and can be seen as playing a central role in minimizing the global manufacturing economy's core dependence on primary extraction industries. At the same time, while today's fledgling, globalized e-waste recycling chain already constitutes a multi-billion dollar industry, these economic gains have been overshadowed by environmental and labour concerns with linkages to international toxic waste trading.

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[172] Rolf Widmer et al, "Global Perspectives on e-waste" (2005) 25 Environmental Impact Assessment Review 436; Eric Williams et al, "Environmental, Social and Economic Implications of Global Reuse and Recycling of Personal Computers" (2008) 42 Environmental Science & Technology 6446.

The majority of e-waste generated worldwide is treated in developing countries.[173] With most of these countries still lacking the appropriate infrastructure and legislative framework necessary to protect human and environmental health from hazardous e-waste processing, a global health crisis has become apparent. The current literature reveals that even though local and regional contexts differ substantially, there is a general lack of safe work methods and working environments for informal e-waste workers in all developing countries. Although entrepreneurial activity in the collection, recycling and recovery of e-waste is flourishing in the developing world (where domestic markets for certain types of EEE are ever growing), work in the e-waste sector is marked by poor environmental and labour conditions.[174] Hence, informal and semi-informal workforces involved in

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[173] British Environment Agency / Industry Council for Electronic Equipment Recycling, *Green List Waste Study* (ICER, 2004); European Environment Agency, *Waste Without Borders in the EU? Transboundary shipments of waste* (Copenhagen, EEA, 2009); European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), *IMPEL-TFS Project II : 'International Cooperation in Enforcement Hitting Illegal Waste Shipments', Project Report September 2004 – May 2006* (IMPEL, June 2006); Government Accountability Office, *Electronic Waste: EPA Needs to Better Control Harmful U.S. Exports through Stronger Enforcement and More Comprehensive Regulation* (Washington DC: GAO, August 2008); Greenpeace Research Laboratories (K. Brigden, I. labunska, D. Santillo, P. Johnston) *Chemical contamination at e-waste recycling and disposal sites in Accra and Korforidua, Ghana* (Amsterdam : Greenpeace International, August 2008); Greenpeace Research Laboratories (K. Brigden, I. Labunska, D. Santillo, M. Allsopp, Department of Biological Sciences University of Exeter, UK) *Recycling of Electronic Waste in China and India: Workplace and Environmental Contamination* (Amsterdam: Greenpeace International, 2005); Toxic Links, *Scrapping the High-tech Myth* (Delhi: Toxic Links India, 2003).

[174]Mattias Schluep et al, *From E-Waste to Resources* (United Nations Environment Program and United Nations University: Bonn, 2009); Secretariat of the Basel Convention, *Where are WEee in Africa? Findings from the Basel Convention E-waste Africa Programme* (SBC, 2009); International Labour Office *The global impact of e-waste* (International Labour Office: Geneva, 2012); A. Sepulveda et al, "A review of the environmental fate and effects of hazardous substances released from electrical and electronic equipments during recycling:

the de-manufacturing of e-waste are engaged in economically significant yet occupationally hazardous activities. Another problematic dimension of many informal e-waste economies is the prevalence of child labour, which is not well documented, but has been observed in Pakistan,[175] Ghana,[176] Nigeria,[177] India[178] and China.[179]

Informal e-waste work sites, which tend to be located close to ports and manufacturing hubs in densely populated, poverty-high nations, are known to pose a serious threat to public and agricultural health through soil, air and water

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Examples from China and India" (2010) 30:1 Environmental Impact Assessment Review 28; Widmer at al, *supra* note 172.

[175]Shakila Umair, Anna Bjorklund and Elisabeth Ekener Petersen, "Social Life Cycle Inventory and Impact Assessment of Informal recycling of Electronic ICT Waste in Pakistan" (2015) 95 Resources Conservation and Recycling 46.

[176] Siddharth Prakash and Andreas Manhart, *Socio-economic assessment and feasibility study on sustainable e-waste management in Ghana* (Oeko Institute; Freiburg 2010). Prakash and Manhart confirm child labour findings of the Greenpeace study (Brigden et al. (2008), *supra* note 173). The authors note that children are mostly involved in burning activities and some hazardous manual dismantling of e-waste. According to the authors, these children are self-employed and do not work for any immediate superiors.

[177]Andreas Manhart et al, *Informal e-waste management in Lagos, Nigeria - Socio-economic impacts and feasibility of international recycling co-operations Final Report of Component 3 of the UNEP SBC E-waste Africa Project* (Lagos & Freiburg: Oeko-Institute, 2011). The authors indicate that child labour not a major issue in the electronics refurbishing sector, but mainly in e-waste collection and recycling.

[178] In its 2013 study on the national e-waste industry, the Associated Chambers of Commerce and Industry of India estimates that in the capital city of Delhi alone, approximately 35000-45000 children between the ages of 10 and 14 are engaged in hazardous e-waste activities. See Associated Chambers of Commerce and Industry of India, *Electronic Waste Management in India* (New Delhi: ASSOCHAM, 2013).

[179] X. Huo et al, "Elevated blood lead levels of children in Guiyu, an electronic waste recycling town in China" (2007) 15 Environmental Health Perspective 1113.

pollution.[180] At the community and municipal level, informal e-waste workers often come under the scrutiny of neighbouring residents and municipal authorities, because of how their activities negatively impact the surrounding environment and local health.[181]

These informal industries may also be perceived as a threat to global consumer health, as the detrimental effects of e-waste pollution are not simply contained in the places where e-waste is physically transformed, but may flow into subsequent product lifecycles. The research of chemist Jeffrey Weidenhammer shows that resources derived from e-waste and which serve as manufacturing inputs for children's toys and jewelry produced for the international market may carry over toxic constituents of e-waste such as lead and cadmium.[182] In this way, material that emerges as e-waste from both developed and developing countries eventually

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[180] See *supra* note 174 and J. Fu, Q. Zhou and J. Liu, "High levels of heavy metals in rice (oryza sativa L.) from typical e-waste recycling are in southeast China and its potential risk to human health" (2009) 31 Chemosphere 1269; J.P. Wu et al, "Bioaccumulation of polybrominated diphenyl ethers (PBDEs) and polychlorinated biphenyls (PCBs) in wild aquatic species from an electronic waste (e-waste) recycling site in South China" (2008) 34:8 Environment International 1109; S. Atiemo et al, "Assessing the Heavy Metals Contamination of Surface Dust from Waste Electrical and Electronic Equipment (E-waste) Recycling Site in Accra, Ghana" (2012) 4:5 Research Journal of Environmental and Earth Sciences 605; Environment and Social Development Organisation, *Study on E-waste: The Bangladesh Situation. Dhaka, Bangladesh* (ESDO: Dhaka, 2010).

[181] In the case of Accra, Ghana for instance, a number of complaints over the activities of the informal e-waste sector in Agbogbloshie have been filed to the Ghana Environmental Protection Agency, as well as to the Accra Metropolitan Assembly. The local government has made numerous attempts to evict informal waste workers from Agbogbloshie. See Secretariat of the Basel Convention, *Ghana e-waste Country Assessment, SBC e-waste Africa Project* (SBC, 2011).

[182] J.D. Weidenhamer and M.L. Clement, "Leaded electronic waste is a possible source material for lead- contaminated jewelry" (2007) 69 Chemosphere 1111; J.D. Weidenhammer and M.L. Clement, "Evidence of recycling of lead battery waste into highly leaded jewelry" (2007) 69 Chemosphere 1670.

returns to the global marketplace, in renewed forms that may continue to pose risk to human and ecosystem health.[183]

2.1.2. Mapping Interlegalities

While informal e-waste workers certainly constitute the highest profile and most controversial actors of the global e-waste crisis, it is important to recall that they represent only one point along a global chain throughout which human health risks emanate. This global chain also involves EEE retailers, EEE consumers, formal waste collectors, trading brokers, EEE manufacturers, international metals dealers and refiners. Informal e-waste worksites reflect the stage of the chain at which profits are low, health risks high and occupational resources few. They are directly linked to the metals-buying industry, to whom they trade "up" their products, and these actors, in turn, link upwards in trade, to foreign processors and refiners. For instance, in the case of the e-waste sector located in Agbogbloshie (Accra, Ghana), informal e-waste dismantlers (who are mainly internal migrants from Northern Ghana) sell materials recovered from e-waste to Nigerian middlemen directly onsite and in turn, these intermediaries trade with businesses located in the coastal city of

[183] These risks have been associated to both metal containing commodities and produce from the agri-food industries. Ultimately, chemical and toxic contamination from dangerous e-waste processing irreversibly enters the global food chain. In the case of Pakistan for example, informal recycling sites located on river banks pass highly pollutive effluents through mangroves. These mangroves serve a critical role in the lifecycle of many fish species including shrimp, one of Pakistan's major food exports. See S. Umair and S. Anderberg, *E-waste imports and informal recycling in Pakistan – A Multidimensional Governance Challenge* (KTH Royal Institute of Technology: Stockholm, 2011) at 17. Little is known yet of the impact this may have on national or international consumer health. In China, health researchers have cautioned against the daily consumption of rice grown in proximity to, and sharing water resources with, e-waste worksites. See See J. Fu et al, *supra* note 180 at 1274.

Tema, from where the materials are exported to China and Dubai, amongst other countries.[184]

Even though the informal-formal linkages along the global e-waste value chain are evident, financial and physical responsibilities in relation to the upgrading of informal labour conditions remain unassumed. Regulatory efforts in response to e-waste pollution focus mainly on EEE manufacturers, obliging them to reduce the use of toxins in their production processes and to take on the environmental management of their products at the end-of-life phase. New regulations also target consumers, prohibiting them from disposing e-waste in landfills or in regular municipal waste streams. However, the roles of waste dealers, shipping lines and other intermediaries of trade remain largely unacknowledged in regulatory contexts. This inattention is unsurprising, given the increasingly deregulated state of global business transactions. The possibility for certain transnational actors to play a role in international waste trading without engaging any form of accountability, and sometimes even preserving their anonymity, inevitably facilitates and expands opportunities for transnational environmental crime in the global e-waste value chain[185] and for the proliferation of exploitative working conditions within the informal economy.

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[184] Mike Anane, League of Environmental Journalists, 2009. Cited in Ditte Maria Frandsen, Jakob Rasmussen and Maren Urban Swart, *What a Waste: How your Computer Causes health Problems in Ghana* (Copenhagen: DanWatch, November 2011).

[185] See Carole Gibbs et al, "Transnational white collar crime and risk: Lessons from the global trade in electronic waste" (2010) 9:3 Criminology & Public Policy 543 at 545.

Informal e-waste workers are often perceived as being engaged in illegal, detrimental activities through which they harm their own communities and other populations. Yet, they are intimately linked into the formal urban fabric via consumers and businesses from whom they buy e-waste, and traders to whom they sell their recovered materials. The chain through which products transform into waste and back again into products is innately *interlegal*, a process of exchanges and transitions that challenge the binary categorization of legal and illegal. The interlegality and perpetually liminal nature of the material thing of e-waste as it crosses borders and proprietors along the global waste value chain is further explored below, demonstrating the complex dimensions of environmental justice debates regarding transnational flows of e-waste.

2.2. Perspectives on E-waste

In their current state, the e-waste economies of developing countries generate significant economic growth but often fall short of offering socially or environmentally secure work opportunities. Informal recycling communities do not have access to fundamental health protection or any social security measures. As noted above, the technological dimension of the contemporary waste stream has intensified the environmental and occupational hazards of recycling and recovery work, because of the toxic constituents contained within EEE. Although strict environmental regulations in post-industrialized countries prohibit the dangerous types of 'backyard recycling' operations that have been commonly observed in many developing nations, in the latter, similar legislation is often lacking or remains

unenforced.[186] Hence, in these countries, e-waste is likely to be treated through hazardous manual processing methods such open-air burning[187] or acid-bathing[188] of materials. Because of the devastating impact of such activities on human health and the environment, the informal e-waste sectors in India, China, Pakistan, Ghana, Nigeria, Bangladesh and other non-OECD countries have become the focal points of social and environmental injustice claims emanating not only from a globalized network of environmental NGO's, but also from within the United Nations system.

2.2.1. Environmental Justice Narratives

Since the early 1990's, when the issue of electronic waste being exported from industrialized countries into Asia started gaining public attention, several transnational environmental networks have undertaken the task of tracking and

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[186] See O. Osibanjo and I.C. Nnorom, "Overview of electronic waste (e-waste) management practices and legislations, and their poor applications in the developing countries" (2008) 52 Resources, Conservation and Recycling 843. See also XinWen Chi et al, "Informal electronic waste recycling: A sector review with special focus on China" (2011) 31 Waste Management 731, where the authors note that China prohibits e-waste imports but regularly receives massive quantities at its ports. Regarding African countries, Oladele Osibanjo points out that none of the 24 African nations that have thus far ratified the *Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991)* have transposed the treaty into national legislation. See Oladele Osibanjo, "The Global Issue of E-waste", Regional workshop on enhancing capacities for the environmentally sound management of waste electrical and electronic equipment (e-waste) through the regional delivery in Africa, Lagos, Nigeria 19-22 October 2015. Online: <http://www.basel.int/Implementation/TechnicalAssistance/Partnerships/PACE/WorkshopNigeriaOct2015/tabid/4619/mctl/ViewDetails/EventModID/8495/EventID/557/xmid/14030/Default.aspx>.

[187] Method commonly used in Ghana, to burn plastic casings off copper wire. See SBC (2011), *supra* note 181 at 67.

[188] Method observed in China and India to separate valuable metals from circuit boards. See Greenpeace(2005) *supra* note 173 at 3.

publicly exposing the negative impacts of the global e-waste trade on developing countries, aptly framing this new technological variation of the hazardous waste trade as a violation of international labour and human rights.[189] The prevailing narrative in the work of these environmental NGO's tracking international e-waste flows is the affirmation of a global trend whereby obsolete electronics, having outlived their optimal existence of virtual and functional, to the state of being merely physical and potentially toxic, are internationally traded, or "dumped", towards poorer, less-regulated spaces of the global economy.[190] This perspective on global e-waste trading, along with that of environmental sociologists such as Pellow[191], Clapp[192] and Grossman[193] reflects a globally-scaled version of the longstanding central argument of the environmental justice movement that originally emerged in the United States, according to which it is marginalized populations that have unwillingly assumed a disproportionate share of the toxic hazards of wastes produced throughout society.[194] David Naguib Pellow has drawn

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[189] See note 5.

[190] See in particular, Puckett et al, and Greenpeace, *supra* note 5.

[191] David N. Pellow, *Resisting Global Toxics: Transnational Movements for Environmental Justice* (Cambridge : MIT Press, 2007); David N. Pellow,"The global waste trade and environmental justice struggles", in K.P. Gallagher, ed, *Handbook on Trade and the Environment* (Northampton: Edward Elgar, February 2009) 225.

[192] Jennifer Clapp, *Toxic Exports : The Transfer of Hazardous Wastes from Rich to Poor Countries* (Ithaca : Cornell University Press, 2001).

[193] Elizabeth Grossman, *High Tech Trash : Digital Devices, Hidden Toxics and Human Health* (Washington DC : Island Press, 2006).

[194] Robert Bullard, ed, *Confronting Environmental Racism: Voices from the Grassroots* (South End Press: Boston, 1993); William M. Bowen et al, "Toward Environmental Justice: Spatial Equity in Ohio and Cleveland" (1995) 85:4 Annals of the Association of American Geographers 641; Phil Brown, "Race, Class and environmental Health, A systematization of the Literature" (1995) 69 Environmental Research 15; Bunyan I. Bryant and Paul Mohai,

attention to the race and class inequalities embedded in global industry's longstanding practice to dump hazardous wastes in the Global South, a trend that continues through the international electronic waste trade.[195] The various studies undertaken by health science research communities that show the severity of soil, water and air pollution in the major e-waste processing hubs of developing countries provide substantial support to environmental injustice arguments.

Regarding the ecological and health impacts of the global electronics industry, Watterson & Chang point out:

> Two disturbing phenomena are generally found where clusters of manufacturing, assembly and disassembly are located: the generation of serious occupational and environmental hazards for workers and nearby communities and the intensification of social inequalities through low wages and labour disempowerment.[196]

At the core of environmental injustice claims is the global trading of e-waste, from developed to developing countries. In 2003, the United Nations *Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights*, drew attention to the harmful practices of the global toxic waste industries, explicitly identifying e-waste exports from industrialized countries as an obstacle to the realization of the human right to

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Race and the incidence of environmental hazards: A time for discourse (Westview Press: Boulder, 1992).

[195] Pellow (2007), *supra* note 191.

[196] A. Waterson and S. Chang, "Environmental Justice and Labour Rights" in Smith, Sonnenfeld and Pellow, eds, *supra* note 5 at 107 (references omitted).

health in developing countries.[197] And again in 2006, the subsequent Special Rapporteur specifically addressed the environmental justice concerns of e-waste trading:

> the poor, the vulnerable, and the marginalized suffer disproportionately from exposure to toxic chemicals.[…] The continuing export of electronic wastes from developed to developing countries for recycling or disposal in conditions which often directly expose workers and communities to toxic chemicals is another example of the particular burden faced by individuals and communities in developing countries. It is a problem which requires urgent attention, both at the international level and at the level of both exporting and importing Governments.[198]

A 2008 Report notes that although developing countries engage in international e-waste trading, "the overall risks to life, health and the environment always outweigh short-term monetary benefits."[199] Subsequent reports narrow in specifically on the critical issue of informal labour within the global e-waste chain, acknowledging the role played by lax international and national regulatory frameworks in the propagation of disproportionately high health risks onto poor working communities in developing countries.

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[197] Commission on Human Rights, *Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights: Report submitted by Ms. Fatma-Zohra Ouhachi-Vesely, Special Rapporteur, in accordance with Commission resolution 2003/20*, 60th session, Geneva, 15 December 2003. UN Doc. E/CN.4/2004/46 (Geneva: Office of the United Nations High Commissioner for Human Rights, 2003).

[198] Commission on Human Rights, *Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights: Report of the Special Rapporteur Okechukwu Ibeanu, 62nd session*, Geneva, 20 February 2006. UN Doc. E/CN.4/2006/42 (Geneva: Office of the United Nations High Commissioner for Human Rights, 2006).

[199] Human Rights Council, *Report of the Special Rapporteur on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Okechukwu Ibeanu*, 7th Session, 18 February 2008, U.N. Doc. A/HRC/721 (Geneva: Human Rights Council, 2008) at 18.

In a 2010 Report detailing the findings of a Mission to India that was undertaken to gain knowledge on the e-waste and shipbreaking industries, the Special Rapporteur notes that regulatory gaps in the national legal framework[200] facilitate an approximated 50,000 tons of illegal e-waste imports per year, from source countries including the United States and members of the European Union.[201] The Special Rapporteur also signals major concern over India's then-prospective national e-waste legislation, stating that the Government's draft rules on e-waste "fail to recognize the reality of e-waste recycling in the country, where at least 95% is dismantled and recycled by the informal sector."[202] The human rights implications of the Government's continual denial of the informal sector are expressly noted:

> the new legislation does not provide sufficient protection for the estimated 80,000 persons working in the informal e-waste recycling sector and their families. The failure to incorporate the informal sector into Government strategies on the sound management and disposal of e- waste constitutes, in the Special Rapporteur's view, a violation of the obligations undertaken by the State under articles 6, 7 and 11 of the International Covenant on Economic, Social and Cultural Rights.[203]

It is interesting to note that recommendations made with regard to facilitating integration of the informal sector into India's official national e-waste framework,[204]

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[200] *Hazardous Wastes Management, Handling and Transboundary Movement Rules*, 2008, India.

[201] Human Rights Council, *Report of the Special Rapporteur on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Okechukwu Ibeanu*, 15th session, 2 September 2010, U.N. Doc. A/HRC/15/22/Add.3 (Geneva: Human Rights Council, 2010) at 80.

[202] *Ibid* at 81.

[203] *Ibid*

[204] *Ibid* at 102.

and tightening restrictions on the import of obsolete electronics,[205] were excluded from India's new e-waste legislation that came into effect in May, 2012.[206]

While the Report on the Mission to India does not critically assess the international regulatory framework that applies to the hazardous waste trade, in the Annual Report of 2010, the Special Rapporteur affirms the role of international law in propagating toxic e-waste imports into developing countries:

> […]gaps and ambiguities in the existing international legal framework, and in particular the lack of a common definition and classification of e-waste, will not allow any significant improvement in the reduction of the adverse human rights impact of the transboundary movement of e-waste […].[207]

Tracing the development of the Special Rapporteurship since its establishment in 1995 sheds light on our continuously evolving understanding of the complexity that marks the relationship between international human rights norms and the global trading of hazardous wastes. The mandate, which was initially established as a Special Rapporteurship on the "adverse effects of the illicit movement and dumping of dangerous products and wastes on the enjoyment of human rights," was

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[205] *Ibid* at 104.

[206] *E-waste Management and Handling Rules*, Ministry of Environment and Forests,12 May 2011, New Delhi, India.

[207] Human Rights Council, *Report of the Special Rapporteur on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Okechukwu Ibeanu*, 15th session, 5 July 2010, U.N. Doc. A/HRC/15/22 (Geneva: Human Rights Council, 2010) at para 33.

significantly expanded by the Human Rights Council at its ninth session, at which point the term "illicit" was officially dropped from the title.[208]

In the annual report of 2010, the Special Rapporteur requested a broadened mandate. The Report also hints at the controversial character of the concepts of legality and illegality, when applied to international movements of hazardous wastes. Specifically, the Special Rapporteur notes that while certain transboundary movements may "appear to be officially legal, particularly in the form of trade and development assistance […] some of such movements could be considered "illicit" based on human rights norms and they carry far-reaching adverse consequences for the enjoyment of most internationally guaranteed human rights."[209]

This disputed legality of the hazardous waste trade under different norms of international law is a practical illustration of the types of problems generated by what is described as the fragmentation of international law. That the legality of a transboundary movement of products or wastes may be interpreted differently under diverse international regulatory regimes brings to the forefront the convoluted challenge of concomitantly enforcing international laws of trade, of the environment, and of human rights. I will return to this aspect of international law further on, in my discussion of the Basel Convention in chapter 3, where I also point out that the legality of transboundary movements of e-waste is not only obscure

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[208] See Human Rights Council, *Mandate of the Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights Resolution 9/1,* UN Doc. A/HRC/RES/9/1.

[209] HRC(2008) *supra* note 199 at para 36.

when analyzed in the context of competing regulatory regimes of international trade law and international environmental law, but also within the international environmental regime itself.

Returning to the evolution of the rapporteurship, the mandate was again broadened in 2011, at which point its scope was reformulated from "movement and dumping" to "environmentally sound management and disposal".[210] This shift reflects the international community's acknowledgement that the way hazardous products and wastes are treated in all stages of their lifecycle, from conceptualization and manufacturing, to consumption and post-consumption, may adversely affect the enjoyment of human rights. Hence, the human rights dimension of the problem of hazardous waste, initially perceived as concerning illicit movements of dangerous wastes across borders, has essentially been recast as a matter involving all aspects of our global industrial system: production, consumption and reproduction. In Resolution 18/11 adopting the change in the scope of the rapporteurship, e-waste industries and ambiguities in international legal frameworks are explicitly recommended as ongoing focal areas for the Special Rapporteur.

Notably, the expansion of this rapporteurship embodies a new awareness of the twin nature of products and wastes. In the broadening of the mandate, there is an

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[210] See Human Rights Council, *Mandate of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, Resolution 18/1, U.N. Doc. A/HRC/RES/18/11, 13 October 2011.

implicit acknowledgement that product becomes waste, and waste becomes product. As discussed below, this awakening to the overlapping and eternally enveloped lives of products and wastes is also reflected in contemporary scholarship on e-waste, emerging from multiple intersecting disciplines.

2.2.2. The Fallacy of Waste as End

In general, e-waste scholarship has drawn attention to the dangerous characteristics of discarded electronics, and the need to improve the protection of human communities against the discriminatory environmental effects of globalized flows of e-waste towards developing countries. Without necessarily contradicting the widely held view that e-waste from wealthier countries is sent towards poorer countries, geographers studying e-waste trading patterns have shown that the global flow of e-waste is far more complex and less linear a matter than the straightforward externalization of pollution from affluent to poor nations, or from nations with higher environmental and labour standards to those with lower, or unenforced standards. In particular, Lepawsky and McNabb[211] highlight the highly regionalized dynamics of international e-waste trading. Observing that intra-regional trade accounts for the majority of the total trade flows of e-waste, these researchers re-question broad assumptions that worldwide e-waste trading

[211] Josh Lepawsky and Chris McNabb, "Mapping international flows of electronic waste (2010) 54:2 The Canadian Geographer 177.

patterns may be fully explained by the pollution haven hypothesis.[212] Their research does suggest that as GDP per capita of a country decreases, the likelihood that it is a net importer of e-waste increases. At the same time, they draw attention to the fallacy of waste disposal as an end point of economic activity, showing international movements of e-waste to be processes of "transubstantiation"[213] whereby waste is transformed to value through a series of exchanges dependent upon "geographic difference and mobility."[214] This perspective starkly contrasts with notions of the international e-waste trade as a global process whereby items *extinguished of value* are discarded in the developing world. In essence, Lepawsky and McNabb's conceptualization of the e-waste trade as an "open ended and contingent"[215] process recognizes the value that is generated through informal recycling workforces, integral stakeholders of the globalized manufacturing economy who have

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[212] The pollution haven hypothesis is the proposition that dirty industries tend to be located where environmental regulations are lax. In Lepawsky and McNabb's study it is traced back to I. Walter, "Environmental attitudes in less developed countries" (1978) 4:3 Resource Policy 200. Studies that have tested the pollution haven hypothesis have come to various conclusions, both affirming and negating the idea that pollution havens exist. See, for example, Patrick Low and Alexander Yeats, "Do Dirty Industries Migrate?" in Patrick Low, ed, *International Trade and the Environment* (Washington DC: World Bank, 1992); Peter Thompson & Laura A. Strohm, "Trade and Environmental Quality: A Review of the Evidence" (1996) 5:4 Journal of Environment and Development 363; Eric Neumayer, "Pollution Havens: An analysis of Policy Options for Dealing with an Elusive Phenomenon" (2001) 10:2 Journal of Environment and Development 147; Clapp (2002) has pointed out that the lack of consensus in the literature may be attributed to weaknesses in the "current, narrow and economistic framework" that is applied in most pollution haven studies. Amongst these weaknesses, she notes there is a bias towards manufacturing in the defining of dirty industries, with the waste industry often remaining unaccounted for, and a narrow construction of environmental costs, which are generally limited to pollution abatement costs only. See Jennifer Clapp, "What the Pollution Havens Debate Overlooks" (2002) 2:2 Global Environmental Politics 11.

[213] Lepawsky and McNabb *supra* note 211 at 186.

[214] *Ibid* at 190.

[215] *Ibid* at 191.

traditionally been ignored in economic analyses of global commodity chains. In fact, global e-waste networks actually confound the theoretical underpinnings of concepts classically used to analyze commodity chains, such as the global production chain and the global value chain, as these frameworks have never ventured into the post-consumption economic life of products.[216]

2.2.3. Seeing the Regional: Beyond Uni-directionalism and into the nuanced particularities of the international division of labour

Regulatory dynamics both between and within regions attest to the inherent complexity of the global e-waste trade. The difficulty in coming to regional agreement on how transboundary movements of e-waste should be regulated illustrates the limitations of unidirectionalist (rich to poor) and dichotomous (developed vs. developing) analyses. National regulatory responses towards e-waste flows indicate that even neighbouring developing countries may hold opposing views on the extent to which restrictions on imports or exports of used EEE or e-waste should be adopted. Paying attention to these regional dynamics gives insight into the workings of the global e-waste chain and into the nuanced particularities of the international division of labour.

[216] For a discussion of the limitations of the Global Value Chain (GVC) and Global Production Chain (GPC) concepts, see Mike Crang et al, "Rethinking governance and value in commodity chains through global recycling networks" (2013) 38:1 Transactions of the Institute of British Geographers 12, and Josh Lepawsky and Mostaem Billah, "Making chains that unmake things: waste-value relations and the Bangladeshi electronics rubbish industry" 93:2 (2011) Geografiska Annaler 121.

In the ASEAN region, for instance, a country such as Thailand, which contains a large domestic EEE manufacturing industry and includes the EU amongst its largest export markets, is likely to have greater incentives to conform to international environmental, health and product safety standards than its neighbouring Cambodia, which has not developed a domestic EEE industry or national e-waste recycling capacity, and relies exclusively on imports for digital development.[217] Cambodia may well perceive regulatory standards that restrict flows of second-hand EEE or e-waste into the region as hampering the availability and affordability of EEE within its own borders. Although all ASEAN nations have prominent informal e-waste recycling sectors, there exist wide discrepancies in their formal manufacturing and waste processing industries, and in the nature of their engagement with external actors.[218] These factors are likely to influence their distinct perceptions of the benefits of either liberalizing or restricting e-waste trading, amongst each other and with other States. For example, both Singapore and Malaysia, which play specialized roles in the globalized repair and refurbishment networks of multinational IT and medical technology manufacturers, have argued that materials they receive through these networks should not be defined as e-waste, as this would entail debilitating socio-economic consequences on their domestic industries.[219] This is due to the stricter administrative[220] and financial[221]

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[217] Armin Ibitz "Environmental Policy Coordination in ASEAN: The Case of Waste From Electrical and Electronic Equipment" (2012) 5:1 ASEAS – Austrian Journal of South-East Asian Studies 30.

[218] *Ibid*

[219] Discussed in detail below at 203.

responsibilities that are applied to all cross-border movements of hazardous wastes. Moreover, the classification of items for repair and refurbishment as e-waste would make it illegal to transfer such items from OECD to non-OECD countries, given the prohibitions under international, regional and national legislative frameworks.[222]

Evidently, due to major differences in their respective international trading linkages, levels of economic development, domestic industrial structures and export markets, achieving regional consensus on the regulation of transboundary movements of e-waste has not been possible for ASEAN countries. Even though several African nations have adopted international and regional instruments that make it illegal to import hazardous wastes into the region (namely, the Basel Convention, the Basel Ban Amendment and the Bamako Convention), these agreements have not been transposed into national legislation in any African State. There is, however, momentum towards regional cohesion. At the Pan-African Forum on E-waste,[223] twenty participating African nations along with other governmental and non-governmental stakeholders agreed upon a set of priority actions in order to further the development of a regional approach to e-waste regulation in Africa. One of the

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[220] This includes, for example, documentation regarding: notification, prior-informed-consent and proof of environmentally sound management, as per the rules of the Basel Convention.

[221] In general, large insurance bonds are required for the transfer of hazardous wastes.

[222] I expand on this issue further below. A discussion of the implications of the designation of used EEE as e-waste for globalized repair and refurbishment networks can also be found in Sabaa A. Khan, *Differentiating EEE Products and Waste: Recent Developments and Future Possibilities under the Basel Convention* (Bonn: UNU-ISP, 2014).

[223] The Pan-African Forum on E-waste is a multilateral and multi-stakeholder meeting organized by the Secretariat of the Basel Convention and the United Nations Environment Program that took place from 14 – 16 March, 2012, in Nairobi, Kenya.

main priorities is that key elements of prospective national e-waste laws be harmonized.[224] Harmonization is one of many critical objectives of the global waste regime. However, as the European Union experience has shown, exploitative and pollutive waste recycling markets are linked into even highly harmonized and progressive regional environmental regimes.[225]

Regional dynamics reveal that international e-waste trading is neither unidirectional, nor exclusively a matter of the Global North externalizing environmental costs towards the Global South. Transboundary movements of e-waste are an integral part of the globalized processes through which metal commodities are produced and reproduced for global consumption. In essence, current industrial production and consumption cycles challenge all homogenous or end-point conceptualizations of waste as a static and hazardous by-product of societal consumption. Contemporary social science and geography research alerts us to how waste is but a transient phase between production and reproduction, a dynamic object that is entirely constituted by social, cultural and political conditions.

The deep complexities of global processes of production, consumption, disposal *and reproduction* reveal that while it is necessary to study and to regulate e-waste as a hazard, it is evidently too narrow an approach to look at e-waste exclusively as the

[224] See Pan African Forum on E-waste, *Call for Action on E-waste in Africa. Set of Priority Actions*. 16 March 2012, Nairobi, Kenya.

[225] EEA, *supra* note 173.

hazardous finality of consumption. In fact, adopting such an approach dismisses the dynamics of international e-waste flows, including the labour and livelihoods of thousands of informal waste workers in developing countries. E-waste embodies hazards against which society should be protected, yet conceptualizations of e-waste exclusively as an environmental hazard ignore the fact that culturally, socially and economically, e-waste is not treated as a hazard, but understood and used by society as resource and livelihood strategy. This multidimensionality of e-waste must inform environmental and social justice debates on the regulation and prohibition of transnational e-waste flows. There are people and places along the e-waste value chain that remain excluded from common understandings of production networks, despite the critical role they play in the broader global manufacturing economy.

Contemporary sustainability perspectives that transform our understandings of waste from unwanted trash to coveted resource compel governments to ensure the environmental stewardship of e-waste, in part, through the greater formalization or regularization of waste management and recycling industries. However, State-led formalization efforts appear to be focused mainly on safeguarding the economic and environmental potential of e-waste, while further outcasting the informal economy. Despite their stated concerns for environmental and human health protection, emerging regulatory frameworks are centered upon the waste object, not the waste worker or the existing social relationships that have evolved from, and are attached to, the concept and object of waste. These new regimes provide pragmatic examples

of how legal formalization agendas may conflict with the needs and interests of the informal economy, opposing their traditional political, social and economic claims to waste resources.

2.3. Labourers Lost in Translation

As emphasized above, embracing e-waste's multidimensionality is critical to understanding how the global e-waste value chain operates and the full range of stakeholders that it involves. From the discussion above, we see that seeking social and environmental justice for informal e-waste workers and their communities has been portrayed as one of the urgent challenges of the global e-waste economy. However, despite these justice concerns, State regulation of e-waste continues to be guided by sheer economic interest, rather than concern for the health of the recycling workforce. The new wave of e-waste legislation being adopted in developing countries shows that waste law landscapes are fixed in an absolute form of State-centricism and formalism that efficiently work to propel economic over human health interests. While there is a clear and urgent need for any prospective legal project in relation to the e-waste economy to work towards the emancipation of informal workers from social marginalization and dangerous work, it appears that new regulatory efforts aim instead to remove the informal e-waste worker's traditional stronghold on urban e-waste flows, creating exclusionary legal utopias in the name of sustainable development. Rather than addressing, validating, or building upon informal workers' political, social and economic claims to waste resources, new waste regulation frameworks often threaten, even criminalize,

informal livelihoods. In the remainder of this Chapter I demonstrate this argument through the example of the e-waste industry in Agbogbloshie, Ghana.

2.3.1. The Case of Agbogbloshie

The history of resource extraction in the Global South is marked by centuries of social and environmental injustice. Today, diamond, oil, cobalt and other metal, mineral and even agricultural industries continue to be globally associated with human rights abuse and practices of labour exploitation. With the globalization of urbanism and technology, and under conditions of increasing world poverty, a new form of resource extraction has emerged, one that is of urban origin and based on the economic and environmental rationality of recovering metal resources embedded in waste commodities. Like primary mining, e-waste recovery, as carried out in the global south, has been widely linked to narratives of labour exploitation, transboundary environmental crime and pollution, as discussed above.

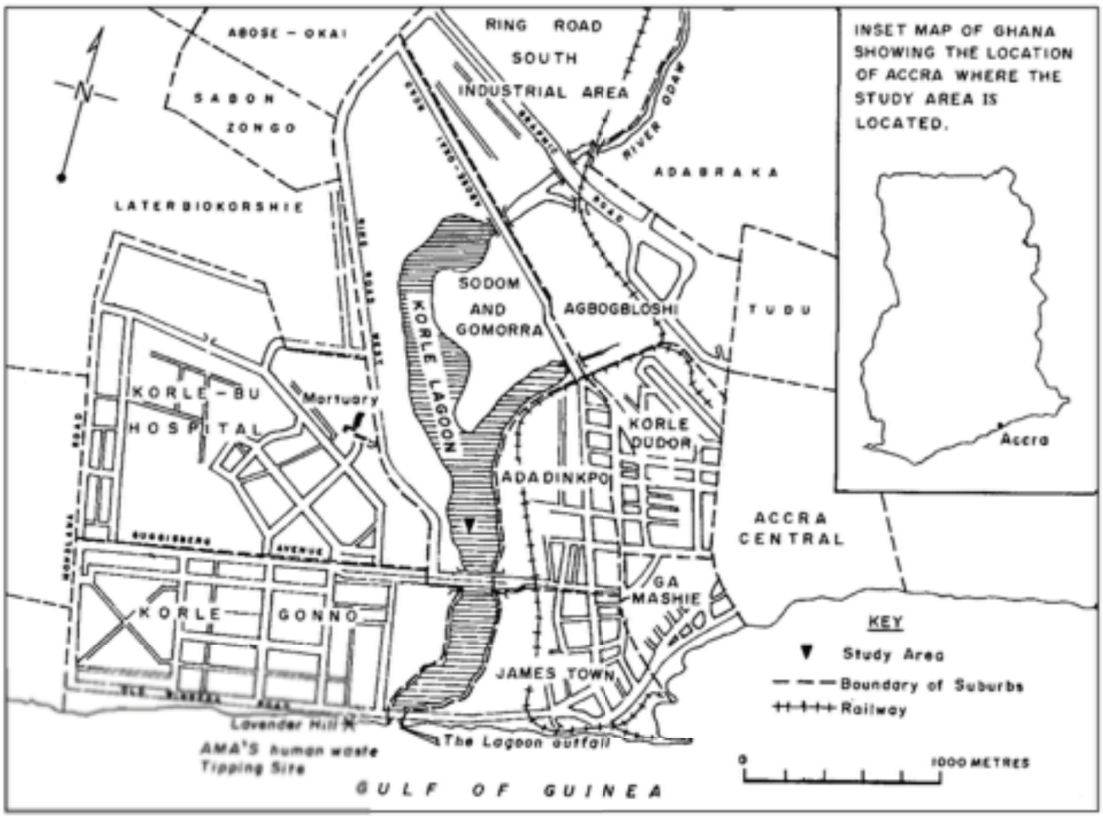
Amongst sub-Saharan African countries, Ghana is known as one of the top destinations for second-hand information and communication technology (ICT) imports from industrialized nations. To pursue its ICT for development policy, the Ghanaian government imposes no duties on the import of second-hand IT equipment.[226] The tremendous influx of secondhand ICT equipment and the Government's failure to provide its citizens with environmentally sound waste

[226] M. Oteng-Ababio, "E-waste: an emerging challenge to solid waste management in Ghana" (2010) 32:2 International Development Planning Review 191.

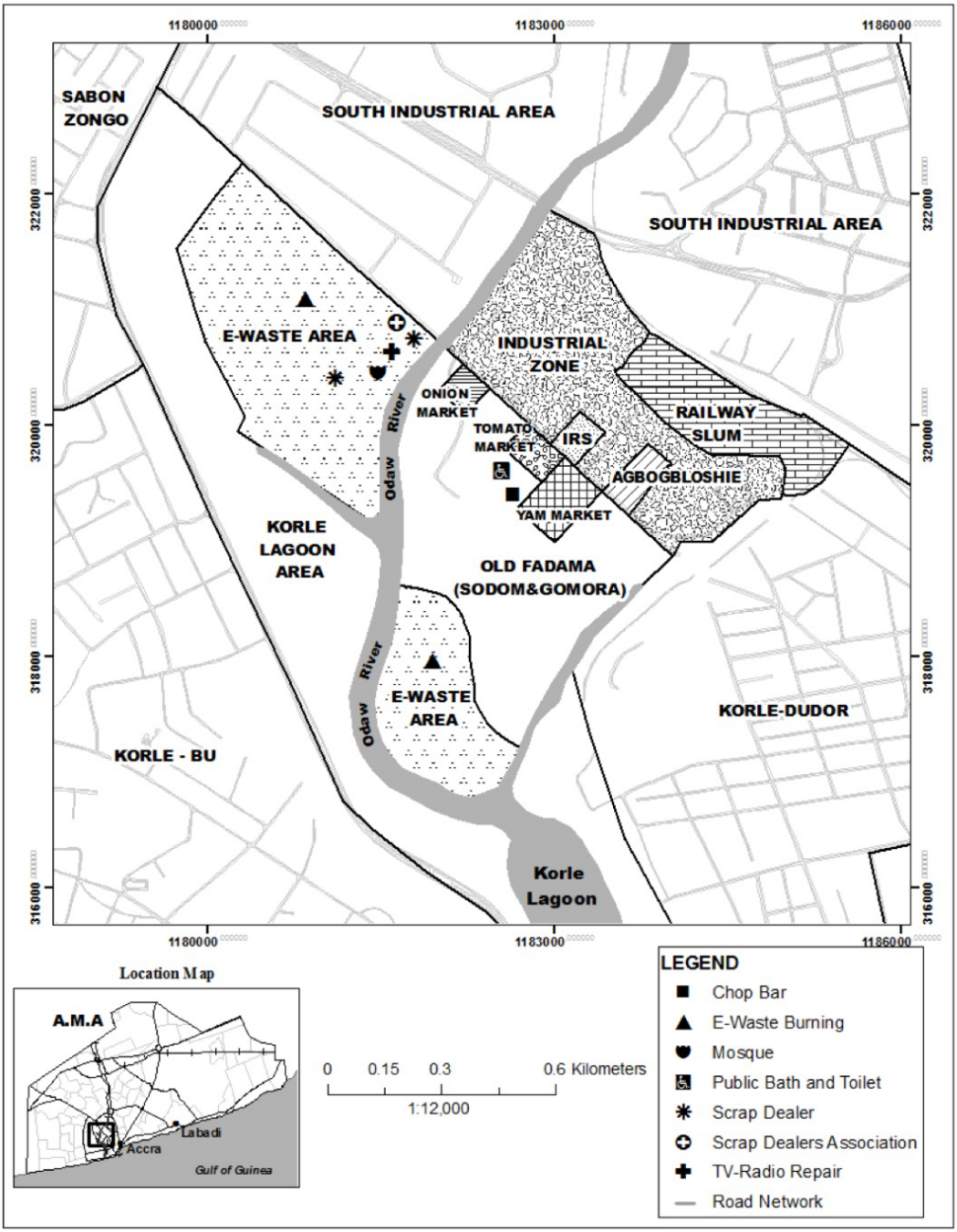
management options for the disposal of electronic equipment has led to the emergence of a highly organized and efficient informal e-waste collection and recycling industry. The largest such sector operates out of the Agbobloshie and Old Fadama areas on the outskirts of Accra, Ghana. Although Agbogbloshie and Old Fadama are originally distinct areas, they are commonly referred to as one entity. In 2009, the population of Old Fadama was estimated at close to 80,000 individuals.[227] The local and national media, and even governmental authorities commonly refer to the entire area derogatively as "Sodom and Gommorah", indicative of the social stigma and *lawlessness* attached to the population that work and reside here.

Map 1 below indicates the distance between the Old Famada and Agbogbloshie areas and the urban centre of Accra while Map 2, designed by Martin Oteng-Ababio, reveals a more detailed layout of the space, specifying precisely where e-waste processing is carried out, in relation to other commercial activities in the area. The e-waste processing area is referred to in the literature varyingly, as both Agbogbloshie and Old Fadama.

[227] Housing the Masses, *Final Report to People's Dialogue on Human Settlements on Community-led Enumeration of Old Fadama Community* (Accra: Housing the Masses/People's Dialogue, 2010).



MAP 1. *Map from the Survey Department of Ghana showing the adjacent settlements of Old Fadama (derogatively demarcated as "Sodom and Gomorra") and Agbogbloshie. Today, these areas are commonly referred to as one entity, under all three designations. (**Source: Boadi and Kuitunen (2002)).***



MAP 2. *Map depicting the spatial layout of the Agbogbloshie e-waste recycling area.* ***Source: Martin Oteng-Ababio (2012).***[228]

[228] Martin Oteng-Ababio, "When Necessity begets ingenuity: E-waste scavenging as a Livelihood Strategy in Accra, Ghana" (2012) 13:1/2 African Studies Quarterly 1.

2.3.2. Agbogbloshie's E-waste economy

In Accra alone, the informal e-waste sector employs 4,500 – 6000 individuals, out of which at least 3000 recyclers are based in the Agbogbloshie scrap yard.[229] Although not officially recognized, the national economic contribution of Ghana's informal electronics refurbishing and e-waste recycling sectors together is estimated at somewhere between US $105 to 268 million.[230] Like traditional forms of informal waste work, e-waste recycling is primarily a livelihood strategy of the urban poor. Agbogbloshie's burgeoning e-waste sector consists mainly of economic migrants originating from Northern Ghana. Although e-waste collectors and recyclers are predominantly men, women also work in the scrap yard selling tools, water and food.[231]

There are essentially four different forms of work available in the e-waste industry: (1) collection (also referred to as "scavenging") of waste materials from households, businesses, waste bins and landfills, (2) dismantling and sorting of e-waste into valuable and non-valuable components, (3) recovery of precious materials through burning, and finally, (4) trading of valuable fractions to local or international dealers who in turn sell the recovered materials to local or foreign industries.[232] There are

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[229] Prakash and Manhart, *supra* note 176; Richard Grant and Martin Oteng-Ababio, "Mapping the Invisible and Real "African" Economy: Urban E-Waste Circuitry" (2013) 33:1 Urban Geography 1.

[230] Grant and Oteng-Ababio, *ibid* at 4.

[231] Oteng-Ababio, *supra* note 226.

[232] Prakash and Manhart, *supra* note 176.

also "middlemen" who link with e-waste actors both downstream and upstream in an effort to gather and sell bulk quantities of materials. These actors are widely perceived by other stakeholders as interfacing in an opportunist or exploitative manner with collectors, traders and dealers.[233]

Revenues gained along the e-waste chain vary extensively, and fluctuate according to the availability of e-waste and market prices for metals. In general, e-waste work is much more lucrative than other forms of informal work, particularly for upstream actors in the trading chain. Estimated daily earnings are US $3.50 for collectors, US $8.00 for collectors involved in dismantling and recovery, US $35.00 for middlemen, and US $50.00 for scrap dealers.[234] With actors at the base of the industry earning well above the average income of informal workers in Ghana, e-waste "scavenging" presents an important short to mid-term poverty alleviation strategy for the most marginalized segment of the population.[235]

It is well understood that via multiple layers of actors, the labour of the informal e-waste sector located in Agbogbloshie eventually feeds into global manufacturing circuits. It is estimated that 95% of the e-waste generated in Ghana is managed through the informal urban mining sector.[236] Alongside the informal sector, there also exists a formal waste recycling industry. In 2011 only one of the three EPA-

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[233] Grant and Oteng-Ababio *supra* note 229 at 12.

[234] *Ibid*

[235] *Ibid*

[236] *Ibid* at 50.

authorized recyclers, City Waste Management Ltd., was involved in e-waste recycling.[237] Due to their inability to compete both financially and on an organizational level with the informal sector, formal waste recyclers are unable to access significant amounts of e-waste. It is estimated that in 2009, out of all the e-waste recycled in Ghana, only 0.2% was treated through the formal sector.[238]

An informal collective of e-waste recyclers, known as the Greater Accra Scrap Dealers Association (GASDA), is based in the Agbogbloshie scrap yard and possesses a membership of at least 3000 individual recyclers, half of which work in e-waste recycling and the other half in automobile dismantling and recovery.[239] With regards to work structure, there appears to be some informal vertical integration, as each e-waste recycler typically employs 3-4 individuals, including e-waste collectors who are paid to go around the city gathering e-waste.[240] In recent media reports, the Secretary of the GASDA indicates there are over 6000 individuals involved in scrap work at Agbogbloshie, but does not mention how many are registered with the GASDA.[241]

There is currently a gap in the literature regarding the internal structure and organization of the GASDA. Although the association is widely mentioned in the

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[237] *Ibid* at 53.

[238] *Ibid*

[239] Prakash and Manhart *supra* note 176 at 26.

[240] *Ibid* at 30.

[241] Vibe Ghana, "Ghana to stop e-waste at Agbogbloshie" August 30, 2014, VibeGhana. Online: <http://vibeghana.com/2014/08/30/ghana-to-stop-e-waste-at-agbogbloshie-2/>

literature as representing informal e-waste workers, and advocates on their behalf in the media and in relations with official authorities and NGOs, literature on the scope of the association's activities is in early emergence. According to Okolo, the GASDA collects dues from its members, represents the latter in disputes with local authorities, and transfers fees on members' behalf to the Accra Metropolitan Assembly (AMA), essentially ensuring their right to operate on the government-owned land.[242] Grant and Oteng-Ababio (2012) note that the GASDA offers a microfinance scheme to its members from which they can borrow funds when needed for emergencies or business expansion, and more importantly, the association provides solidarity and much needed protection against "intimidation, physical abuse, and excessive exploitation."[243] Beyond providing the vulnerable e-waste workforce with a social network and some degree of social protection, the GASDA appears to fulfill a *de facto* governance role in the Agbogbloshie scrap yard, as a gatekeeper through whom access to the space must often be negotiated, and as the unified voice of recyclers that inhabit the space.

2.3.3. Framing Agbogbloshie: Formalization as Justice?

The e-waste sector located at Agbogbloshie began to gain major global public attention following the release of Greenpeace's 2008 Report (Brigden et al.),

[242] Ijeoma Okolo, *E-waste management in Accra: Examining informal workers and informal-formal linkages for sustainable recycling*, MA/MSc Dissertation, King's College London, 2013.

[243] Grant and Oteng-Ababio, *supra* note 229 at 15.

Poisoning the Poor: Electronic Waste in Ghana,[244] and its accompanying Technical Note *Chemical Contamination at e-waste recycling and disposal sites in Accra and Korforidua, Ghana*.[245] This research on the e-waste situation in Ghana was part of Greenpeace's "global expose of e-waste", and followed similar studies that were undertaken by the organization in China and India. The Greenpeace Report documents Agbogbloshie as a severely contaminated workplace where defunct electronics are disposed and subsequently excavated by poor migrant children from the North. Images of informal e-waste workers, many of which are children, are prominently featured throughout the Report, to demonstrate the nature of the hazardous open-air burning activities in which the sector is involved. However, the Report does not engage whatsoever with the issues of the livelihood, organization, economic contribution, or formal linkages of the informal sector. Agbogbloshie appears as a charred and barren waste-filled land. There is no trace of its thriving economy or residential population of close to 80,000 people.

The primary concern of the Greenpeace Report is the illegal transboundary trade of e-waste originating from developed countries. As such, the Report recommends that national governments adopt stricter regulations on the transboundary movements of e-waste, and on the manufacturing and recycling of electronic equipment. Recommendations are also geared towards electronics producers, encouraging them to voluntarily phase out toxic chemicals in their manufacturing processes and

[244] Greenpeace (2008), *supra* note 5.

[245] *Ibid*

to take on financial and physical responsibility over the end-of-life management of their products. The Technical note recommends global ratification of the Basel Convention, in particular the Ban Amendment (which prohibits e-waste flows form OECD to non-OECD countries), as well as "greater regulation of informal e-waste recycling in all countries where it takes place, to improve conditions and to formalize this sector."[246] The exact meaning of formalization is left to the imagination.

With its narrow focus on the human health harm caused by illegal transboundary flows of e-waste, the Greenpeace Report does not provide an in-depth understanding of the significance of both internationally and domestically-generated used ICT equipment and waste resources to the livelihood of informal economies in developing countries. It also overrides the complex and ongoing debate over when a commodity transforms from resource to waste, or from waste to resource. The Report delivers a snapshot of Agbogbloshie as a "global hotspot"[247] for e-waste imports and severely contaminated workplace that implicates child labour. The Report makes recommendations based on a perspective that is evidently delinked from the historical, social and spatial processes that have shaped environmental pollution, informal settlement and work in Agbogbloshie.

[246] *Ibid* at 18.

[247] Greenpeace (2008) *supra* note 5 at 5.

Greenpeace and other international environmental organizations link the environmental injustice of e-waste to international trade flows of waste, and focus their efforts on documenting the dangers of crude informal recycling as well as advocating for stricter government regulation of e-waste management in developing countries.[248] Alternatively, environmental injustice has also been defined in terms of the obstacles faced by the informal e-waste sector in accessing the tools necessary to mitigate the health and environmental risks associated to their activities.[249] Under this latter perspective, the real environmental injustice issue is not international e-waste dumping, but the unavailability of tools that may allow the informal e-waste sector to perform their activities in a safe manner. Solutions proposed to resolve the unjust *status quo* relate to enhancing the informal sector's capabilities, through, for example, the provision of cable shredding equipment and microcredits for business growth.[250]

In terms of formalization in practice, efforts that have been implemented to date at Agbogbloshie aim for a specific goal: the elimination of burning activities and occupational health training. In October 2014, the U.S.-based Blacksmith Institute for a Pure Earth, in collaboration with local NGO Ghana Green Advocacy and the GASDA, launched a pilot project at Agbogbloshie, which consists of a mobile recycling facility equipped with four automated wire-stripping units that offer an

[248] See Puckett et al *supra* note 5.

[249] Rafael Fernandez-Font Perez, *Tools for informal e-waste recyclers in Agbogbloshie, Ghana,* MSc Dissertation, Royal Holloway University of London, 2014.

[250] *Ibid* at 48.

environmentally friendly alternative to the burning of cables for copper recovery. The facility is located on land that has been donated for use by the National Youth Authority (a governmental body that holds ownership of the land on which the scrap industry is located). Other collaborators of the project include City University of New York (School of Public Health), Environmental Protection Agency of Ghana, Ghana Health Service, Ministry of Environment of Ghana, Global Alliance for Health and Pollution, and United Nations Industrial Development Organization. According to its official description, the project is led by GASDA's "vision to promote Agbogbloshie as a recycling knowledge centre by setting up a model e-scrap facility that protects livelihoods while minimizing the adverse health and environment risks of scavenging and exposure to toxic substances."[251]

GASDA employs trained workers to dismantle collected materials, which are then directly traded to exporters.[252] Materials entering the facility are purchased from informal collectors and recyclers (who would otherwise resort to burning). The facility pays for the materials according to a pricing structure determined by the GASDA and local NGO GreenAd Ghana. There does not appear to be any sort of vertical integration of the informal collectors that bring their materials to the facility. It also appears that collectors themselves do not participate in determining the pricing structure.

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[251] See Project description online at <http://www.pureearth.org/project/agbobloshie-e-waste/>

[252] *Ibid*

City Waste Recycling (CWR), which is a formal recycling company funded by the German, Ghanaian, Swiss and Danish governments, has also started various initiatives that aim to link the informal and formal e-waste recycling sectors. Their projects include the provision of free occupational health and safety training to informal recyclers, as well as the purchase of materials from Agbogbloshie scrap dealers for further processing in CWR facilities in Ghana, and in state-of-the art facilities abroad.[253]

In general, it can be said that in the existing literature and in practice, formalization is largely understood and carried out in terms of technical and operational improvements. Recurring themes include the need for the government to adopt and enforce stricter environmental regulation, provide health and environmental awareness education to the informal sector, and foster new "sustainable" partnerships between the informal e-waste sector and local and international recycling facilities.[254] Much of the literature attempts to fill in critical knowledge gaps in the spatial mapping and practice of Agbogbloshie, on determining quantities and composition of e-waste that is processed, identifying the local and international chain of stakeholders that circulate the space, estimating revenue generated

[253] See Prakash and Manhart, supra note 176; On City Waste Recycling's activities in Agbogbloshie, see: <http://www.aljazeera.com/indepth/features/2013/10/inside-ghana-electronic-wasteland-201310301285258028 8.html>

[254] Oteng-Ababio (2010) *supra* note 226 and Atiemo et al, *supra* note 180.

through informal recycling activities and measuring health impacts of e-waste burning on recyclers and the surrounding community.[255]

While the technical and operational upgrading of Agbogbloshie's e-waste sector that is led being by the GASDA and its international and local partners is clearly beneficial to the community of e-waste recyclers, it is worth questioning if and how these initiatives transform the Government's traditional politics of non-recognition towards the informal sector, particularly in light of prospective national e-waste legislation that seems to exclude informal sector interests altogether.

In fact, none of the current formalization proposals or linkage strategies questions the existing power relations in the global recycling chain. While they aim to eliminate the most serious occupational health hazards, current initiatives do not alter the socio-economic insecurities of the informal worker. In essence, the e-waste continuum does not change. Perhaps it filters resources and pollutants through a more ordered, transparent and consolidated "green" channel, but the volatility of the continuum remains, as does the subordinated position of e-waste collectors at the bottom of a recycling chain that functions according to pure market dynamics. Suggested models to link the informal and formal sectors, whereby the informal

[255] Grant and Oteng-Ababio *supra* note 229; Prakash and Manhart, *supra* note 176; E. Amankwaa, "Livelihoods in risk: Exploring health and environmental implications of e-waste recycling as a livelihood strategy in Ghana" (2013) 51:4 Journal of Modern African Studies 551; Jack Caravanos et al, "Assessing Worker and Environmental Chemical Exposure Risks at an e-waste Recycling and Disposal Site in Accra, Ghana (2011) 1:1 Journal of Health and Pollution 16; S. Agyei-Mensah & G. Ababio, "Perceptions of health and environmental impacts of e-waste management in Ghana" (2012) 22:6 International Journal of Environmental Health Research 500; Atiemo et al, *supra* note 180.

sector collects and segregates wastes before handing them over to the formal sector for further processing, could be seen as escaping the more fundamental issue of the precarious, insecure and arduous nature of informal waste work. After all, the only legitimate expectations one can hold regarding society's daily generation of waste are uncertainty and chance. Formalization efforts do not appear to change this reality.

2.3.4. The Exclusionary Legal Utopia

A look at Ghana's draft legislation[256] on e-waste management reveals that this prospective 'sustainable' e-waste regime lacks any coherent linkage to the existing waste management system in which 95% of the e-waste generated is collected by the informal sector. Continuing the traditional politics of non-recognition, the Ghanaian government's draft e-waste bill doesn't recognize the informal sector as stakeholders in the recycling chain. The E-waste Bill aims to protect public and environmental health from the hazards of e-waste, but does not concern itself with the inclusive dimensions of sustainable growth or the social protection of the informal sector. While the E-waste Bill sets out an authorization process for businesses wishing to collect e-waste, this opportunity remains inaccessible to the informal sector. In general, the formalization framework that has been imagined maintains the informal e-waste sector in invisible and insecure arrangements.

[256] *Hazardous and Electronic Waste Control and Management Bill*, 2011. Online: <http://media.myjoyonline.com/docs/201112/Hazardous%20Waste%20Control%20Bill,%202011%20-%2022nd%20November,%202011.pdf>. [E-waste Bill].

The E-waste Bill obliges importers, retailers, distributors, wholesalers and manufacturers to collect end-of-life products they have put into the market, and to provide storage containers for this purpose. Local governmental authorities are mandated to designate "disposal assembly points" (Art. 31) where these actors are to deliver the e-waste they have collected. The E-waste Bill also provides that persons wishing to dispose of e-waste must return it to one of the above-mentioned stakeholders or to a designated disposal facility. The possibility of gaining authorization to collect e-waste is reserved for "establishments" only, and granted through the Environmental Protection Agency after "consultation with relevant persons or bodies" (Art. 44(1)). As for specific authorization criteria, it is only mentioned that the EPA "may" establish guidelines in this regard (Art. 46). In essence, the E-waste Bill imagines a fantasy State-led collection system, that is totally delinked from the current reality of the e-waste chain in which e-waste generating households and businesses sell e-waste to informal sector collectors. The existing social arrangements surrounding e-waste that involve exchanges between formal and informal actors on local and transnational scales are buried underneath this new legal vision for the social and economic ordering of e-waste from above.

Regarding recycling activities beyond collection, the E-Waste Bill provides that the EPA shall operate an "e-waste recycling plant".[257] At the same time, it is stipulated that the EPA may authorize any "private persons" to operate an "electronic waste

[257] *Ibid*, art. 42.

processing plant" if the person can provide evidence of the availability and accessibility of "designated collection facilities," and of the financial feasibility and environmental safety of the project.[258] It is interesting that while authorization to collect e-waste can only be granted to "establishments", the higher-level and more capital-intensive operations of processing are opened up to "private persons". The E-waste Bill remains unclear as to what exactly constitutes an establishment. In fact, the inconsistent use of language and definitional ambiguities throughout the E-waste Bill make it impossible to gain a clear view of how the envisioned system would function. What is absolutely certain is that the E-waste Bill advocates a state-managed chain from collection to processing, providing no opportunity for the legal recognition of small-scale informal collectors who currently dominate the system.

As for funding mechanisms to support the envisioned system, the E-waste Bill obliges importers and manufacturers to pay an "Electronic Waste Levy" for every product they put into the market that is covered under the Bill.[259] The levies are transferred to an Electronic Waste Recycling Fund (EWRF) that is managed by the Minister for the Environment and serves to finance the construction and maintenance of e-waste recycling facilities, to conduct and publish e-waste related research and reports, and to provide public education on "safe disposal of electronic waste as well as the negative effects of electronic waste."[260] Here also, the opportunity to implicate the informal system through the provision of occupational

[258] *Ibid*, art. 43.

[259] *Ibid*, art. 28.

[260] *Ibid*, art. 37.

health training and other social protection measures, or through the creation of subsidies for sustainable business development has been entirely overlooked.

Overall, the E-waste Bill appears to create an imaginary space in which the informal sector simply does not exist. Moreover, it is a space under the strict command of governmental authorities who are notably empowered, under Art. 7 of the E-waste Bill, to order the "sealing up" of any "area, site or premises" suspected to be a place for hazardous waste disposal. Additionally, law enforcement officers are granted a "power of search, seizure and arrest" over any person or place suspected of keeping or transporting hazardous wastes.[261] Both moveable and immoveable spaces fall under the scope of this provision, including vehicules, lagoons, ponds, landfills, buildings, structures, storage containers and ditches.[262] Evidently, this vaguely configured broad authority further legitimizes the persecution of informal waste collectors who are already subject to constant harassment, hostility and seizure by municipal authorities.[263]

Instead of using the legislative opportunity as a path towards an inclusive e-waste management system, the Government of Ghana is evidently moving towards cutting off informal sector participation in e-waste collection. With the Government

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[261] *Ibid*, art 9.

[262] All these sites are included in the E-waste Bill's expansive definition of "facility". *Ibid*, art. 27.

[263] M. Oteng-Ababio, E.F. Amankwaa and M.A. Chama, "The local contours of scavenging for e-waste and higher-valued constituent parts in Accra, Ghana" (2014) 43 Habitat International 163.

deepening its traditional stance of non-recognition, the informal sector's visibility remains restricted to the extra-legal sphere, while formal legal reforms strive to construct a State-dominated e-waste utopia. The pending E-waste Bill reflects the State's distorted vision of what constitutes the e-waste economy. It is entirely removed from the spatial reality of actual e-waste flows and is likely to further drive the informal sector into places of invisibility that are characterized by environmental and social risk. Hence, law as embodied within the E-waste Bill presents new threats to the livelihood of informal workers, rather than enabling the latter to become engaged in a sustainable local e-waste economy.

Considering that important quantities of internationally generated flows of used electronic products flow into Ghana and sustain its ICT and the e-waste economy, the question of law's emancipatory promise must also be extended to the global platform. Given the international dimension of the e-waste economy, can international law provide the necessary safeguards to emancipate the informal e-waste labourer from dangerous work and social marginalization? The chapter that follows demonstrates that the international laws of the e-waste trade work along the same lines as local and national legalist agendas to deny the existence and legitimacy of the informal economy. In essence, the laws of e-waste, at all scales, have originated from an artificial perspective of what constitutes sustainable waste governance, and have thus fostered the invisibility and precarious growth of the informal workforce. The evolving dynamics of the international environmental regime show that it works together with the international trade regime to legitimize

the e-waste trade, by retaining its primary focus on removing barriers on transnational movements of used EEE. Treaty objectives in relation to human health protection remain mostly symbolic and unactionable, trapping the social and labour hardships of the global waste economy within the realm of national sovereignty.

CHAPTER 3. International Legal Perspectives on E-waste: Missing Voices, Blinded Spaces

This chapter explores the spatial blindness of law in the context of the international legal regimes governing e-waste. Its main contention is that despite their common overarching objective of sustainable development, international trade law and international environmental law coalesce to legitimize a liberalized e-waste trade. Moreover, when it comes to international environmental law, the human and the labourer remain abstract concepts under a regime whose very existence is explicitly based on the need to protect human health from international movements of toxic wastes. The key purpose of this chapter is to demonstrate, through an analysis of the international legal rules and discourse that surround e-waste, that international legal regimes governing e-waste cannot be relied upon to address systemic injustices of the global waste trade. The Basel Convention and the WTO trading regime serve as case studies to illustrate the spatial limitations of international law, in other words, the inability of traditional international law frameworks to see global problems across the multiple scales upon which they are experienced and ordered.

The chapter is divided in six principal sections. Section 3.1. examines how wastes are defined and regulated as objects of international trade. The section seeks to explain whether human and environmental health concerns related to e-waste are,

or can be, taken into consideration in the context of the international trade regime. Section 3.2. juxtaposes the international trade and international environmental regimes, to explore where and how compromises between liberalized trade and the protection of environmental and human health emerge in international law. Section 3.3. focuses on how the international environmental regime governing e-waste seeks to balance trade growth and human health protection, with a special focus on new soft law development pertaining to e-waste. Sections 3.4., 3.5. and 3.6. link this chapter back to the question of informal work, illustrating how the spatial blindness of the substantive and procedural workings of the international environmental regime influence the growth of precarious informal recycling economies. The remaining part of the present section provides an introductory note on the exlcusionary dimensions of international law and global trade.

Globalization and its Exclusions

Decades of growth in world trade have not led to better labour conditions for all categories of the global workforce. Social science research on "global cities" [264] attests to the deep inequality that characterizes mega-urban nodes of the globalized economy and is manifested in the stark disparity between the living standards of the "skilled" workforce and those of an ever-growing majority of the human population: the informal workforce.

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[264] See Saskia Sassen, *The Global City: New York, London, Tokyo* (Princeton, N.J.: Princeton University Press, 1991); Saskia Sassen, Globalization and its discontents (New York: New Press, 1998); J. Friedmann, "Where we stand : A decade of World City Research" in P. Knox and P. Taylor, eds, *World Cities in a World System* (Cambridge: Cambridge University Press, 1995) 21.

This is perhaps one of the most critiqued aspects of globalization, that is, the confusing relationship between economic growth and greater social welfare. This chapter draws attention to the exclusionary dynamics of the world trade system. It argues that this framework, in failing to embody the interests of certain stakeholders and the legal responsibilities of others, reinforces the imbalanced and environmentally unjust aspects of our continuously urbanizing and digitizing world economy, the *always higher tech* anthropocene. It also considers our world trading system through Lefebvrian 'spaces of representation', that is to say, world trade space as it is used reflexively by its inhabitants. We see that while States (multilaterally, regionally and bilaterally) implement trade measures in the pursuit of certain economic and social orderings (for instance, through norms designated in the form of technical and health standards, financialization instruments, investment treaties, and migrant labour agreements), actors of the living world trade space (ordinary people and their social movements, corporations and international institutions for example) act within these legal normative orderings, beyond them, and in resistance to them.[265]

[265] My framing of trade space ordering draws on the medical anthropological work of Street and Coleman. Noting that prevalent perspectives in hospital ethnography present hospitals as either "isolated islands" ordered and controlled by biomedical regulation of space and time (hence, as "scientific" space), or conversely as "continuations and reflections of everyday social space", Street and Coleman build on Foucault's notion of heterotopia to argue that polarized framings of hospital space overlook "hospitals' paradoxical capacity to be simultaneously bounded and permeable, both sites of social control and spaces where alternative and transgressive social orders emerge and are contested." Alice Street and Simon Coleman, "Introduction: Real and Imagined Spaces" 15:1 (2012) Space and Culture 4.

The unequal distributive realities of the *always higher tech* anthropocene, in particular, the concentration of world poverty and hazardous work in strategic "Southern" spaces, have led to persistent, and ever-strengthening movements for alternative orderings of the global economic system. There is ongoing debate surrounding the issue of whether the world trade system propels the interests of elite economic actors in post-industrialized, information economies to the detriment of people and the environment in higher-poverty nations.[266]

The increasing informalization and marketization of employment relationships in all world regions demonstrates a consistent, socially degrading trend by which precarious work, absence of social security, vulnerability and declining incomes have come to constitute dominant characteristics of the global labour market. [267] While absolute poverty has certainly declined, most often the gains of the 'extremely poor' have failed to go beyond their mostly symbolic recognition as the 'working poor'. Some categories of workers are still struggling to be legally recognized, fighting for their inclusion amongst the working realms that enjoy protection under minimal labour standards.

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[266] See Anwar Shaikh, *Globalization and the myths of free trade: history, theory and empirical evidence* (London: Routledge, 2007); Patrick Love et al, *International Trade: Free, fair and open?* (Paris: OECD, 2009); A.P. Thirlwall and Penelope Pacheko-Lopez, *Trade Liberalization and the Poverty of Nations* (Cheltanham: Edward Elgar, 2008); Jeffrey G. Williamson, *Trade and Poverty: When the Third World Fell Behind* (Cambridge: MIT Press, 2011).

[267] ILO *supra* note 3.

A vast and growing body of counter-hegemonic discourse and civil society activism highlights how neoliberal globalization is based upon, and further reinforces, social and economic inequality at every scale – the city, the nation-state, the global.[268] It can be argued that the social and environmental ambiguity of the global economic order are built into its very structure. Indeed, as Lang has emphasized:

> GATT/WTO obligations are vastly more ambiguous in their meaning than is typically acknowledged in contemporary literature[…] In virtually every area of domestic regulation, neogitators have chosen to proceed largely by way of generally worded principles. Such principles are highly indeterminate in their meaning, and their impact on regulatory choices at the national level is governed to a very large extent by the way they are interpreted and reinterpreted over time.[269]

Moreover, scholarship on the WTO accession rules, negotiation rounds and case law illustrates that issues pertaining to the harmonization or upgrading of labour and environmental standards, have been, whenever at all possible, carefully separated from the sphere of international economic integration.[270] While the separation of

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[268] See David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005); B. Santos and C. Rodriguez-Garavito, eds, *Law and Counter-Hegemonic Globalization: Towards a Subaltern Cosmopolitan Legality* (Cambridge: Cambridge University Press, 2005); Asef Bayat, "Politics in the City-Inside-Out" (2012) 24:2 City & Society 110; P. Bourdieu, *Acts of resistance: against the tyranny of the market* (Cambridge: Polity Press, 1998). On the racialization and criminalization of poverty in the United States, see L. Wacquant, *Punishing the poor: the neoliberal government of social insecurity* (Durham, N.C.: Duke University Press, 2009).

[269] A. Lang, *World Trade Law After Neoliberalism* (Oxford: Oxford University Press, 2011) at 164.

[270] See Steve Charnowitz, "The influence of international labour standards on the world trading system: a historical review" (1987) 126 International Labour Review 565; Steve Charnowitz, "The Neglected Employment Dimension of the World Trade Organization" in Virginia A. Leary and Daniel Warner, eds*, Social issues, globalisation and international institutions : labour rights and the EU, ILO, OECD and WTO* (Leiden ; Boston : M. Nijhoff, 2006) 139; Bob Hepple "The WTO as a Mechanism for Labour Regulation" in Brian Bercusson and Cynthia Estlund, eds, *Regulating labour in the wake of globalisation : new challenges, new institutions* (Oxford: Hart, 2008) 161.

these, as well as other issues that are today commonly conveyed in the language of human rights,[271] may have been less problematic in the post-war era during which "embedded liberalism"[272] provided a "normative floor"[273] or "collective purpose"[274] for international trade liberalization, transformations of the latter under the rise of neoliberalism have propelled the trade and human rights debate as a forefront concern of globalization.

Even with today's vast body of globally-agreed upon international labour laws and environmental standards, attempts to invoke fundamental human rights at work[275] and to a healthy environment[276] at the base levels of various global commodity chains are often dismissed, ignored, or violently suppressed. Narratives of state

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[271] See Lang's discussion of the emergence, in the late 1990's, of human rights language in debates regarding international trade law, in particular, the use of human rights as a common language of resistance by the labour, environmental, indigenous and women's rights movements. Lang, *supra* note 269 at 81-103.

[272] John Ruggie introduced the term "embedded liberalism" to denote the "multilateralism […] predicated upon domestic interventionism" that characterized the post World War II international trading system, differentiating the latter from the "nationalism of the thirties" as well as the "liberalism of the gold standard". See John C. Ruggie, "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order" (1982) 36 *International Organization* 379 at 393. He notes, "[T]he essence of embedded liberalism […] is to devise a form of multilateralism that is compatible with the requirements of domestic stability" (at 399). Further along, Ruggie specifies that "movement toward greater openness in the international economy is likely to be coupled with measures designed to cushion the domestic economy from external disruptions" (at 405).

[273] Robert Howse, Brian Langille and Julien Burda, "The World Trade Organization and Labour Rights: Man Bites Dog" in Leary and Warner, eds, *supra* note 270 151.

[274] Lang, *supra* note 269.

[275] Embodied in the eight core ILO Conventions.

[276] The right to health is stipulated under Art. 25 of the *Universal Declaration on Human Rights (1948)* and Article 12 of the *International Covenant on Economic Social and Cultural Rights (1966)*. The right to a healthy environment is included in over 100 national Constitutions.

violence against industrial action have historically marked many parts of the world and are in continuous emergence.[277]

The reality of the global economic order is that persistent barriers to the social inclusion of the so-called 'low-skilled' and informal working population have allowed for economic growth and development on highly unsustainable grounds. The interface between multinational corporations and informal workers is visibly obscured and not always directly mediated by the law of the State, but is nevertheless intimately coiled into it. Most often, this interface is governed by the sheer economic and political bargaining powers of unaccountable intermediaries. Our international legal system's failure to regulate in-between actors, such as transnational "white-collar"[278] traders and recruiters, has left the geographically-spread urban and rural poor vulnerable to labour exploitation and acute health risk, and constrained them under informational and material assymetries.[279]

As for national governments, they have historically positioned themselves as partners and facilitators of mega-industries, risking the livelihoods of indigenous,

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[277] International Labour Office, *Digest of decisions and principles of the Freedom of Association Committee of the Governing Body of the ILO*, 5th edition (Geneva: ILO, 2006); International Trade Union Confederation, Countries At Risk: 2013 Report on Violations of Trade Union Rights (ITUC, 2013).

[278] Carole Gibbs, Transnational white collar crime and risk: Lessons from the global trade in electronic waste(2010) 9:3 Criminology and Public Policy 543.

[279] Fay Faraday, *Profiting from the precarious: how recruitment practices exploit migrant workers* (Toronto: Metcalf Foundation, 2014); Ellina Samantroy, "Regulating international labour migration: issues in the context of recruitment agencies in India" (2014) 22:4 Contemporary South Asia 406.

informal and migrant communities. Excessively harsh policymaking against these groups is well documented, as are the repressive origins of international law and environmental legislation.[280]

Historicizing brings to the forefront the temporal dimensions of international law's exclusions. In the spaces we live, we continuously encounter remnants of past - and in some cases, extremely brutal - political and economic systems. Indeed, this is a central idea of postcolonial and critical race theories.[281] In this sense, we are constantly time travelling into our legal pasts as we shape our legal futures, enmeshing these different temporalities. The leftover traces of past global injustices have not disappeared so much as they have been overlayed, thickened by their

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[280] Antony Anghie, *Imperialism, sovereignty and the making of international law* (Cambridge: CUP, 2005); Bonnie Roos and Alex Hunt, *Postcolonial Green: environmental politics and world narratives* (Charlottesville: University of Virginia Press, 2010); Lisa Sun-Hee Park and David N. Pellow, *The slums of Aspen: immigrants vs. the environment in America's Eden* (New York: New York University Press, 2011); Dorceta E. Taylor, *The Environment and the people in Amercican Cities: 1600-1900's: disorder, inequality and social change* (Durham: Duke University Press, 2009); Robert Bullard, *Unequal Protection: environmental justice and communities of color* (San Fransisco: Sierra Club, 1994); Laura Westra and Peter S. Wenz (eds.) *Faces of environmental racism: confronting issues of global justice* (Lanham: Rowmann & Littlefield, 1995); Elli Louka, *International Environmental Law: Fariness, Effectiveness and World Order* (Cambridge: Cambridge University Press, 2006). See Louka's discussion of "coercive conservation" practices by colonial and post-colonial governments in developing countries at 28-29. See also Daniel Bodansky, Jutta Brunnée and Ellen Hey, eds, *The Oxford Handbook of International Environmental Law* (Oxford: Oxford University Press, 2007). At 2: "International environmental law continues to struggle with the complaint that it reflects the concerns of developed countries more than those of developing countries and that it merely rearticulates some of the patterns of colonial exploitation in environmental terms."

[281] On contemporary forms of colonization, see generally, Michael Hardt and Antonio Negri, *Empire* (Cambridge: Harvard University Press, 2000); Ali Behdad "On Globalization Again!" in Ania Loomba, ed, *Postcolonial studies and beyond* (Durham: Duke University Press, 2005) 62; Couze Venn, *The Postcolonial Challege: towards alternative worlds* (London: Sage, 2006). On cyberspace and ICT industries as a newer form of colonial exploitation see Lisa Nakamura, *Cybertypes: race, ethnicity, and identity on the Internet* (New York: Routledge, 2002); Greg Downey, "Virtual Webs, Physical Technologies, and Hidden Workers: The Spaces of Labor in Information Internetworks" (2001) 42:2 Technology and Culture 209.

newer variations: the rising number of urban working poor populations, labour insecurity and generalized inequalities towards (im)migrant, gendered and racialized peoples. In this time travel, we face the legacy of our system of international law that remains anchored in the "civilizing mission"[282] and question how to shift its impacts from subjugation of "Third World" peoples towards emancipation, an aspiration that Anghie and Chimni denote as "truly global justice".[283]

The classical doctrine of conquest[284] and the historically discriminatory legal technique of recognition[285] paved the way for the unhibited exploitation of human and environmental resources in the era of colonialism, to the benefit of colonial rulers.[286] Traces of this legacy remain. Today's global commodities chains (for instance, soy and palm oil cultivation for fuel production) provide examples of massive-scale foreign land acquisitions that channel environmental resources and

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[282] A. Anghie, ""The Heart of my Home": Colonialism, Environmental Damage and the Nauru Case"(1993) 34:2 Harv Int'l L 445 and Anghie *supra* note 280.

[283] A. Anghie & B.S. Chimni, Third World Approaches to International Law and Individual Responsibility in Internal Conflicts (2003) 2:1 Chinese Journal Of International Law 77.

[284] On the history of the right of conquest, see Sharon Korman, *The Right of Conquest: the acquisition of territory by force in international law and practice* (Oxford, Clarendon Press, 1996); see also Lindsay Gordon Robertson, *Conquest by law: how the discovery of America dispossessed indigenous peoples of their lands* (Oxford: Oxford University Press, 2005).

[285] See Anghie's discussion of recognition in Antony Anghie, "Finding the Peripheries: Sovereignty and Colonialism in Nineteenth Century International Law" (1999) 40:1 Harv Int'l L J 1 at 38. See also, Ian Brownlie, *Principles of Public International Law* (Oxford: Clarendon Press, 1990).

[286] Anghie (1993) *supra* note 282; M. Rafiqul Islam "History of the North-South Divide in International Law: Colonial Discourses, Sovereignty, and Self-Determination" in Shawkat Alam et al, eds, *International Environmental Law and the Global South* (New York: Cambridge University Press, 2015) 23.

workers from global Southern spaces towards fulfilling the market needs of wealthy nations.[287] The legal modes of this style of internationalization include trade laws, environmental laws and financial laws, amongst others. As argued in this chapter, the 'legal' part of this internationalization has left out the social and economic livelihood concerns of informal workers that make contemporary economic cosmopolitanism possible. The electronics manufacturing[288], chocolate[289], footwear[290] and extractive[291] industries are well-known and sadly enduring examples of hugely profitable sectors that generate revenues in the billions, and at the same time, embody immense and highly precarious workforces composed of the urban and rural poor in Southern spaces.

The environmental and human impacts of fast-track global trade liberalization, which include ever-expanding informal economies in both the Global North and the

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[287] See Michael Kuegelman, Susan Levenstein, Carl Atkin, eds, *The Global Farms Race: land grabs, agricultural investment, and the scramble for food security* (Washington DC: Island Press, 2013); Propser B. Matondi et al, *Biofuels, landgrabbing and food security in Africa* (London: Zed Books, 2011); Jean Zigler, *Betting on Famine: why the world still goes hungry* (New York: The New Press, 2013); Rob Cramb, "Oil palm and rural livelihoods in the Asia-Pacific region: An overview" (2012) 53:3 Asia Pacific Viewpoint 223; Amanda Cassel and Raj Patel, *Agricultural Trade Liberalization and Brazil's Rural Poor: Consolidating Inequality* (Oakland, CA: Institute for Food and Development Policy/Food First, 2003); Tim Bartley et al, *Looking Behind the Label: global industries and the conscientious consumer* (Bloomington, Indiana: Indiana University Press, 2015).

[288] See Smith, Sonnenfeld and Pellow, *supra* note 5.

[289] Orla Ryan, *Chocolate nations: living and dying for cocoa in West Africa* (London: Zed, 2011).

[290] Peter Lund-Thomsen, Khalid Nadvi, Anita Chan, Navjote Khara, Hong Xue, "Labour in Global Value Chains: Work Conditions in Football Manufacturing in China, India and Pakistan" (2012) 43:6 Development and Change 1211.

[291] See Penelope Simon and Audrey Macklin, *The governance gap: extractive industries, human rights and the home state advantage* (London: Routledge, 2014); Bonnie Campbell, *Mining in Africa: regulation and development* (London: Pluto Press, 2009).

Global South, force us to re-examine the emancipatory role of law in the context of globalization, in particular, international law's potential to resolve existing patterns of social and economic exclusion and marginalization. Anghie and Chimni's notion of a "truly global justice"[292] concisely evokes the exclusionary nature of the international legal realm. In general, contemporary Third World Approaches to Law (TWAIL) scholarship shows us that one aspect of international law's democratic deficit is representational and concerns the extent to which the interests of "Third World" peoples are represented by their state when the latter engages in international law making.[293] Even though our international treaties embody universalist ideals centered on a common humanity, the structural imbalances and interpretive styles of our international legal world prevent the most vulnerable and poor populations from benefiting fully from our ever-encompassing international economic integration. Asserting that international law's cosmopolitan ideals are the very essence of its appeal to developing nations, Balakrishnan signals the need for a "theory of resistance in international law;" [294] in other words, an international law that makes place for social movements rather than maintaining an exclusive gaze on states or individuals.

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[292] See note 283.

[293] *Ibid.* See also Makau wa Mutua, "Why Redraw the Map of Africa: A Moral and Legal Inquiry" (1995) 16 Michigan Journal of International Law 1113; Madhav Khosla, "The TWAIL Discourse: The Emergence of a New Phase" (2007) 9:3 International Community Law Review 291.

[294] Balakrishnan Rajagopal, "International Law and Third World Resistance: a theoretical inquiry" in Antony Anghie et al, eds, *The Third World and International Order: Law, Politics and Globalization* (Leiden: Martinus Nijhoff Publishers, 2003) 145 at 146.

The globalized e-waste trade, engaging the interests of highly differentiated transnational actors, is made possible through world trading in used and waste electronics. Although e-waste trading may constitute a significant source of revenue for developed and developing countries alike, this chapter argues that the international environmental legal framework governing the e-waste trade fails to meet its objectives in relation to the protection of human health. Weaknesses in the international legal framework covering transboundary movements of e-waste facilitate the expansion of precarious informal e-waste economies in developing nations. The international environmental regime (specifically, the Basel Convention) establishes rules to ensure the international circulation of recyclable waste resources in the interests of capital-intensive actors in the globalized manufacturing economy, without concerning itself with the social and environmental conditions in which wastes are produced and reproduced. The arguments that follow demonstrate that although the Basel Convention secures the participation of informal economies in transnational recycling chains, the regime reinforces the economic and political dominance of some economic actors to the detriment of workers at the base level of the e-waste economy. As a starting point, the section below looks at how the notion of waste is constructed and treated within international trade law.

3.1. The International Waste Trade

3.1.1. Is Waste a 'Product'?

One of the most controversial areas of post WWII global growth has been the waste trade, which has left a disproportionate and devastating impact on poor, racialized communities around the world.[295] Onwards from the 1970's, as international business practices in waste dumping came under greater global scrutiny, the restriction of hazardous waste exports from developed countries to developing countries became the most prominent goal of newly established international and regional waste governance regimes.[296] Hence, the multilateral approach to resolving global environmental injustices in relation to hazardous waste trading practices emerged as the geographical restriction of trade, in other words, the creation of separate hazardous waste trading blocs for developed and developing nations. While in the last decade, political emphasis has shifted away from geographical restrictions and towards the establishment of global, public-private partnerships in waste management, the fundamental principle that developing

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[295] See Clapp *supra* note 192 at 21; Pellow *supra* note 191 at 13.

[296] Parties to the Basel Convention agreed to phase out all hazardous waste exports from OECD to non-OECD countries by 31 December 1997. See *Decision II/12, Report of the Second Meeting of the Conference of the Parties to the Basel Convention,* UNEP/CHW.2/30, 25 March 1994. With regards to regional treaties, the *Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa* (1991) 2101 U.N.T.S. 177 [Bamako Convention] between African nations imposes a ban on all hazardous waste imports into Africa that did not originate from that region. Similarly, the *Convention to ban the importation into Forum Island countries of hazardous and radioactive wastes, and to control the transboundary movement and management of hazardous wastes within the South Pacific region* (16 September 1995) 2161 U.N.T.S. 91 [Waigani Convention] prohibits hazardous waste imports into all Pacific Island developing countries from nations outside the area of the treaty (the South Pacific region). The EU prohibits its Members from exporting hazardous wastes to non-OECD countries under *Regulation (EC) No. 1013/2006 of the European Parliament and the Council of 14 June 2006 on shipments of waste*.

countries should be protected from hazardous wastes generated in developed countries is still widely upheld.[297] Although this may seem a rather straightforward environmentally- and socially-grounded objective of the global economy, it becomes ever more difficult to implement in the era of complex globalized industrial systems in which wastes are produced at various intervals along cross-border value chains and are subsequently transformed into secondary resources. In a world where all commodities eventually turn to waste, and waste itself is increasingly turning back into commodities, the blurring of legal vision between these two material categories is inevitable and confusing. Nations seek at once to prohibit certain forms of waste trading, and to liberalize others. In this respect, it is important to understand the compatibility between trade-restrictive measures on hazardous wastes agreed upon in environmental legal regimes and the WTO system.

In so far as 'wastes' can be considered 'products', the international waste trade falls under two distinct legal regimes. One aims to prohibit the free flow of hazards across borders (environmental law). The other that aims to progressively remove trade barriers on products in international commerce (trade law). According to the fundamental principles of the international trading regime of the World Trade Orgnization (WTO), non-tariff restrictions on the import or export of products are

[297] Indeed, this is the central objective of regional hazardous waste treaties such as the Bamako Convention and the Waigani Convention. See also the *Nairobi Ministerial Declaration on the Environmentally Sound Management of Electrical and Electronic Waste*, Conference of the Parties to the Basel Convention, 8th meeting, UNEP/CHW.8/CRP.24, 1 December 2006, which makes explicit Basel Parties' concern over "the risk to the environment and human health arising from international traffic in e-waste to countries, in particular developing countries that do not posses the capacity for the environmentally sound management of such waste."

generally prohibited.[298] While there is no universally agreed upon definition of non-tariff measures, the term refers to all measures other than tariffs imposed to protect a national industry.[299] The concepts of "restrictions" and "prohibitions", as articulated under Article XI:1, are understood as being both comprehensive and broad.[300]

Hence, non-tariff measures include import prohibitions as well as import and export licensing schemes. The scope of measures that may qualify as non-tariff restrictions is vast:

> The universe of NTMs encompasses all measures that affect trade other than tariffs, but since most regulatory action undertaken by governments can at least potentially influence trade, the set of possible NTMs is huge and its borders indistinct.[301]

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[298] See *General Agreement on Tariffs and Trade 1994* (GATT 1994), 1867 U.N.T.S. 187 [hereinafter GATT], Article XI and *General Agreement on Trade in Services (GATS),* 1869 U.N.T.S. 183 [hereinafter GATS], Article XVI.

[299] See *India – Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products, Report of the Panel,* WT/DS90/R. 23 (6 April 1999) at para 5.129. See also, the definition provided by UNCTAD: "Non-tariff measures (NTMs) are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both." UNCTAD, *Non-Tariff Measures: Evidence from Selected Developing Countries and Future Research Agenda*, UNCTAD/DITC/TAB/2009/3 (New York and Geneva: UNCTAD, 2010).

[300] The GATT Panel in the *Japan – Trade in Semiconductors* dispute interpreted the term "restriction" as referring "to all measures instituted or maintained by a contracting party prohibiting or restricting the importation, exportation, or sale for export of products other than measures that take the form of duties, taxes or other charges." *Japan – Trade in Semiconductors, Report of the Panel* (4 May 1988) at para 104. The Panel hearing the *India – Quantitative Restrictions* dispute endorsed this view adding that "The scope of the term "restriction" is also broad, as seen in its ordinary meaning, which is "a limitation on action, a limiting condition or regulation." *Ibid* at para 5.129.

[301] World Trade Report, *An inventory of non-tariff measures and services measures* (Geneva: WTO, 2012) at 96.

Sanitary and phytosanitary measures (SPS) and technical product requirements are two streams of non-tariff measures regulated under WTO Agreements.[302] While the SPS Agreement recognizes that WTO Members may impose SPS standards necessary for the protection of human, animal or plant life, or health, these measures are to be based on science and not constitute unjustifiable discrimination against countries where similar conditions prevail.[303] Similarly, the Agreement on Technical Barriers to Trade (TBT Agreement), which applies to technical regulations that are not covered by the SPS Agreement, protects WTO Members' right to set their own technical standards. It does so provided that those standards are based on scientific evidence, conform to the principle of non-discrimination and do not constitute unnecessary barriers to trade.

In essence, the SPS and TBT Agreements provide normative frameworks for distinguishing between "protectionist" and "legitimate" health and technical standards. In past WTO disputes (involving for example, beef growth hormones,[304] salmon quarantine standards[305] and GMO product marketing prohibitions[306]), we have seen that *select* knowledges - predominantly science - are called upon in the

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[302] *Agreement on Technical Barriers to Trade*, 1868 U.N.T.S. 120 [hereinafter TBT Agreement]; *Agreement on the Application of Sanitary and Phytosanitary Measures*, 1867 U.N.T.S. 493 [hereinafter SPS Agreement].

[303] SPS Agreement, art.3.3.

[304] *European Communities — Measures Concerning Meat and Meat Products* (Hormones), WTO/DS/26 (1998).

[305] *Australia-Measures Affecting Importation of Salmon*, WTO/DS/18 (1998).

[306] *European Communities — Measures Affecting the Approval and Marketing of Biotech Products*, WTO/DS/291 (2006).

process of designating regulatory standards as either necessary to protect human, animal or plant life or health, or as constituting *illegitimate* barriers to international trade.[307] The greater influence of certain epistemic systems above others in the interpretation of WTO norms is one of the contentious features of the international trading system.

The essential point to retain here is that national measures affecting waste commodities may take the form of outright trading prohibitions or restrictions on certain waste products, or technical or health regulations (packaging or labelling requirements and saftety standards for example), thus triggering a potential challenge under the GATT, TBT and SPS Agreements.[308] The GATS may also be applicable, where a shipment of waste is sent as raw material in the context of a service contract being carried out in an importing country.[309]

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[307] See Perez's insightful critique of the privileged role that is granted to science in the resolution of WTO risk disputes in Oren Perez, *Ecological Sensitivity and Global Legal Pluralism* (Oxford: Hart, 2004) at 116-118.

[308] See Mirina Grosz, *Sustainable waste trade under WTO law : chances and risks of the legal frameworks' regulation of transboundary movements of wastes* (Leiden; Boston: Martinus Nijhoff Publishers, 2011) at 257 – 260.

[309] A cross-border movement of waste may be implicated in trade in services, specifically under Article 1:2(b) GATS, which includes, in its definition of trade in services, the supply of services "in the territory of one Member to the service consumer of any other Member." Tania and Alam note: "In the context of sewerage and waste management services, for instance, in a situation where country A ship's waste to country B for treatment and disposal, this would be considered as a form of waste management services consumed abroad." See Sharmin Jahan Tania and Shawkat Alam, "Liberalisation of Sewerage and Waste Management Services and the GATS: Implications and Challenges for Developing Countries" (2011) 12 Journal of World Investment and Trade 519 at 539. See also K. Kummer, *Transboundary movements of hazardous wastes at the interface of environment and trade* (Geneva, Switzerland : United Nations Environment Programme, 1994) at 72 and Grosz *supra* note 308 at 261.

In light of the rules that emanate from the WTO framework, it would be difficult for a WTO Member to ban or restrict waste commodities from *some* other WTO Members if such a ban were based exclusively on geography. Hence, a treaty such as the Basel Convention, which entails certain trade prohibitions on waste based essentially on geographical reasoning, could be seen as potentially conflicting with the non-discriminatory, progressively-freer trade philosophy of the WTO.

The first issue to be resolved is whether 'hazardous and other wastes'[310] regulated by the Basel Convention can be considered 'goods', 'products' or 'commodities'. In the event that wastes are not goods, there is no regulatory overlap or potential conflict between the Basel Convention and the WTO legal framework.[311] In the event that wastes are indeed commodities in the context of the WTO, the question to be answered is whether trade-restrictive measures on exports such as e-waste to developing countries[312] are compatible with the foundational non-discrimination rules[313] of the international trading regime.

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[310] The relevance of the sub-categorization of wastes as 'hazardous' and 'other' is discussed in detail below (Section 2). Suffice to note here that the Basel Convention aims to protect human and environmental health from the negative effects of a wide range of wastes, which, based on their origin, or composition and characteristics, are defined as either "hazardous wastes" or "other wastes".

[311] See Kummer *supra* note 309 at 72.

[312] Trade restrictive measures are set out in *Decision III/1 Amendment to the Basel Convention*, UNEP/CHW.3/35 (28 November 1995) (commonly referred to as the Basel Ban Amendment), as well as *the EU Waste Shipments Regulation* and within various national legislative texts (e.g. China). All nations implement certain waste import prohibitions.

[313] The Most-Favored-Nation (MFN) and national treatment principles enshrined in Articles 1 and 3 of the GATT are addressed further below. In essence, these provisions prohibit WTO Members from differentially treating "like products" originating from different WTO countries.

As the WTO legal framework does not provide a clear definition of "products" or "goods", the question of whether hazardous and other wastes are in fact commodities that come within the regulatory scope of WTO law, remains open to interpretation.[314] There are currently no universally accepted legal definitions for either 'waste' or 'product'. From a conceptual point of view however, there are a number of evident, existential and functional differences between the categories of product and waste. A product is generally considered to be a material or substance that is the result of intentional manufacturing processes, whereas waste is commonly defined as a material or substance that is "eliminated or discarded as no longer useful or required after the completion of a process."[315] In most countries wastes are treated as *by*-products of industrial and household activities.[316] Hence, under most legal conceptualizations of waste, the critical point of reference in identifying an object as waste lies in the acts or intentions of discard or disposal. Moreover, while an object may retain similar material properties and some economic value in both its product and waste phases, in the latter phase, the object is generally considered unuseable for its original purpose and regulated primarily from the point of view of the risks it embodies for environmental and human

[314] Kummer *supra* note 309 at 72; Grosz *supra* note 308; J. Kreuger, "When is Waste not a Waste?" Paper presented at the 39th ISA, Minneapolis, USA (March, 1998) at 7.

[315] Oxford dictionary definition for 'waste'.

[316] See Louka *supra* note 280 at 92-93.

health.[317] As such, wastes are perceived as "negative" resources.[318]

Examining the EU, OECD and Basel Convention frameworks, Grosz highlights three distinct approaches to legal definitions of waste: the operational approach hinged on the criterion of disposal or recovery operations, the material composition approach based on the hazardous compounds of an object, and the valuation approach set forth in the jurisprudence of the European Court of Justice, according to which the economic re-utilisation value of a discarded object does not preclude it from qualifying as waste.[319]

It can be argued from functional, environmental and human health perspectives that the category of waste is different from common notions of product. However, from an international trading perspective it would be difficult to argue that waste materials are not products or commodities. In WTO Members' schedule of concessions that are based on the Harmonized Commodity Description and Coding System (HS) and indicate which commodities fall under the scope of the WTO Agreements, the term 'waste' appears in relation to several commodity groups.[320]

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[317] Ludwig Krämer, "When Waste Ceases to be Waste", Association for Cities and Regions for Recycling and Sustainable Resource Management, 2006 Compendium. Online: < http://www.acrplus.org/index.php/en/virtual-library/finish/10/64>.

[318] Louka *supra* note 280 at 106.

[319] See Grosz *supra* note 308 at 48-71.

[320] For example, entries that are relevant to e-waste include: HS Code 71.12: "waste and scrap of precious metal or of metal clad with precious metal; other waste and scrap containing precious metal or precious metal compounds, of a kind used principally for the recovery of precious metal." HS Code 74.04.00: "Copper waste and scrap", HS Code 75.03: "nickel waste and scrap". It is worth noting that the HS Nomenclature 2012 Edition further specifies that the expression "waste and scrap" as applied to base metal commodities (Section XV, Chapters 72-83 of the HS) refers to "metal waste and scrap from the

Moreover, wastes are treated as 'goods' in various other trade-related instruments implicating diverse countries and regional groupings. There are some bilateral free trade agreements concluded by Japan in which wastes appear quite prominently and in broad scope, with the specific inclusion of "scrap and waste derived from manufacturing or processing operations or consumption" in the list of "goods" with respect to which custom duties and other trade barriers are to be reduced or eliminated.[321] Similarly, under NAFTA, waste and scrap resulting from production in Canada, Mexico or the U.S., as well as waste and scrap derived from used items collected in any of these countries, are explicitly regarded as "goods" originating in the NAFTA region.[322] From a trade perspective then, wastes are undisputedly treated as commodities. As emphasized by Kreuger, "industry [...] defines materials, hazardous or not, that are intended for recycling as 'products' or secondary raw materials, that should not be subject to waste regulations."[323] The pervasive inclusion of wastes in free trade agreements and prevalent international business practices indicate that States and corporations conventionally consider wastes to be tradeable commodities. At the same time, various international environmental regimes restrict the free flow of certain wastes across borders. The very origin of the Basel Convention lies in the globally agreed-upon vision that the common

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manufacture or mechanical working of metals, and metal goods definitely not usable as such because of breakage, cutting-up, wear or other reasons."

[321] See *Japan-Phillipines Economic Partnership Agreemen*t (9 September 2006), Articles 29 and 18. See also *Japan-Malaysia Economic Partnership Agreement* (13 December 2005), *Japan-Thailand Economic Partnership Agreement* (3 April 2007), *Japan-Mexico Economic Partnership Agreement* (17 September 2004).

[322] See *North American Free Trade Agreement*, 32 ILM 289, 605 (1993). Part Two (Trade in Goods), Chapter Four (Rules of Origin).

[323] Kreuger *supra* note 314 at 7.

international business practice of liberally exporting wastes from from rich to poor nations is by all means, an environmental and social injustice.

3.1.2 Debating the permissibility of export and import restrictions on e-waste commodities

Geographical prohibitions and freedoms on waste commodities have a direct impact on global IT production and servicing chains, and on the livelihoods of people implicated in both formal and informal recycling networks. While it is not difficult to imagine why a country may want to prohibit or limit the flow of e-waste commodities for health or environmental reasons, from the perspective of international trade rules that call for equal treatment of foreign and domestic 'like' products, import prohibitions on waste commodities of foreign origin and export prohibitions on waste commodities of domestic origin are both, at first sight, problematic as they potentially violate non-discrimination norms of the WTO system.

The concept of likeness is central in determining whether the WTO principle of non-discrimination applies in the context of a given regulatory measure that distinguishes between domestic and foreign products. In its decision on the *EC-Asbestos* dispute in which Canada challenged France's ban on asbestos and asbestos-containing products, the Appellate Body noted that in determining likeness, WTO

Panels and the Appellate Body have essentially followed and further developed the approach set out by the Working Party on Border Tax Adjustments[324] :

> This approach has, in the main, consisted of employing four general criteria in analyzing "likeness": (i) the properties, nature and quality of the products; (ii) the end-uses of the products; (iii) consumers' tastes and habits – more comprehensively termed consumers' perceptions and behaviour – in respect of the products; and (iv) the tariff classification of the products. We note that these four criteria comprise four categories of "characteristics" that the products involved might share: (i) the physical properties of the products; (ii) the extent to which the products are capable of serving the same or similar end-uses; (iii) the extent to which consumers perceive and treat the products as alternative means of performing particular functions in order to satisfy a particular want or demand; and (iv) the international classification of the products for tariff purposes.
>
> These general criteria, or groupings of potentially shared characteristics, provide a framework for analyzing the "likeness" of particular products on a case-by-case basis.[325]

In this decision, the Appellate Body further clarified that health risks resulting from differing physical properties of two products were relevant in determining their likeness and did not form a separate criterion, but could be incorporated under the existing criteria of physical properties and consumer tastes and habits.[326] The WTO Appellate Body also re-affirmed its position on the relativity and flexibility of the concept of likeness, that it first expressed in the *Japan – Alcoholic Beverages II* dispute:

> The concept of "likeness" is a relative one that evokes the image of an accordion. The accordion of "likeness" stretches and squeezes in different places as different provisions of the *WTO Agreement* are applied. The width of

[324] GATT, Report of the Working Party (1970).

[325] *European Communities — Measures Affecting Asbestos and Products Containing Asbestos*. Report of the Appellate Body, WT/DS/135 (12 March 2001). At para 101 – 102.

[326] *Ibid* at para 113.

> the accordion in any one of those places must be determined by the particular provision in which the term "like" is encountered as well as by the context and the circumstances that prevail in any given case to which that provision may apply.[327]

Given the insights above, the question of whether waste trading prohibitions or restrictions set in place by WTO Members are compatible with their WTO non-discrimination obligations remains an open and complex one. A first concern to address is the likeness of the waste products in question. Once the likeness of two products has been established, they may still be treated differentially, as provided under GATT, SPS and TBT provisions that seek to safeguard WTO Members' regulatory autonomy when deemed necessary for the protection of human, animal, plant life and health, as well as other non-trade policy objectives. From a broad legal point of view, it is likely that waste trade prohibitions based exclusively on the country of origin of wastes would be interpreted as violating the non-discrimination and national treatment principles of the WTO trade regime.[328] However, that is not to say that prohibitions or restrictions on waste trading cannot be accommodated within the WTO regime, as the latter reinforces WTO Members' regulatory autonomy with regards to their chosen standard for public and environmental health protection, through provisions stipulated in the GATT, TBT and SPS

[327] *Japan — Taxes on Alcoholic Beverages* Report of the Appellate Body, WTO/DS10/AB/R (4 October 1996). At para 114.

[328] Kreuger *supra* note 314 at 48; Kummer *supra* note 309 at xxxii, Grosz *supra* note 308 at 479.

Agreements and as interpreted by the Appellate Body.[329] Since trade measures prohibiting the import or export of e-waste commodities are likely to fall under the scope of Art. XI GATT (prohibiting trade restrictions on "products"), the analysis that follows explores how a measure of this nature may be justified by a WTO Member as constituting an exception to general obligations contracted under Article XI.

Paragraphs (a) to (j) of Article XX provide the specific circumstances under which WTO Members may exempt themselves from obligations contracted under the GATT. Among the various exceptional situations outlined, Art. XX (b) upholds WTO Members' sovereignty regarding the adoption of national standards necessary for the protection of human, animal or plant life, or health.

Although the WTO adjudicating bodies have never had to examine the issue of trade barriers on waste, the *Brazil – Tyres* case launched by the European Communities (EC) brought into question the validity of an import ban on a *nearly-waste* product (retreaded tyres) that had been imposed by Brazil in the aim of reducing the generation of harmful tyre waste within its borders. Produced by the recycling of used tyres, retreaded tyres have a significantly shorter lifespan than new tyres and consequently, retreaded tyre imports can rapidly become a waste management

[329] In the *EC-Hormones* case, the Appellate Body emphasized that States may choose health protection standards above and beyond international norms. *European Communities — Measures Concerning Meat and Meat Products (Hormones)* Report of the Appellate Body, WTO/DS/26/AB/R (16 January 1998) at para 124.

problem for importing countries, particularly those that do not have the proper technologies to safely manage hazardous tyre waste. Stockpiled and landfilled retreaded tyres pose a particular challenge in tropical climates, where they become breeding grounds for mosquitoes, contributing to the proliferation of disease such as malaria and dengue.[330]

In 2000, Brazil imposed a general ban on retreaded tyre imports.[331] The following year, Uruguay intiated MERCOSUR arbitral proceedings against Brazil arguing that the measure conflicted with Brazil's obligation to not impose new commercial restrictions upon its MERCOSUR partners.[332] Following Uruguay's successful challenge, Brazil modified its measure, introducing an exception for retreaded tyre imports originating from MERCOSUR countries. The EC subsequently challenged the Brazilian measure at the WTO, arguing that the ban was discriminatory and that Brazil was not imposing it to protect human and environmental health from the accumulation of waste tyres, but in order to protect its domestic retreading industry.[333]

In this case, Brazil acknowledged that it had indeed deviated from the WTO principle of non-discrimination by prohibiting retreaded tyre imports from all but

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[330] *Brazil — Measures Affecting Imports of Retreaded Tyres* Report of the Panel WTO/DS332/R (12 June 2007). At paras 7.109, 7.210.

[331] *Ibid* at para 2.8(a).

[332] *Ibid* at para 4.4 – 4.7.

[333] *Ibid* at paras 3.1; 4.2; 4.19.

MERCOSUR countries. Invoking Art. XX (b), Brazil argued that the ban was necessary to protect human, animal, plant life and health, from the accumulation of tyre waste. Furthermore, Brazil argued that the exception on MERCOSUR countries was justified under Articles XXIV and XX(d) GATT.[334] While the Appellate Body ultimately found the Brazilian measure to be inconsistent with the requirements of Art. XX, the case nevertheless provides critical insight into the sovereign power of WTO Members to impose trading restrictions on waste products under environmental and human health concerns.

In this case, the WTO Panel recognized that an import prohibition on retreaded tyres *could* constitute a valid measure to reduce public health risks associated to the generation of waste tyres.[335] Furthermore, the Panel and Appellate Body both found the import ban on retreaded tyres to be a necessary[336] measure to prevent health risks associated to the accumulation of waste tyres in Brazil.

What is particularly relevant to our discussion of e-waste regulation, is the WTO adjudicating bodies' recognition that restricting the import of hazardous, near end-

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[334] *Ibid* at para 3.3.

[335] *Ibid* at paras 7.94 - 7.107.

[336] On the criteria of necessity: "To be characterized as necessary, a measure does not have to be indispensable. However, its contribution to the achievement of the objective must be material, not merely marginal or insignificant, especially if the measure at issue is as trade restrictive as an import ban. Thus, the contribution of the measure has to be weighed against its trade restrictiveness, taking into account the importance of the interests or the values underlying the objective pursued by it." *Brazil — Measures Affecting Imports of Retreaded Tyres*, Report of the Appellate Body WTO/DS332/AB/R (3 December 2007). At paras. 210-211. On the Appellate Body's development of the "weighing and balancing" approach, see Lang *supra* note 269 at 320.

of-life products, qualified, in certain instances, as a legitimate and necessary measure to address the adverse effects of toxic waste accumulation. Hence, the protection of human health from waste could very feasibly require regulatory prohibitions on certain products. While the European Communities argued that an import ban targeting retreaded tyres was unrelated to health risks arising from the accumulation of waste tyres,[337] the Panel drew on the *U.S.- Gasoline* and *E.C.- Biotech* cases to justify its position that the risk in question did not have to arise directly from the product targeted by the regulatory measure.[338] Furthermore, the Panel rejected the idea that no linkage exists between tyres as product and tyres as waste:

> While retreaded tyres are distinct from waste tyres, we note that waste tyres are nothing other than tyres that have reached the end of their lifecycle as tyres. In these circumstances, we see no reason to assume […] that a measure relating to retreaded tyres is incapable of bearing a relationship to risks arising from the accumulation of waste tyres.[339]

Also relevant is the Panel's finding (confirmed by the Appellate Body) of waste prevention as a general principle of environmental governance. In essence, the Panel found that waste management and remedial operations did not form a valid

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[337] *Supra* note 330 at para 7.47.

[338] *Ibid* at para 7.49: "[…] there have been other cases in which the characterization of the risk being addressed through the measure did not necessarily involve the exact product affected by the measure. For example, the type of risks found to exist within the meaning of Article XX(b) in US – Gasoline was health risks that did not, strictly speaking, directly relate to gasoline itself (i.e. the product targeted by the measure) but rather to air pollution caused by the consumption of gasoline. We also note that, in its Report on EC – Approval and Marketing of Biotech Products, the Panel states that "there is nothing in the text of Annex A(1)… [to the SPS Agreement] to suggest that the product subject to an SPS measure – in this case, a GM plant to be released into the environment – need itself be the pest which gives rise to the risks from which the measure seeks to protect.""

[339] *Ibid* at para 7.50.

alternative to waste prevention policies.[340] While the European Communities argued that this principle was recognized under international environmental law strictly in relation to the management of a specific group of wastes (hazardous wastes) and only to the extent that social, technological and economic aspects be taken into account,[341] the Panel referred to a range of other evidence[342] to conclude "that policies to address "waste" by non-generation of additional waste are indeed a generally recognized means of addressing waste management issues."[343] The Appellate Body confirmed the Panel's views in this regard. However, in light of the import ban's application to non-MERCOSUR countries only, the Brazilian measure was ultimately considered "arbitrary and unjustifiable discrimination" towards non-MERCOSUR WTO Members. In other words, while the Art. XX (b) criteria had been met, the measure did not pass the Art. XX Chapeau test as articulated by the Appellate Body in its Report on the *U.S.- Shrimp* dispute. [344] In essence, Brazil's ban

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[340] *Ibid* at para 7.100.

[341] Specifically referring to Article 4(2)(a) of the Basel Convention.

[342] This included evidence from the British Environment Agency, the California Environmental Protection Agency, and a number of EU Directives. See footnote 1170 of the *Brazil – Tyres* Panel Report citing excerpts from: *EU Decision n° 1600/2002/CE of the European Parliament and of the Council, of 22 July 2002, laying down the Sixth Community Environment Action Programme; EU Directive 2000/53/European Communities of the European Parliament and of the Council, of 18 September 2000, on end-of-life Vehicles; EU Council Directive 1999/31/European Communities, of 26 April 1999, on the landfill of waste; EU Directive 2000/76/EC of the European Parliament and of the Council, of 4 December 2000, on the incineration of waste;* California Environmental Protection Agency (US), Integrated Waste Management Board, Tire Pile Fires: Prevention, Response, Remediation (2002); British Environment Agency, Tyres in the Environment, at §4.1; Commonwealth Department of Environment (Australia), "A National Approach to Waste Tyres," p. xv (2001).

[343] *Supra* note 330 at footnote 1170.

[344] See *United States — Import Prohibition of Certain Shrimp and Shrimp Products* Report of the Appellate Body, WTO/DS58/AB/R (12 October 1998) at para 150.

was seen as having been arbitrarily and unjustifiably applied to WTO Members. So even though the policy was seen as legitimate for the objectives it pursued, it was nonetheless regarded as having deprived EC Members of their trading rights in retreaded tyres.

The final outcome of this dispute suggests that even though it may be possible to justify an import prohibition on used goods or waste as a necessary measure to reduce toxic waste generation, it will be challenging for any geographically restricted import ban to meet the requirements of the chapeau of Art. XX. A broad and dichotomously defined trading restriction such as the Basel Ban Amendment, which essentially creates two different markets for waste trading (one for OECD countries and Litchenstein, and a separate one for non-OECD countries), quite blatantly arbitrarily and unjustifiably discriminates against countries, as there is no coherent legal, social or environmental basis on which the geographic distinction is based.[345] Hence, even though the WTO Appellate body has indicated that trade restrictive measures resulting from a multilaterally negotiated agreement that is open to all WTO Members are to be treated differently than unilaterally imposed measures,[346] the arbitrarily or unjustifiably discriminatory aspects of any such scheme would certainly affect its compatibility with WTO rules.

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[345] For a detailed discussion of the compatibility between the Basel Ban and the WTO regime, see Sabaa Khan,"Electronic Waste Governance: Sustainable Solutions to a Global Dilemma, LL.M. Dissertation, Université de Montréal (2009). See also Grosz *supra* note 308 at 360.

[346] *US - Shrimp (Article 21.5 – Malaysia)*, Report of the Appellate Body, WT/DS58/AB/RW (22 October 2001) at paras 115-134.

A recent Appellate Body decision[347] on European regulations that impose a general prohibition on the import of seal products into EU countries (the "EU Seals regime") opens another discursive dimension of the social and environmental standards debate. The decision pertains to complaints submitted by Canada and Norway on measures adopted by the EU to ban the import of seals and products derived from seals, in order to protect animal welfare. Canada and Norway alleged that the way exceptions to the measure were formulated resulted in unfair discrimination against their sealing industries. Instead of arguing that the measure was necessary to protect animal life (Art.XX(b),GATT), or for the conservation of natural resources (Art.XX(g), GATT), the EU argued that its Seal Regime was necessary to protect public morals, invoking the general exception provided under Art.XX(a), GATT. While the Panel and Appellate Body found the measure to contain some discriminatory aspects, the protection of animals was upheld as an aspect of public morality. To make this determination, the Panel looked back on the legislative history of the Seals regime, including a 2006 Declaration by the European Parliament on banning seal products, as well as observations by the Parliamentary Assembly of the Council of Europe, and a 2008 Proposal by the European Commission to ban seal products. In particular, the Panel took note of explicit references made within the Proposal regarding "ethical considerations", "public concern", "citizens' deep indignation and repulsion regarding the trade in seal

[347] *European Communities — Measures Prohibiting the Importation and Marketing of Seal Products*, Report of the Appellate Body, WTO/DS/401/AB/R (22 May 2014).

products" to affirm that seal welfare was indeed an issue of public morality for the EU population.[348]

Whether an export or import ban on waste material could be justified under the public morality clause would presumably depend on whether it could be clearly ascertained that the issue of banning waste imports or exports, was an aspect of public morality. Given that debates surrounding wastes are generally framed and discussed in the context of environmental and human health protection and that currently it is impossible to identify a general position, in any given society, on the morality or "ethical" dimension of the waste trade, it would be extremely difficult to justify a prohibition on liberalized waste trading from the public morals perspective.

This section has explored the overlapping and legally obscure nature of the notions of 'product' and 'waste', and the resulting potential for tension that is thus created between the Basel Convention and WTO law. Nevertheless, it is unlikely that trade-restricting measures mandated under multilateral environmental agreements would be challenged within the WTO dispute settlement mechanism. Most Members of the Basel Convention are also Members of the WTO, and it is thus more likely that they would seek harmonization in the implementation of these agreements rather than the nullification of commitments they have made under one regime. Indeed, the Appellate Body, in relation to the *US-Shrimp* dispute, clearly indicated that WTO

[348] *European Communities — Measures Prohibiting the Importation and Marketing of Seal Products*, Report of the Panel, WTO/DS/400/R; WT/DS/401/R (25 November 2013) at para 7.395.

law must be interpretated with an awareness of the evolutionary nature of international law and of the notion of sustainable development.[349] As social and environmental concerns increasingly permeate the body of international law, there is a strong argument that the meaning of WTO commitments also evolve in light of these subsequent developments.

3.1.3.The WTO and Trade Measures in MEA's

Potential harmonization strategies between the WTO Agreements and the use of trade restrictions in MEAs have long been in discussion amongst WTO Members and Basel Parties as well. In 2002, the WTO Secretariat issued a Note[350] on proposals made by WTO Members over a span of seven years (1995-2002) in the Committee on Trade and Environment regarding the coordination of MEAs and WTO rules. Several distinct approaches have been proposed including maintenance of the status quo under the rationale that WTO Agreements provide sufficient scope for trade measures mandated under MEAs and that, furthermore, the WTO dispute settlement body is competent to address any such issue should it arise. Conversely, it has also

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[349] On whether or not living resources fell under the scope of the Art.XX exception for the conservation of "exhaustible natural resoruces", the Appellate Body noted: "The words of Article XX(g), "exhaustible natural resources", were actually crafted more than 50 years ago. They must be read by a treaty interpreter in the light of contemporary concerns of the community of nations about the protection and conservation of the environment." The AB then goes on to note that "modern international conventions and declarations make frequent references to natural resources as embracing both living and non-living resources."(US – Shrimp Appellate Body Report, *supra* note 344 at paras 129-130).

[350] WTO, Committee on Trade and Environment Special Session, Multilateral Environmental Agreements (MEAs) and WTO rules; proposals made in the committee on trade and environment (CTE) from 1995-2002 - Note by the Secretariat, TN/TE/S/1 (23 May 2002). The Committee on Trade and Environment was established in 1995, as a forum for WTO Members to address trade and environment issues.

been proposed that Art. XX be formally amended so that the permissibility of trade restrictive measures mandated by MEAs and fulfilling certain procedural criteria (to be set out in an "Understanding") only be based on an examination of whether they satisfy the Art. XX Chapeau test.[351] Similarly, another proposal calls for the introduction of a "Coherence Clause" mandating that, in the case of a WTO dispute involving a trade measure adopted under a designated list of MEAs, the WTO dispute settlement body would override an examination of the measure under Art. XX subparagraphs and limit its assessment to whether or not the measure is applied in accordance with the Art. XX Chapeau. Other proposals include a reversal of the burden of proof under Art. XX GATT, the granting of time-limited waivers on specific MEA-mandated trade restrictions on a case-by-case basis, the development of "Non-binding Interpretive Guidelines" as a reference document for the negotiation of future MEAs, and the adoption of a WTO-wide "Understanding" on differentiated treatment of trade restrictions adopted under MEAs.[352] Lastly, there is a proposal for "Mutual Supportiveness and Deference", which calls for the adoption of an interpretive decision according to which trade measures in MEAs would benefit from a presumption of conformity to the WTO Agreements, but still be expected to fulfill the criteria laid out in the Art. XX Chapeau.[353]

There is clearly no shortage of possibilities for strengthening coordination between WTO rules and trade measures in MEAs, by way of both formal amendment to the

[351] *Ibid*

[352] *Ibid*

[353] *Ibid*

WTO Agreements, or *soft law* approaches through non-binding instruments. Still, the various proposals made by individual WTO Members over the years clearly indicate that there is no unanimously shared view regarding the necessity for a formal clarification of the relationship between the WTO and MEAs. Secondly, even the most progressive of proposals that have been made to date all indicate a strong hesitancy on the part of WTO Members to provide too much leniency for trade restrictions set out in MEAs. From an institutional point of view, this is hardly surprising, especially considering the clearly opposing aims of the WTO system and an MEA such as the Basel Convention, with respect to how certain substances should be regulated in the global market. In regards to waste in particular, the Doha Negotiation Round aiming to establish freer trade in "environmental goods" - a category of products that notably encompasses a number of environmentally hazardous wastes – has drawn out these fundamental differences to the highest degree.

Moreover, it is imperative to point out that despite the *US-Shrimp* ruling, which is generally considered as having paved the way towards new and progressive possibilities for the accommodation of environmental concerns within the international trading system,[354] in general, WTO jurisprudence reveals that a wavering stance is being taken by WTO adjudicating bodies towards the relevance of multilateral agreements in the interpretation of WTO law. There does not appear

[354] See in particular, Oren Perez, *supra* note 307; Robert Howse, "The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate", (2002) 27:2 Columb J Envt'l L 489; Steve Charnowitz, "The WTO's Environmental Progress" (2007) 10:3 J Int'l Envt'l L 685.

to be, as of yet, a clear and consistent legal basis upon which the Appellate Body approaches principles and norms contained within international environmental law.[355] While the Appellate Body has made it clear, notably through its decisions in the *Shrimp - Turtle* and *EC-Asbestos* disputes, that the international trade regime does not seek to undermine sovereign decision-making related to public or environmental health protection, the AB has neverthless refrained from engaging in any substantive reasoning on the legal status of other international customary or legal norms within the WTO system. In the *EC-Hormones* case, the Appellate Body stressed that unless a general principle of customary international environmental law is "widely accepted by (WTO) Members as a principle of *general* or *customary international law"*[356]*,* it has no binding effect on the WTO. Acknowleding that the precautionary principle had "crystallized" into a general principle of international environmental law, the AB stated that its status as a principle of general or customary international law was "less clear" and that it was "imprudent for the Appellate Body […] to take a position on this important but abstract question."[357]

While the Appellate Body has emphasized that WTO Agreements should not be

[355] See for example, Kulovesi's discussion of the *Shrimp-Turtle* and *EC-Hormones* cases, illustrating the Appellate Body's inconsistent, selective and non-transparent approach to international environmental legal instruments. Kati Kulovesi, *The WTO dispute settlement system : challenges of the environment, legitimacy and fragmentation* (Wolters Kluwer Law & Business, 2010) at 167-170.

[356] *EC-Hormones* Appellate Body Report, *supra* note 329 at para 123.

[357] *Ibid* at para 123.

interpreted "in clinical isolation from public international law"[358] and has even referred to environmental treaties such as the Convention on Biodiversity and the UNCLOS to justify its interpretation of the term "natural resources" referred to in Art. XX (g) GATT,[359] the WTO Panel hearing the *EC-Biotech* case took the incoherent position that *all* WTO Members must be Parties to an international Convention in order for that Convention to be mandatorily taken into consideration in the interpretation of the WTO Agreements.[360] The *EC-Biotech* Panel decided that Art. 31 (3) (c) of the Vienna Convention on the Law of Treaties, according to which treaties must be interpreted taking into account "any other rules of international law applicable in the relations between the parties", should be read restrictively, meaning, that all parties to the treaty being interpreted must be parties to the other international law as well, in order for the latter to be relevant in the interpretation of the former. Seeing as there is no MEA unanimously ratified by the WTO Membership, this would seem to imply that international environmental law has, at most, an informative role in the WTO system, to be applied at the discretion of the WTO adjudicating bodies. The *EC-Biotech* decision challenges the integrity of the entire international legal system, as it suggests that WTO law is somehow impervious to all other forms of conventional international law. Commenting on the *EC-Biotech* Panel's interpretive stance, the International Law Commission elucidates the decision's disintegrative implications for the system of international law:

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[358] *United States- Standards for Reformulated Gasoline* Report of the Appellate Body WT/DS2/AB/R (29 April 1996) at para 3.

[359] *US-Shrimp* Appellate Body Report, *supra* note 344 at paras 127 – 131.

[360] *European Communities — Measures Affecting the Approval and Marketing of Biotech Products* Report of the Panel, WTO/DS/291/R (29 September 2006) at paras 7.67 – 7.75.

> This would have the ironic effect that the more the membership of a multilateral treaty such as the WTO covered agreements expanded, the more those treaties would be cut off from the rest of international law. In practice, the result would be the isolation of multilateral agreements as "islands" permitting no reference inter se in their application. It would also prohibit any use of regional or other particular implementation agreements – including inter se agreements that may have been concluded under a framework treaty, as interpretative aids to the latter. This would seem contrary to the legislative ethos behind most of multilateral treaty-making and, presumably, with the intent of most treaty-makers.[361]

The divisive perspective that was taken by the Panel in the *EC-Biotech* dispute, according to which "international trade law" and "international environmental law" are somehow completely isolated from one another and governed by different principles opposes contemporary interpretive trends of the Appellate Body, evoking a regression back to the "mercantilist vision of the GATT"[362] that characterized GATT Panel rulings prior to the establishment of the WTO. In fact the Appellate Body has made it clear that texts of international trade law cannot be interpreted through an exclusively economic, or self-referential lens. This line of thinking is evident for example in the *EC - Asbestos* dispute, in which the Appellate Body determined that carcinogenity is a relevant factor in determining the likeness of products, or in the *US - Shrimp* or *Brazil - Tyres* disputes where the Appellate Body referred to international treaties, soft law and other instruments to inform its decision-making. Still, the Appellate Body's implication with environmental and

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[361] ILC, Fragmentation Of International Law: Difficulties Arising From The Diversification And Expansion Of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 13 April 2006 at para 471.

[362] See in particular, Oren Perez's discussion of the influence of the mercantilist ethos in interpretations of Art. XX exceptions, notably in the widely criticized *Tuna – Dolphin* disputes. Perez, *supra* note 307 at 59 – 65. See also Lang, *supra* note 269 at 243 – 246.

social norms shouldn't be confounded with a willingness or eagerness to make substantive value judgments on those norms, as its scrutiny has been primarily of a procedural nature.[363]

According to Lang, Art. XX jurisprudence shows that the Appellate Body and WTO Panels have increasingly taken a "procedural turn […] drawing attention to a lack of transparency, objectivity, procedural fairness and even-handedness in the application of a regulatory measure - rather than its substantive rationality, in the sense of how efficiently and effectively it achieves its intended outcomes."[364]

If economic self-centredness, environmental blindness and disconnectedness are no longer evident characteristics of the international trading regime as they may have been in the mercantilist era, how can we describe and evaluate situations of perceived incompatibility between trade and social, or trade and environmental standards? The following section explores how the language of fragmention has provided a valuable heuristic tool to the field of international law in this regard.

3.2. Fragmentation"s": Between and Within regimes

The tension between international trade and environmental regimes is often problematized under the phenomenon of fragmentation, that is, the emergence of overlapping systems of law, or, as posited by the ILC in its 2006 report on fragmentation, "the splitting up of the law into highly specialized "boxes" that claim

[363] Perez *supra* note 307; Lang *supra* note 269; Kulovesi *supra* note 355.

[364] Lang *supra* note 269 at 324.

relative autonomy from each other and from the general law."[365] International legal discourse reveals ongoing debate as to the causes, solutions, and positive and negative dimensions of fragmentation. The ILC has posited fragmentation as naturally emerging from the "development and expansion of international law in response to the demands of a pluralistic world"[366], approaching it as a technical issue that may be resolved with recourse to the rules on normative conflicts as outlined in the *1969 Vienna Convention on the Law of Treaties*. Jonathan Charney viewed the proliferation of specialized international regimes and tribunals as permitting "a degree of experimentation and exploration which can lead to improvements in international law" under the essential condition however, that a certain degree of consistency be maintained in the interpretive framing of rules:

> Not only may a cacophony of views on the norms of international law undermine the perception that an international legal system exists, but if like cases are not treated alike, the very essence of a normative system of law will be lost. Should this develop, the legitimacy of international law as a whole will be placed at risk.[367]

While Charney drew attention to the inherent risks of the decentralized system of international law, he did not see the hierarchization of international tribunals as "practically or politically possible" or even beneficial.[368]

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[365] ILC, Fragmentation Of International Law: Difficulties Arising From The Diversification And Expansion Of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682, 13 April 2006.

[366] *Ibid* at para 9.

[367] Jonathan Charney, "The Impact on the International Legal System of the Growth of International Courts and Tribunals" (1999) 31:4 NYU J Int'l L & Pol 697 at 699.

[368] *Ibid* at 698. Other legal scholars, however, have insisted that the solution to fragmentation lies in the establishment of a clearer international judicial hierarchy. See, for example: Karin Oellers-Frahm, "Multiplication of International Courts and Tribunals and Conflicting Jurisdiction – Problems and Possible Solutions" (2001) 5 Max Plank UNYB 67;

Koskenniemi and Leino have highlighted the political dimension of fragmentation, viewing the dilemma as essentially rooted in the hegemonic struggle between new institutions, and their tendency to deviate from standard interpretations of international law in order to serve their own interests:

> Each institution speaks its own professional language and seeks to translate that into a global Esperanto, to have its special interests appear as the natural interests of everybody.[369]

Benvinisti and Downs perceive fragmentation as far more harmful than Charney or Koskenniemi and Leino, as an intentional strategy invoked by powerful States which "operates to sabotage the evolution of a more democratic and egalitarian international regulatory system and to undermine the normative integrity of international law."[370] They essentially argue that through the creation of narrow, functionalist regimes with limited scope, overlapping boundaries and obscure interconnectivity, powerful States have been able, in a deceptive and non-hierarchical manner, to preserve their dominance in the international sphere and create a regulatory order that reflects their interests, to the detriment of the interest of weaker States.[371]

Pierre-Marie Dupuy, "The Danger of Fragmentation or Unification of the International Legal System and the ICJ" (1999) 31 International Law and Politics 791; Judge Stephen M. Schwebel, President of the ICJ, Address to the Plenary Session of the General Assembly of the UN, 26 October 1999.

[369] Martti Koskenniemi & Paivi Leino, "Fragmentation of International Law? Postmodern Anxieties" (2002) 15:3 Leiden J Int'l L 553.

[370] Eyal Benvinisti and George Downs, "The Empire's New Clothes: Political Economy And The Fragmentation Of International Law" (2007) 60:2 Stan L Rev 595 at 597.

[371] *Ibid*

Although Benvinisti and Downs look towards an emerging global constitutionalism to provide an effective anti-fragmentation strategy, they themselves express an awareness as to the questionable legitimacy of such an approach.[372] Indeed, many scholars have questioned the validity of applying constitutionalism concepts at the global level, including Koskenniemi, who notes:

> The debate on an international constitution will not resemble domestic constitution-making. This is so not only because the international realm lacks a pouvoir constituant but because if such presented itself, it would be empire, and the constitution it would enact would not be one of an international but an imperial realm.[373]

Whether we adopt a legal or political pluralist, constitutionalist, or other approach to fragmentation, underpinning the problem and its resolution in the interaction of specialized, horizontal, international legal regimes is an evasion of the more fundamental plane on which international law may lose its coherency, unity and universalism – and that is, internally, within a regime itself. In the following passages, I explore this idea in relation to the Basel Convention. I posit that while the concept of fragmentation is certainly useful in exploring the trade and environment tensions of international law, focusing the analysis exclusively on conflict *between* specialized treaty regimes ignores the substantive legal conflict that occurs at a more primordial level, which is within the environmental regime itself. This first order of fragmentation happens when States, in shaping the contours of an environmental treaty, effectively determine how balanced the relationship between

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[372] *Ibid* at 630.

[373] Martti Koskenniemi, "International Law: Constitutionalism, Managerialism and the Ethis of Legal Education" (2007) 1 European Journal of Legal Studies 1.

trade growth and environmental protection will be. While there is clear tension between rules emanating from WTO law and those in certain MEA's, it is argued here that fragmentation must be explored, more urgently, at the level of MEA's themselves, where the compromises between trade, environment and human health protection first emerge. This level of fragmentation (within the regime) inevitably shapes the next (between regimes). Before we can pin down the conflicting natures of the WTO regime and the Basel Convention, it is worth asking to what extent the Basel Convention is about waste trade facilitation and to what extent it is about environmental and human health protection.

What is perhaps more problematic than the differing ideologies of WTO law and the Basel Convention, is the tension within the Basel Convention itself in relation to the waste-resource interface, that is, the perception and balancing of used goods as commodity or hazardous waste. An examination of the Basel Convention rules pertaining to transboundary movements of e-waste shows the legal instrument to be indeterminate on the issue of when obsolete technologies should be designated a hazard to be controlled under stringent regulations (such as prior informed consent rules and import prohibitions from developed to developing countries), and when they should be allowed to flow liberally across borders, as an ordinary commodity.

I argue below that while there is broad international consensus over the need to protect poor countries from rich countries' e-waste, the international environmental regime that has been agreed upon to achieve this objective has implicitly been

designed to protect the important economic possibilities that arise from transboundary flows of used electronics, and to accommodate the demands of the globally-based manufacturing economy. The Basel Convention not only fails to meet its human health objectives with regards to protecting communities and workers against e-waste pollution; it also falls short of nurturing inclusive trading patterns, contributing instead to the expansion of a highly polarized, global e-waste value chain. It is valuable to turn to the question of the mandate of the Basel Convention, and to ask whether the protection of human health against e-waste pollution can be interpreted as one of the Convention's objectives. The term "human health" appears throughout the Basel Convention Preamble and in several of its provisions. This concept that remains undefined in the text, provides an anchor to the treaty, and to another key concept of the treaty, "environmentally sound management", defined under Art.2(8):

> "Environmentally sound management of hazardous wastes or other wastes" means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes;[…]"

Considering that it is waste workers and their communities that are most acutely affected by the negative effects of waste, it is not unreasonable to say that the treaty's concern over the protection of human health is especially relevant to these stakeholders. While occupational health is never explicitly mentioned in the treaty, environmentally sound management (ESM) is inherently an occupational health matter. Moreover, the question of protecting (informal and formal) worker health is indissociable from the broader and overarching objective of the Convention, that is,

human health protection. In the context of regulating the global waste trade, workers are in fact a critical focal point of human health protection. In this respect, the silence of the Basel Convention on waste workers should in no way be interpreted as a dismissal of concern for the latter. The challenge of the Convention is that vaguely defined concepts like ESM can be used to exclude informal workers from the economic possibilities of the waste recyclables trade.

The commonality between the international trade and environmental regimes is that neither provides a sociologically nuanced view of the reality of the e-waste trade. Their narrow focus on flows and circulations of certain material categories are disembedded from the historical, social and cultural realities and power inequalities that determine the unjust outcomes of waste liberalization. By establishing no more than the lowest-common denominator outlines of global trade that translate, at best, into faint legalities, these regimes politically neutralize the globalization of e-waste. The ideals of sustainable development and human health protection that are undoubtedly prominent objectives of international trade law and international environmental law, are approached without any real connection to the livelihoods of the most precarious and acutely affected environmental actors in the waste trade. These regimes operate on the assumption that their rules reflect the interests and cultures of the global population, when in fact very few perspectives are infused into the determination of the boundaries between products and wastes.

3.3. The Basel Convention

In the 1980's, several high profile toxic trade scandals, in which European and U.S. companies were found to be dumping hazardous wastes into Eastern Europe and Africa,[374] sparked global awareness of the environmentally damaging and human-rights violating practices of the international waste industry. This prompted governments to negotiate a regulatory regime for the transboundary movement of hazardous wastes. On March 22, 1989, after two years of negotiations, thirty-four nations signed the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. The Convention came into force on May 5, 1992, after ratification by 20 nations. The main objective of the multilateral environmental treaty, which today, has been ratified by 180 nations, is the protection of human health against the negative effects of hazardous wastes, and in particular, the protection of the developing world from socially and environmentally detrimental hazardous waste trading patterns.

The fundamental objectives of the Convention may be summarized broadly as the minimization of hazardous waste generation, the environmentally safe disposal of wastes as close to their source of generation as possible, the prohibition of

[374] For a discussion of these cases, see Clapp, *supra* note 196 at 32-38. See also Greenpeace, *The International Trade in Wastes: A Greenpeace inventory*(Greenpeace USA, 1989); Christoph Hilz, *The International Toxic Waste Trade* (New York: Van Nostrand Reinhold, 1992).

hazardous waste exports from OECD to non-OECD countries[375], as well as prohibition of hazardous waste exports to Antarctica, to Parties that have banned the import of hazardous wastes, and to non-Parties that do not adhere to standards equivalent to the Basel Convention.[376] Furthermore, transboundary movements of hazardous wastes between Parties are only permitted under specific circumstances, namely, when necessary for environmentally safe disposal, or when the wastes in question are required as a raw material for recycling or recovery industries in the State of import.[377] Recycling and recovery exceptions do not apply to hazardous waste transfers from OECD to non-OECD countries, which are prohibited at all times.

During negotiations, most developing countries as well as non-governmental organizations participating as observers, supported an outright North-South ban on all transfers of hazardous waste, but the Convention initially only established a controlled trading regime, allowing North-South transfers to occur for recycling and recovery purposes. During the early years of implementation of the Convention however, it became apparent that hazardous wastes were actually being exported for disposal towards developing countries under the guise of recycling,[378] and thus, in 1995, the Parties to the Convention adopted the Basel Ban Amendment,

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[375] Under the Basel Convention, OECD nations and Litchenstein are known as Annex VII countries, and all other nations are known as non-Annex VII countries.

[376] *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* 28 ILM 657 (1989) [hereinafter Basel Convention]. Art. 4.

[377] *Ibid* art. 4(9).

[378] Kreuger *supra* note 314.

effectively prohibiting all transfers of hazardous waste from Annex VII to non-Annex VII countries, whether for disposal, recycling or recovery purposes. Although the Basel Ban has been transposed to some regional and national legislative texts,[379] it never entered into force at the international level, due to conflicting views as to the number of ratifications required to give it effect.[380]

The Basel Convention and all other legal instruments regulating hazardous wastes share a number of common overarching principles: that waste generation should be minimized (prevention), that wastes should be managed as close to their source of generation as possible (proximity), that countries should endeavour towards managing their wastes independently and without externalizing pollution (self-sufficiency), and that wastes should not be traded from developed to developing countries. However, as discussed below, due to the vague language used within the Basel Convention, and the reluctance of States to implement and enforce the treaty, the actual realization of these principles largely remains an elusive aspiration. The procedural and informational focus of the treaty, along with its narrowly construed

[379] At the regional level, the Bamako Convention (1991) prohibits the import of toxic wastes into sub-saharan Africa. The Waigani Convention (1995) applies to the South Pacific, the Izmir Protocol prohibits trade in toxic wastes from OECD to non-OECD countries in the Mediterranean region, and the EU Waste Shipments Regulation prohibits exports to non-OECD countries.

[380] This dispute concerned the interpretation of the language contained in Article 17(5) of the Convention. Two possible interpretations were advanced in this regard: the current-time approach, according to which ratification by 3/4 of the total *current* number of Parties was needed to give effect to the amendment, and the fixed time approach, under which ratification by 3/4 of the Membership that existed at the time the treaty amendment was adopted (COP 3) was necessary for the amendment to enter into force.[380] At COP-10, Parties to the Convention resolved this longstanding dispute, agreeing on the fixed time approach, and thus it is anticipated the Basel Ban will soon enter into force as only 10 more ratifications are needed. At the time of writing, 85 Parties have ratified the Ban Amendment.

regulatory scope and soft law character, undermine its impact on the global e-waste trade.

3.3.1. Regulatory System of Basel

The Basel Convention affirms that in order to protect human health, hazardous wastes should not be traded freely, like ordinary commercial goods. Wastes are defined under Article 2 of the Convention, as "substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law." Disposal is also defined under Article 2, as referring to operations specified under Annex IV of the Convention. Notably, Annex IV distinguishes between two kinds of disposal operations - those that do not lead to the possibility of resource recovery, reclamation, direct re-use, or alternative uses (e.g. landfilling, release into water, incineration on land or at sea, permanent storage) as well as operations that do lead to the fore-mentioned outcomes (e.g. recycling or recovery of metals and metal compounds, use as a fuel or other means to generate energy, recovery of components used for pollution abatement). As such, under the Basel Convention, the fact that a substance or object is intended for recycling, recovery or some other type of subsequent use, does not preclude it from qualification as a waste or hazardous waste.

The Convention establishes a written notification and approval process known as the Procedure of Informed Consent (PIC) for all transboundary movements of hazardous wastes. The strictly controlled trading regime only applies to hazardous

wastes, which are defined under the Convention as those materials listed in Annexes I and VIII of the Convention, unless they do not exhibit one of the characteristics listed in Annex III. Wastes that do not appear in these Annexes but that are defined as hazardous wastes under the domestic legislation of an importing, exporting or transit country that is a Party to the Basel Convention are also recognized as hazardous wastes. Under this system, Parties to the Convention are prohibited from exporting hazardous wastes unless the importing State has consented to the shipment beforehand, in writing. Furthermore, the State of export cannot approve a hazardous waste transfer from taking place unless it has received prior confirmation from the State of import that the waste shall be handled in an environmentally sound manner. Proof of a contract between the exporter and disposer regarding environmentally sound treatment of the waste shipment also must be provided. Hence, the treaty establishes a system of procedural safeguards that essentially standardize the process of international hazardous waste shipment and at the same time stipulates certain geographical limitations on hazardous waste trading.

It is crucial to remember that only the 'hazardous waste' definition triggers application of the Basel Convention's restrictions on transboundary shipments. As such, any control of transboundary shipments of e-waste depends on whether or not this material category is recognized as a hazardous waste under the Basel Convention. As discussed below, the extent to which discarded electronics are controlled under the Convention remains legally unclear. Regulatory gaps created

through a lack of definitional clarity have made it impossible for the Basel Convention to fulfill its objectives with respect to the protection of human and environmental health from transboundary movements of e-waste.

3.3.2. E-waste under Basel

E-waste is listed under entry A1180 of Annex VIII of the Convention as a hazardous waste. In general, all e-waste that conforms to Annex VIII would be designated hazardous waste, and subject to the PIC procedure when transported across borders. While this may appear to be a straightforward approach, complications arise under the inclusion of e-waste under Annex IX, which specifies wastes that are excluded from the scope of the Convention and hence from all PIC regulatory controls. According to the last paragraph of Entry B1110, electrical and electronic equipment (EEE) destined for direct reuse are not considered hazardous wastes. The definition of "reuse" is provided in footnote 20 of the Annex as including "repair, refurbishment or upgrading, but not major reassembly." The subsequent footnote further specifies that "in some countries these materials destined for direct reuse are not considered wastes." Hence, when a shipment of EEE is destined for disposal or recycling, it is controlled as a hazardous waste and subject to Basel Convention notification and consent procedures. Transfers of such shipments from OECD countries to non-OECD countries are prohibited. However, that same shipment, if labelled for reuse, is not recognized as a hazardous waste, but as *non-hazardous waste*, and in some cases, as *non-waste.* In other words, the Convention provides an opening for used electronic commodities to cross international borders

freely, like ordinary commercial goods, even if they may be in need of repair, refurbishment or any other form of upgrading short of major reassembly. The ambiguous liminal space between product and waste that is thus created makes it harder to eliminate the human health and environmental externalities of global ICT flows. The substantial risk that results from interpretive uncertainty in relation to the legal distinction between products and wastes (regardless of the specific material category in question) is well-captured by Krämer:

> "There is […] the need to see that essentially equivalent situations are not being dealt with differently, in order to avoid the borderline between wastes and products being drawn along purely pragmatic lines, that then all too easily follow practical economic interests – which are not necessarily the same as environmental interests."[381]

Although Annex IX represents Basel Parties' inclination to uphold the social, economic and environmental benefits of EEE reuse and to secure developing countries' access to affordable technologies through the second-hand EEE market, the resulting effect of its open-ended terminology is a regulatory framework that ultimately provides little safeguard against transboundary e-waste pollution. Recalling the WTO Appellate Body's remarks in the *Brazil – Tyres* dispute, even though a product in its used, recycled or near-end-of-life phase must be differentiated from the product in its waste phase, it is unreasonable to assume that the re-useable product is somehow unrelated to the health risks associated with the product in its waste phase.

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[381] Ludwig Krämer, "The Distinction Between Product and Waste in Community Law" (2003) 11:1 Environmental Liability 3.

The language that is used in the understated footnotes of Annex IX leaves in complete legal obscurity the distinction between EEE products and wastes. The general principle that appears to be reinforced is that Parties to the Convention maintain all authority over the definition and classification of materials as wastes or products within their respective jurisdictions. Moreover, because Annex IX exempts EEE for reuse from the Convention's controls without imposing any additional requirements regarding pre-testing, labeling or certification, the Basel Convention appears to provide no definitive clarity on the legal contours of *reuseability*. It is this oversight that has allowed the EEE for reuse market to become a portal for trafficking e-waste. While the Basel Convention applies a strict system of controls on hazardous waste transfers, it eliminates many hazardous wastes from its definitional scope and furthermore remains silent on the specific criteria upon which to ascertain the veracity of exempt waste transfers. The following section provides a more detailed look into the complexity that arises from the Basel Convention's simultaneous efforts to prohibit transfers of hazardous waste on the one hand, and to facilitate global transactions of recycled or reusable waste products on the other.

3.3.3. The Convention's Legal Challenge: Balancing Trade Growth and Global Health Protection

The Basel Convention's regulatory exemption on EEE destined for reuse is entirely compatible with the treaty's prime environmental objective to prevent waste generation, as reuse extends the lifecycle of EEE and therefore mitigates the

generation of hazardous wastes. In this sense, supporting the reuse of used EEE is a way for Basel Parties to fulfill their obligations with respect to the reduction of hazardous waste generation.[382] The premature designation of re-useable EEE as waste could even be interpreted as contradicting the aims of the Basel Convention, in that such a management approach inadvertently supports product obsolescence and increases manufacturing rates, thereby also enhancing energy use and raising carbon emissions. It should also be noted that the promotion of reuse appears at the top of all contemporary waste management paradigms and is even recognized as a legal obligation in the EU Waste Framework Directive,[383] which outlines the waste management hierarchy to be prioritized in the waste legislation of EU Member States. Here, like in all other waste hierarchies, reuse figures directly after prevention, and before recycling, recovery and disposal. The WEEE Directive[384] also explicitly prioritizes reuse as a management option for EEE, over recycling and recovery.

Along with environmental advantages, there are other major beneficial aspects of prioritizing reuse, including employment growth and new social entrepreneurship opportunities. It is widely noted that preparing used EEE (referred to as UEEE by Basel Parties) material for reuse generates more work than sending that material

[382] Basel Convention, art. 4(2)(a).

[383] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Waste Framework Directive), Art. 4.

[384] Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE Directive), Art. 20.

towards recycling or recovery operations.[385] For one social enterprise in Ireland, preparing material for reuse generated 11 times more employment and 15 times more revenue than preparing an equivalent amount of material for recycling.[386] In developing countries as well, a major ancillary benefit of wider access to ICT has been the emergence of local repair and refurbishment industries, which in the cases of Nigeria and Ghana, provide employment to more than 30,000 individuals in each country.[387] More broadly, the reuse of UEEE enables citizens and institutions in lower-income nations to have access to affordable information and communication technologies, an essential factor in economic and social advancement, and in the attainment of the Millennium Development Goals.[388]

There is no doubt that in promoting global transfers of UEEE for the purpose of reuse, the Basel Convention contributes to mitigating resource and energy consumption related to digital sector manufacturing and to bridging the digital divide between post-industrialized and developing countries. At the same time, as mentioned earlier, it is now well-documented that the Basel Convention's failure to regulate transboundary movements of UEEE for reuse has been widely exploited by

[385] UNIDO and Microsoft, Factsheet Worldwide Reuse & Recycle: Growing Green Business, (UNIDO, 2009); Computer Aid International, *Special Report Series ICT and the Environment: Why reuse is better than recycling* (Computer Aid International, 2010); Illinois Department of Commerce and Economic Opportunity, *Electronics Recycling: Economic Opportunities and Environmental Impacts* (Illinois: DCEO, 2009).

[386] Ruediger Kuehr et al, *E-waste Challenges: Re-use Practices, Principles and Standards* (Bonn: United Nations University, 2011).

[387] SBC(2011) *supra* note 181.

[388] See UN Millennium Development Goals, Goal 8 (Develop a Global Partnership for Development), Target F, which provides that governments should: "In cooperation with the private sector, make available benefits of new technologies, especially information and communications." The indicators measuring progress in this regard are telephone lines and cellular subscribers, personal computers in use and internet users.

certain trading networks, enabling them to transfer equipment possessing no potential value for reuse, to countries that lack the appropriate legislative framework and waste infrastructure to deal with such equipment without gravely endangering human and environmental health.[389] Moreover, as all information and communication technologies and other forms of EEE eventually turn to waste, it is evident that global transactions of second-hand equipment towards developing countries relieves exporting countries from eventually having to deal with these products as waste. Importing nations thus face a disproportional risk of toxic waste accumulation from products that have been consumed over the course of multiple, globally-spread lifecycles. Evidently, there is an urgent need for enhanced protective measures to frame the rapidly growing global market for second-hand EEE.

Since EEE is not designed for perpetual reuse, the need for recycling or disposal is inevitable, and it is thus perhaps more appropriate to qualify reuse as a management strategy which, at best delays and reduces the environmental impact of EEE, but can never entirely eliminate it. The Basel Convention's provisions on reuse, which do not consider the health risks of the used EEE economy, nor its close connection to the e-waste trade, are reflective of the treaty's conflicting loyalties to trade facilitation on the one hand, and global health protection on the other.

[389] INTERPOL, *Electronic Waste and Organized Crime: Assessing the Links, Phase II Report for the Interpol Pollution Crime Working Group* (INTERPOL, 2009); see also EEA, IMPEL, GAO, *supra* note 173.

In general, the Convention's convoluted method of defining the objects it attempts to regulate makes it impossible to distinguish clearly what constitutes legal or illegal business activity with respect to transboundary movements of e-waste. With key terms such as "waste"[390] and "environmentally sound"[391] only loosely defined, the Convention can be interpreted with great flexibility. The ambiguity in the wording of the Convention benefits contracting Parties, allowing them to shape their e-waste trading policies and national hazardous waste definitions according to the needs of their domestic producers and consumers, and their export markets. This textual ambiguity also undermines the main objective of the Convention, which is to protect human and environmental health from transboundary movements of hazardous wastes.

Evidently, in order not to disrupt the trading interests of its Contracting Parties, the Convention provides no clear legal basis on which to differentiate transboundary movements of waste and non-waste other than referring to national legal definitions. However, national legal interpretations of the Basel Convention differ so widely that achieving a common understanding with respect to the distinction between waste and non-waste, has been identified as a leading objective of the 2012-2021 Strategic Framework for the implementation of the Convention. With

[390] Art. 2 of the Convention defines wastes as "substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law."

[391] According to Art. 2: "*Environmentally sound management of hazardous wastes or other wastes* means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes."

every Basel Party establishing its own legal understanding of the materials that are to be controlled under the Convention's regulatory measures, it appears the treaty is an instrument in constant flux, its scope and application dependent upon varying, interest-driven determinations of what constitutes a hazardous waste.

Here we are faced with the core dilemma of the Basel regime, that is, the inability of the Convention's regulatory controls to influence the actual 'waste resource' trading market. The soft law approach of the Basel Convention and its general failure to regulate the global market of EEE for reuse have enabled State regulatory frameworks and international business practices to override global health protection and environmental justice objectives. As explained above, it certainly makes sense from a sustainability and development perspective to encourage the global trade in reusable EEE, yet the Convention contains no safeguards to ensure that this trade flow of 'goods' does not lead to a disproportionate intensification of e-waste pollution in developing countries.

In essence, this MEA, which was created in order to resolve environmental injustices linked to toxic waste transfers towards developing countries, has evolved under the pressures of global industries. It embraces the idea of waste as a resource, without however, establishing the legal mechanisms necessary to mitigate the vast and detrimental effects that the waste-resource interface presents for poorer nations. The Convention's soft law character combined with its general legal obscurity diminishes its effectiveness. Instead of establishing legal rules to prevent waste

transfers towards poor nations, the MEA enshrines a liberalized waste trading system steered by global supply and demand for waste resources. By entirely excluding trade in used EEE (a major source of e-waste pollution) from its regulatory scope, and by giving its Contracting Parties the ultimate authority to define what constitutes hazardous waste, non-hazardous waste and non-waste in their respective jurisdictions, the Basel Convention essentially supports a market-driven global e-waste trading regime.

It is difficult to see how the Basel Convention could fulfill its objective to protect the world's poorest nations against the harmful effects of globally-generated hazardous wastes without establishing legally binding environmental standards for recycling, introducing transparency and accountability mechanisms in the international trading of EEE for reuse, or providing a clear definition that distinguishes e-waste from used EEE. Aware of these shortcomings, Parties to the Convention have been in the process of drafting technical guidelines on the distinction between used EEE and e-waste.

Although the main objective of these Technical Guidelines is to resolve the regulatory loophole introduced by the ambiguous language of Annex IX of the Convention, the enhanced protective measures that have been envisioned under the guidelines are unlikely to curtail the health hazards of the global reuse market. The following section draws attention to two significant failings of the Technical Guidelines – their general framing of the issue as one of balancing commercial

interests (as opposed to protecting public health) and the short-sighted manner in which they approach the issue of environmental accountability across borders.

3.3.4. The Basel Guidelines

Technical guidelines are adopted by Basel Parties under their obligation to ensure the environmentally sound management of wastes that fall within the scope of the Convention.[392] The Open-ended Working Group (OEWG) of the Basel Convention, which is a subsidiary body of the Conference of the Parties, is responsible for the preparation of technical guidelines.[393] As technical guidelines are intended to advise Basel Parties on the practical implementation of the Convention, their provisions are not legally binding. Nonetheless, technical guidelines can be viewed as having some influence in the interpretation of the Basel Convention. The *1969 Vienna Convention on the Law of Treaties* states that along with a treaty's text, preamble and annexes, subsequent legal agreements adopted between the Parties and the "subsequent practice" of the Parties must also be considered in the interpretation of a treaty (Article 31(3)(b), VCLT). Insofar as technical guidelines reflect the subsequent practice of States in the implementation of the Basel Convention, they are useful as an interpretative tool to clarify ambiguities resulting from the legal framework of the treaty.

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[392] See the general obligations of the Parties under Art. 4(2) (a) to (d) of the Convention.

[393] The OEW was established in 2006, replacing the Technical Group of the Basel Convention. See *Decision VI/36 on Institutional Arrangements, adopted by the 6th Meeting of the Conference of the Parties to the Basel Convention*, December 2002.

In 2010 the OEWG started the process of drafting *Technical Guidelines on transboundary movements of e-waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention* [hereinafter the Guidelines]. The document is intended to clarify the Convention's ambiguous provisions on transboundary shipments of EEE intended for direct reuse (Annex IX). After seven re-drafts over the course of four years, an interim, incomplete version of the Guidelines was adopted at the 12th Conference of the Parties on 16 May 2015.[394] The general objective of the Guidelines is to prevent illicit e-waste trading by assisting Governments in distinguishing between waste and non-waste shipments of UEEE.

The governance framework proposed by the Guidelines is based on mandatory functionality testing of all UEEE that is exported for the purpose of reuse. The Guidelines recommend that documentary evidence of functionality and proprietorship, as well as an attestation of the non-waste status of all equipment within a shipment, be provided by the exporter to the relevant authorities either on a general or case-by-case basis.[395] The Guidelines also provide material, physical, pricing and EEE-market criteria that customs agencies and other relevant authorities should take into consideration when determining whether a particular

[394] *Technical guidelines on transboundary movements of electrical and electronic waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention*. UN Doc. UNEP/CHW.12/5/Add.1/Rev.1 (23 June 2015). [Hereinafter the Guidelines]. The Guidelines provide a brief overview of outstanding issues and related draft provisions that are still under negotiation (Appendix V, Guidelines).

[395] *Ibid* para 25.

UEEE shipment qualifies as waste.[396] For example, the presence of material defects, physical damage, inappropriate packaging and the lack of a regular market for the equipment in question in the import country, are all indicated as situations in which a UEEE shipment should be presumed to contain waste.

The basic principle underlying the Guidelines is that all movements of UEEE across borders must be accompanied by documentation that clearly shows every item in the shipment is not only accounted for, but also in working condition. Functionality is presented as the key variable in determining whether UEEE labelled for direct reuse is, in reality, a waste shipment that should be subject to waste control mechanisms. In introducing a governance framework whereby the functionality of UEEE must be proven before materials leave their country of export, the Guidelines respond directly to the regulatory loophole introduced by Annex IX of the Basel Convention.

The problem that has been signalled with such an approach is the implications it entails for return-to-manufacturer business systems that engage a globalized repair and refurbishment sector. From the industry point of view it is argued that if shipments of defective UEEE sent back to manufacturers for repair or refurbishment are controlled as waste, this will trigger the complex, costly and lengthy notification and consent procedures associated to cross-border movements of waste, inevitably

[396] *Ibid* paras 26, 31.

affecting the solvability of these corporate systems.[397] In particular, repair and refurbishment facilities located in non-OECD countries would be prohibited from receiving equipment for servicing from OECD countries, as various international and regional agreements, and national laws prohibit transboundary waste shipments from OECD to non-OECD countries.

In its comments submitted to the Secretariat of the Basel Convention, electronics multinational Phillips estimated the recommended measures would engender an added cost of 500 million euros annually to health care providers, gravely disrupting medical servicing worldwide.[398] Similarly, DIGITALEUROPE, an industry association which represents more than 10,000 companies in the European digital technology sector, has drawn attention to potential impacts of the Guidelines on the global IT and communications industry, where it estimates that approximately 15 to 20 million repairs and refurbishments are performed each year, often implicating transboundary shipments from OECD countries to specialized repair and refurbishment centres in non-OECD countries. These potential impacts include increased e-waste generation through shortened product lifecycles, the closure of centralized repair and refurbishment facilities in non-OECD countries, and a marked decrease in the industry's ability to meet increasing worldwide demand for

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[398] See Phillips, Comments on 28-September-2012 draft Technical Guidelines on Transboundary Movements of Electronic and Electrical waste (e-waste), 31 October 2012. Online: < http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>

affordable used IT equipment, medical devices and service parts.[399] Alongside industry stakeholders, the governments of Singapore and Malaysia have also voiced concern over geographical restrictions on waste trading (between OECD and non-OECD countries) which would apparently severely hinder their domestic industries from participating in the repair and refurbishment networks of multinational companies.[400] As such, the negotiation process surrounding the drafting of the Guidelines has very intensely focused on the range of *exceptions* that will be allowed under the Guidelines, to eliminate the latter's potential disruption to specific transnational business systems. Ironically, while the development of the Guidelines is rooted in the need to clarify exemptions on reusable EEE contained within the Basel Convention (Annex IX), the primary point of concern for negotiators and other stakeholders involved in the drafting of the Guidelines has been the formulation of yet another level of exemptions.

Evidently there are significant social, economic, and environmental interests linked into the facilitation of transboundary flows of used EEE, including public institutions

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[399] See Digital Europe, Impact Of New Rules At The 'Basel Convention' To The Extension Of The Product Life Of Electrical And Electronic Equipment, 13 February 2013. Online: < http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>

[400] See Malaysia , Comments on the draft Technical Guidelines on Transboundary Movements of Electronic and Electrical Waste (e-waste), in particular regarding the distinction between waste and non-waste, 9 November 2012. Online: < http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>; Singapore, Comments on the draft Technical Guidelines on Transboundary Movements of Electronic and ElectricalWaste (e-waste), in particular regarding the distinction between waste and non-waste, 28 February 2013. Online: < http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>

(e.g. hospitals, schools) and lower-income populations in developing countries who often rely on used equipment due to the high cost of new ICT, along with corporations that operate globally and offer international leasing or warranty systems for their products. The problem of what to do with wastes that are generated along these trade flows vividly draws attention to the complex interdependence between developed and developing nations that results from contemporary global value chains.

The main challenge of the drafting process has been for Basel Parties and other relevant stakeholders to come to agreement on where to delineate the boundaries between transfers of waste and non-waste with regards to items shipped for repair. The several draft versions of the Guidelines reveal consistently opposing views amongst Basel Parties regarding whether to allow a narrow or wide scope of situations in which UEEE intended for repair and refurbishment should be transferable across borders as non-waste. Canada has highlighted its concern that in providing for a too narrow set of exceptions, the Guidelines may engender serious technical barriers to trade.[401]

Earlier formulations of the exceptional cases in which non-working UEEE could qualify as non-waste centered on the existence of warranties. While there was general consensus that equipment under warranty transferred to manufacturers or

[401] See Canada, Comments of September 10, 2013. Online: <http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx.>

their representatives for repair or refurbishment should not be considered waste, various position were taken on the scope of non-warrantied equipment to which a waste exemption should apply. The adopted version of the Guidelines moves away from using warranties as a differential basis.

During the course of the negotiation process, some Basel Parties and industry stakeholders have argued that regulatory exemptions should be limited to specific material streams (equipment designed for professional use,[402] leased equipment, medical and research-related devices) or apply exclusively in the case of materials being shipped back to the manufacturer or a third-party acting on their behalf. A more restrictive proposal made by the EU (which has since been retracted) included a geographical restriction along the lines of the Basel Ban, according to which transfers of all non-warrantied UEEE for repair or refurbishment from Annex VII to non-Annex VII countries would have been prohibited. Alternatively, Japan has consistently argued against both geographical restrictions and limitations on the scope of equipment, a position that reflects the Government's general preference for liberalized waste trading. Proposals that have been made from some industry groups can be seen as a compromise between the seemingly opposite EU and Japanese proposals. In relation to previous drafts of the Guidelines, the Information Technology Industry (ITI) and the European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry (COCIR) had suggested that

[402] 'Equipment for professional use' excludes all equipment that is used in both households and business environments (i.e. mobile devices, computing equipment, small appliances and essentially all other equipment designed for both home and office use).

manufacturer-related flows of UEEE for repair and refurbishment remain exempt from regulatory controls normally imposed on waste (regardless of the geography of such flows), but that transfers of such material from Annex VII countries to independent, third party facilities (i.e. all non-manufacturer related entities) in non-Annex VII countries be prohibited.

A comparison of the adopted version of the Guidelines with earlier drafts shows that negotiations have moved towards the recognition of a wider scope of exemptions. Earlier proposals implicating geographical restrictions seem to have been set aside. What is most striking about these negotiations is to what extent they have been dominated by the solvability concerns of various IT industries, with minor consideration for the environmental stewardship of wastes generated in developing countries, through globalized repair and refurbishment networks. It is critical to note that none of the first five drafts of the Guidelines included provisions regarding the environmentally sound management of hazardous wastes generated through transboundary shipments for repair and refurbishment. Furthermore, while exemptions on manufacturer-related flows of UEEE across borders as non-waste appear to be widely advocated for, from an environmental point of view, there appears to be no clear justification for allowing manufacturers or entities contracting on their behalf to engage in transboundary movements of UEEE unless they are also held responsible for the environmentally sound management - and ideally, the repatriation – of wastes generated through these flows. The first six versions of the Guidelines remained silent on this critical issue of accountability

over wastes engendered through repair and refurbishment operations. As Parties were unable to come to agreement on the question of residual wastes, negotiations in this regard have yet to be finalized. The draft provisions being considered for inclusion are provided under Appendix V of the Guidelines.

The general approach reflected in earlier draft versions of the Guidelines was essentially to reduce the leakage of UEEE into unaccountable global trading networks by effectively eliminating the possibility for non-manufacturer related entities to move non-working UEEE across borders. However, the decision to create regulatory exemptions exclusively favouring certain corporate actors and their subcontracting partners hints of unjust trade discrimination, particularly when these actors do not seem to be engaging their environmental responsibility with respect to the downstream treatment of hazardous wastes generated through their globalized networks. It could be argued that ICT manufacturers should not be granted special privileges over independent exporters of used ICT equipment unless they are also assuming responsibility for the social and environmental stewardship of the wastes generated through their transboundary operations.

The issue of financial and physical accountability for the environmentally sound treatment of hazardous wastes externalized to developing countries through repair and refurbishment systems remained undiscussed until the 11th Conference of the Parties in 2013. In the adopted version of the Guidelines, the question of accountability across borders remains undecided. While it is remarkable that

Parties were able to adopt a set of interim Guidelines given their contrasting positions on many issues, it must be pointed out that the most pressing concerns have yet to be resolved. Most strikingly, the Guidelines seem to recede global consensus back to national determinations of waste and non-waste, consequently offering no further legal clarity at all.

One of the fundamental stipulations of the Guidelines is that a Party wishing to import UEEE for failure analysis, repair or refurbishment purposes should notify the Secretariat of the Basel Convention (SBC) under the transmission of information framework of the treaty (Articles 3 and 13 of the Basel Convention), that it does not consider such UEEE imports to qualify as waste.[403] The question of how to deal with situations where this information has not been communicated remains under negotiation.

To recapitulate the general approach of the Guidelines, the principal idea is that only fully functional UEEE qualifies as non-waste and the exporter must fulfill specific criteria to prove the functionality of equipment being shipped. The Guidelines additionally provide criteria to assist authorities in identifying shipments of UEEE that would normally be considered waste, and equipment that would normally not be considered waste. Under Paragraph 31(b) of the Guidelines it is proposed that in order for transboundary movements of non-working UEEE to *not* be treated as waste (meaning, in the absence of functionality testing documentation), these types of shipments should be accompanied by a "valid contract" between the exporting

[403] Guidelines, para. 29.

and importing entities. The contract should include provisions on the adherence of ESM principles in the treatment of all hazardous wastes generated through the shipment, provisions engaging the exporter's responsibility to adhere to all applicable national and international laws, and provisions that require the importing facility to provide a feedback report to the exporter on the treatment of the shipment and of all wastes generated through failure analysis, repair and refurbishment operations. However, none of the contractual criteria proposed engage the exporter's accountability over wastes generated through shipments of non-working UEEE.

As such, one of the most important issues still to be negotiated concerns the ownership of waste across borders. In particular, Parties still hold contrasting positions on the question of who should assume responsibility for the treatment of residual wastes generated from servicing operations, and on where this should take place.[404] While the exporter is required to perform due diligence to ensure that the importing facility adheres to environmentally sound waste management practices, there is no requirement for the repatriation of residual wastes back to the exporting country.[405] One of the current proposals under negotiation is that all residual wastes generated from these flows, which qualify as hazardous wastes or possess unknown hazardous characteristics, be exported for environmentally sound management to an Annex VII country, unless accompanied by conclusive proof that they can be

[404] The draft texts proposed in this regard can be found under Appendix V of the Guidelines.

[405] See Guidelines, para 31(b)(ii) for the various contractual requirements between an exporter and importing facility.

treated safely in the importing country in accordance with the provisions of the Basel Convention.

By affirming the exporter's responsibility across borders over the imported product *and* over all waste generated from servicing of the product, the Guidelines could establish a much higher level of accountability on the part of the exporter. Moreover, in calling for the repatriation of hazardous wastes imported into non-Annex VII countries, the Guidelines would reflect an alignment with the objectives of the Basel Ban Amendment. In particular, newly proposed modalities for increased transparency, accountability and for the repatriation of hazardous wastes would reinforce the idea that, the primary concern in relation to global movements of used ICT and other hazard-laden commodities should be the social and environmental safeguarding of developing countries. In this regard, the Guidelines already encourage states to enter into a new era of active and accountable waste governance, by providing the possibility for Parties of the Convention to notify the Secretariat of all UEEE-importing facilities in their jurisdiction (Paragraph 29, Guidelines). This informational approach introduces a new level of transparency in the regulation of the global ICT value chain, prompting governments to actively investigate the occupational and environmental conditions of repair and refurbishment facilities operating within their borders.

While it is promising that the criteria currently proposed under the Guidelines reach beyond the current regulatory limitations of the Basel Convention, draft provisions on the repatriation of residual waste remain unsupported by the world's largest

corporate stakeholders as well as those States that primarily export used ICT to developing nations. For instance, the European Union has expressed the view that repatriation of hazardous wastes to an Annex VII country would be "inappropriate"[406] under the rationale that hazardous wastes generated in non-Annex VII countries should be dealt with according to the Basel Convention principles on hazardous waste management (proximity, self-sufficiency and minimization of transboundary movements), regardless of whether the wastes in question are residues resulting from the servicing of non-functional products imported from Annex VII countries. Alternatively, the Basel Action Network (an NGO that has been actively engaged in the drafting of the Guidelines) argues that the repatriation of hazardous waste residuals to the exporting country would be in conformity with the Basel Convention's liability framework, according to which the exporter is ultimately responsible for problems that arise from their hazardous waste shipments. Indeed, it could even be further argued that the polluter pays principle,[407] a foundational precept of international environmental law and management, in this case calls for an approach mandating the repatriation of residual wastes. Of course, this opens up the debate as to whether the exporter in question can be regarded as the polluter, or as an exporter of hazardous waste in the first place. However environmentally and socially well-founded the repatriation

[406] *Comments by the European Union and its Member States* submitted to the Secretariat of the Basel Convention. Draft of 18 February 2015. Available online: <http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx> at 17.

[407] *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992). Principle 16.

of residual wastes may appear in the context of transboundary movements of UEEE for repair and refurbishment, given the current international legal framework it would be essential and yet extremely difficult to illustrate that the waste in question originated in the exporting country.[408] If material has entered a country as non-waste, it would be close to impossible to hold the exporter responsible for hazardous waste management.

The European Union has also voiced its concerns against the exporter's continued ownership of the imported material and of the residual wastes generated, citing "practical difficulties"[409] in the oversight of the handling of materials in a third country, and also a lack of clarity regarding the exporter's liability. Moreover, the EU has argued against the public listing of facilities on the SBC website, noting that it would be administratively "burdensome". In a similar vein, the largest ICT industry groups from the US and the EU have jointly proposed that the requirement of the public listing of importing facilities be removed, and that the responsibility and accountability of the exporter be limited to the servicing phase of the product and not be extended to any residual wastes.[410] Argentina has gone so far as to point out

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[408] On the difficulties of identifying specific actors as responsible for environmental damage caused by waste transfers, see Elli Louka, "Bringing Polluters Before Transnational Courts: Why Industry Should Demand Strict and Unlimited Liability for the Transnational Movements of Hazardous and Radioactive Wastes" (1993) 22:63 Denv J Int'l L & Pol 63.

[409] *Supra* note 406 at 17.

[410] See Digital Europe and Information Technology Industry Council, *Comments of the ICT Industry on Paragraph 26(b) of the Draft Technical Guidelines on Transboundary Movements of Electronic and Electrical Waste and Used Electrical and Electronic Equipment, in Particular Regarding the Distinction Between Waste and Non-waste under the Basel Convention,* December 5, 2014. Online: <http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>

that by establishing criteria for materials that are *non-waste*, and by requiring that Parties submit information on facilities that deal with *non-waste*, the Guidelines attempt to regulate materials that clearly fall out of the scope of the Basel Convention, and are thus uncalled for.[411] Consequently, the Argentinian government has stated its preference for nationally-established importing criteria.

Other Basel Parties have welcomed the increased transparency efforts and it has even been suggested that the SBC listing requirement apply not only to importing facilities, but to exporting entities as well,[412] in the interest of full and balanced transparency in the global networks along which ICT materials circulate and hazardous wastes are generated.

Given the fundamentally distinct views of Basel Parties on the scope of transparency and accountability that is necessary to effectively regulate transboundary shipments of UEEE, during the course of negotiations a "fall-back approach" was also being considered, according to which Basel Parties would establish their own criteria as to when UEEE qualifies as non-waste and then communicate this information to the SBC. Evidently, this regulatory approach undermines the primary objective of the Technical Guidelines, which is to offer clarity on the currently ambiguous position of the Basel Convention text regarding waste and non-waste UEEE. Following a nationalistic *modus operandi* in this regard would further complexify the issue of

[411] See Comments submitted by Argentina, 27 February, 2015. Online: <http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx.>

[412] See Mauritius, Comments submitted by Mauritius, February 27, 2015. Online: <http://www.basel.int/Implementation/Ewaste/TechnicalGuidelines/DevelopmentofTGs/tabid/2377/Default.aspx>

how to distinguish between waste and non-waste, reinforcing a global system of differing criteria to follow in importing, exporting and transit countries. Already uncoordinated regulatory approaches make it possible for a shipment to shift from non-waste to waste, or vice versa, multiple times, as it crosses different borders. Hence, the confusing regulatory outcome would be no different than the problematic status quo.

Clarity on the Horizon?

Overall, the development process of the Guidelines seems to have provided an opportunity for knowledge exchange between Basel Parties, regarding the distinct ways in which they regulate transboundary movements of UEEE for reuse. However, whether the Guidelines can actually clarify the legal ambiguity embedded within Annex IX of the Basel Convention is highly doubtful. Thus far, it seems the Guidelines almost reinforce the Convention's obscurity rather than eliminate it. In general, they fail to address the multidimensionality of the e-waste problem as a public health, environmental protection, employment and economic development issue. Powerful Basel Parties that mainly export UEEE as well as globally-spread ICT industry groups are almost unanimously opposed to establishing increased transparency into the global corporate networks that deal with hazardous wastes and to extending exporters' accountability to wastes generated from their global transactions. With the discussion of exemptions dominating the drafting process, it appears the priority issue under the Guidelines has become the designation of certain flows of hazardous, waste-containing materials as non-waste.

With the question of the repatriation of hazardous wastes still under negotiation, there remains an opening for the Guidelines to engage with the critical public health matter arising from global e-waste flows that is the externalization of hazardous waste pollution to vulnerable populations in developing nations. At the same time, widespread opposition from the Global North and existing obstacles in the international legal framework suggest that coming to global agreement in this regard will be difficult. Unsurprisingly, in the development of the Guidelines, consumer and corporate interests have taken precedence over the health interests of those who are destined to deal with the toxic waste resulting from the global material flows in negotiation.

If the eventual consensus achieved under the Guidelines is simply that there can be no definitive consensus, it is likely that hazardous waste accumulation in developing countries from the global consumption of technologies will continue to intensify. The vague language of Annex IX of the Basel Convention remains obscure under the newly adopted Guidelines and will likely continue to be economically interpreted, without engaging Basel Parties on the disturbing occupational health realities of the global metals recycling market. In fact, the labour discourse within the Basel Convention is non-existent. In aiming to facilitate certain global material flows, the treaty attempts to protect the viability and growth of repair, refurbishment and recycling markets, but fails to examine the nature of these markets, or to introduce

mechanisms that would ensure that the type of work being generated from these global material flows is sustainable, that is, both socially and environmentally just.

It is questionable whether the interim adoption of unfinished Technical Guidelines should be viewed as a progressive step towards a more sustainable globalization of UEEE and e-waste, as the instrument remains far from fulfilling its main objective that is to provide legal clarification on the boundaries between waste and non-waste. From a lifecycle perspective, this binary differentiation on which the Guidelines are fixated, is in reality impossible, as all non-waste eventually makes waste. The designation of materials that embody or eventually turn to hazardous waste as 'non-waste' will ultimately yield the most significant environmental and social gains for the Global North, where technologies are primarily consumed, not manufactured, re-manufactured or de-manufactured.

3.4. Growing Precariously under Basel: How does the Basel Convention influence the Informal Economy?

The analysis above of the Basel treaty and discussion of new developments under the regime reveal that the Convention fails to provide adequate human health safeguards in relation to objects that may soon become e-waste, or already contain some e-waste component. Currently, the Convention's protective mechanisms reach only a very limited portion of actual hazardous waste flows. It is an international treaty that mainly ensures the commercial circulation of recyclable resources in the interests of production and reproduction, without concerning itself specifically with

the social and environmental conditions of production and reproduction. Moreover, under the Basel regime, there is little acknowledgement of the hyperactive demand for metal resources that is the real source of the emergence of precarious new hazardous waste industries. Growth itself, of the hazardous waste economy, remains unchallenged, politically neutralized. Furthermore, the realm of global industrial development is fragmented into separate issues and only the most technical matters in relation to liberalized trade and economic growth are addressed. In this discursive realm, the informal recycling workforce is seen as part of the problem, not part of the solution. The Basel regime remains highly State-centric, and while it is an international environmental governance realm that widely embraces and recognizes the needs of global industrial actors, the needs of informal waste communities that predominate the waste industry in developing countries are not treated as part of Basel "community" concerns. A systematic consideration of informal waste-livelihood concerns is certainly not institutionalized, despite the overarching objective of the Convention of human health protection.

The new layers of corporate accountability and responsibility that have been proposed under the Guidelines fall short of addressing the social protection of informal recycling economies. This issue is somehow seen as too distant from the Basel discussions, and in this way, there is a denial of the fundamental interlinkage between the environmental, economic and labour dimensions of the globalized waste economy. Drawing on these observations, the section below provides a more

in-depth examination of how the current Basel framework contributes to the catalyzed growth of high-risk informal e-waste economies in developing nations.

In the first part, it is argued that while the treaty enables the existence of a globally spread reuse and recycling chain, its procedural and institutional aspects evoke a lack of consideration for the work and livelihood aspects of the e-waste crisis, a central dimension of human health protection in the context of the global waste trade. The sociologically-unconscious managerial and technical approach to the hazardous waste trade that is laid out by the treaty undermines the broader environmental justice[413] concern that is linked to the global waste economy and under which the Convention itself came into existence, namely, the disproportionate burdens of toxic pollution imposed on socio-economically deprived, racialized groups in developing nations.

In the second part I argue that while the treaty creates an *idea* of legal or regulatory space, there is no enforceable obligation upon contracting States to comply with that space, or to recognize objects (wastes/resources) as falling within that legal space.

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[413] The understanding of environmental justice presented here is rooted in Dr. Robert Bullard's early work: "environmental justice is the principle that all people and communities are entitled to equal protection of environmental and public health laws and regulations." Robert Bullard, "Environmental Justice: It's More Than Waste Facility Siting" (1996) 77:3 Social Science Quarterly, University of Texas Press 493. See also Robert Bullard, *Dumping in Dixie : race, class, and environmental quality* (Boulder: Westview Press, 1990) (where Bullard elaborates a framework of environmental justice that encapsulates a procedural, distributional and social dimension); Robert Bullard and Thomas Estabrook, "Confronting Environmental Racism: Voices from the Grassroots"(1996) 72:2 Economic Geography 230; Bunyan I. Bryant & Paul Mohai, *Race and the Incidence of Environmental Hazards: A time for discourse* (Boulder : Westview Press, 1992).

Hence, while there may be the appearance of an international regulatory regime, the Basel Convention ultimately reinforces a fragmented set of rules that culminate into a sovereignty-based and economically motivated system for hazardous waste governance. Ultimately, the Basel regime fails to address deep inequalities rooted in the urban foundations of the globalized recycling economy. Parties to the Convention work closely alongside their domestic industry groups, advocating for similar international regulatory outcomes. Globally-spread industry groups link together as well, and present the world's most economically important actors as a unified voice in various Convention-related working groups and other activities. The specific social and economic interests of informal workforces linked into these globalized ICT networks are not included in the scope of relevant considerations, as informal actors are widely seen as competing with the interests of formal domestic industries. The lucrative recycling economies that are enabled by the globalization of UEEE are thus shaped according to the transparency and accountability frameworks desired by those stakeholders that are the least likely to take into consideration the social, economic or environmental concerns of the workers at the base levels of the recycling chain, upon whom the globalization of e-waste poses the most extensive harm.

3.5. The Liberalized Waste Recyclables Trade: Empowered Elites, Labourers at risk

By exempting global trade in EEE for reuse from its environmental controls, the Basel regime benefits recycling economies in developing countries, in the sense that

it allows them to participate in a global waste recyclables market. A complete ban or restrictions on trade towards developing countries would hamper the development of important electronics repair and recycling industries in these nations, and would furthermore enable a closed market for valuable recyclables to be established between developed countries only. At the same time, in developing countries lacking the proper infrastructure for environmentally sound recycling, the benefits and risks of liberalized trade in used EEE are unevenly distributed between the different stakeholders implicated. The socio-economic benefits reaped by intermediary agents such as brokers and waste dealers and formal developing country importers are unlikely to reach informal manual labourers farther down the value chain. While informal e-waste work is far more lucrative than other forms of informal work that may be available,[414] the working conditions of informal e-waste workers conflict blatantly with their right to health and to a healthy environment.

A major conceptual weakness of the Basel Convention is that it paves the way for international commerce in waste recyclables without factoring in how world poverty and international inequalities produce environmentally unjust outcomes for vulnerable populations in developing nations. The Basel Convention's preamble quite clearly draws out linkages between the waste economy and human health, referring repeatedly to the need to protect human health and the environment against movements of hazardous waste and emphasizing the limited capacity of developing countries in the environmentally sound management of wastes.

[414] Prakash and Manhart, *supra* note 229; Widmer et al, *supra* note 172.

However, what the provisions of the Convention ultimately provide are a *soft law* approach that falls short of the mechanisms necessary to achieve the treaty's aspirational environmental justice objectives.

Accounts of the negotiation process of the treaty demonstrate that members of the Organisation of African Unity (OAU, now the African Union) invoked the environmental justice argument and the language of human rights to support their demands for the prohibition of hazardous waste flows into their territories.[415] However, the text of the Basel Convention makes no reference at all to human health from a rights or poverty perspective, an approach that may have highlighted and even institutionalized the human and working dimension of the waste trade, providing a potential pathway to integrate the livelihood aspect of the global waste trade within the realm of international environmental goverance. The Convention reduces the complex global waste economy to questions of a technical nature that are to be resolved in trade terms. This isolated international bargaining over technical waste trade definitions is too narrow, and perhaps too mercantilist of an approach to effectively address the issue of protecting global human health from hazardous industrial growth. The Convention's omission to balance its trade perspective with a waste livelihood perspective obviously limits the scope of understanding that can be achieved within the confines of the treaty. One of the consistent trends in the history of waste management has been governmental

[415] Kummer *supra* note 308; Kreuger *supra* note 314; Chukwuerije Okereke, *Global justice and neoliberal environmental governance : ethics, sustainable development and international co-operation* (New York: Routledge, 2008).

failure to foster and promote waste industries inclusive of the informal sector. International institutions such as the World Bank have also played a role in this regard, facilitating loans for the import of waste technologies from developed countries that not only prove to be ineffective, but also locally disruptive and socially unsustainable. As Medina notes, on the use of compactor trucks for waste collection:

> Despite the mostly negative experience with the use of compactor trucks in Third World cities, over 60 percent of loans made by the World Bank between 1985 and 1996 were used to purchase compactor trucks. In some cases, compactor trucks displaced the infromal refuse collectors, eliminating their livelihoods.[416]

Van de Klundwert and Anschutz describe the devastating local impact of financial structures upon which waste management in developing countries have been generally based:

> It used to be quite common for city councils in some developing countries to finance the purchase of new refuse collection equipment with medium- to long-term loans (up to 30 years) from foreign donor countries. Taking into account the fact that the average life of waste collection equipment is usually limited to 5 to 7 years and combined with a poor revenue generating capacity of the municipality (to service debts, cover operation and management costs and to replace assets), this frequently led to crippling debts for the municipality, which continued long after the equipment had become obsolete and was not used any more.[417]

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[416] Medina *supra* note 155 at 78.

[417] Arnold Van de Klundwert and Justine Anschutz, *Integrated Sustainable Waste Management*, Paper prepared for the CEDARE/IETC Inter-Regional Workshop on Technologies for Sustainable Waste Management, held 13-15 July 1999 in Alexandria, Egypt. Online at <http://www.worldbank.org/urban/solid_wm/erm/Annexes/US%20Sizes/Annex%204B.3.pdf>

Van de Klundwert and Anschutz further emphasize that the design of successful waste management systems depends on the integration of social, political and financial aspects into decision-making processes on waste management systems, including the implication of all stakeholders and taking into account "interactions between the waste management system and other urban systems."[418] While their analysis retains a local focus, these notions of inclusiveness and integration are also relevant to the world of international law that has remained overly state-centric.

Although some Basel decisions, guidelines, studies and other initiatives do mention the informal recycling sector, the implication of this workforce is often referred to in the context of describing the type of pollutive activities in which they are involved, and the need to educate or formalize them. Evidently, the treaty does not incorporate questions of justice for informal workers into the construct of international waste regulation. The specific issue of the creation of conditions that would enable informal waste workers to access their right to a safe and healthy environment is not addressed. The question of devising inclusive legal formulations of "environmentally sound management" - a critical point of concern in developing countries where most waste work remains informal - is not elaborated upon. It is an issue left to the realm of national governance despite widespread knowledge of the intimate transnational linkages between globalized formal actors and informal waste sectors in developing countries (as with Chinese and Nigerian metals buyers

[418] *Ibid* at 3.

in Accra that purchase metals from Agbogbloshie's informal e-waste sector, discussed above).

Given the historical political tension between governmental institutions and informal economy actors, as well as the exclusionary origins of environmental legislation in developing countries, recognizing the informal work dimension of the waste trade and, in particular, understanding how the informal world of work fits into international visions of environmental sustainability, would appear to be an essential component to framing environmental protection issues.

Even though the legitimacy of environmental decision-making is increasingly viewed as being inherently linked to a rights-based approach that involves the granting of procedural human rights such as public participation, the right for vulnerable groups to be consulted, due process and access to justice,[419] the Basel Convention lacks any such mechanisms. And yet, the protection of human health is arguably the most prominent notion within the Convention's text, very clearly and explicitly, laying down the *raison d'être* of the Convention.

Regrettably, the Basel Convention is not amongst the numerous international environmental agreements that utilize procedural human rights to fulfill

[419] See OHCHR, *Analytical Study on the Relationship Between Human Rights and the Environment*, 16 Dec. 2011UN Doc. A/HRC/19/34. For a discussion of how procedural human rights have been implemented in international environmental agreements and the benefits of adopting a rights-based approach to public health, see Dinah Shelton, *Environmental Protection: Linkages in Law & Practice,Health and Human Rights*, Working Paper Series No 1 (Geneva: World Health Organization, 2002).

environmental and human health protection objectives.[420] A particularly noteworthy example is the *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* (1998) in which environmental rights have been directly conferred to individuals, with respect to governmental decisions affecting the environment at all scales - the local, national and transboundary. It is widely viewed as bringing an unprecedented democratic dimension to environmental compliance mechanisms found within multilateral environmental agreements.[421] What the Basel Convention does provide institutionally and procedurally, are mechanisms that foster the global growth of the recycling industries in a way that reinforces State sovereignty and undermines the

[420] Dinah Shelton (2012) cites the following MEAs as drawing from human rights law through the specific provision of "rights to information, public participation, and redress for environmental harm" (at p.209): Convention for the Protection of the Marine Environment of the North-East Atlantic (1992); Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (1993); North-American Agreement on Environmental Co-operation (1993); International Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (1994); Convention on Co-operation and Sustainable Use of the Danube River (1994); Energy Charter Treaty, Lisbon (1994); Amendments to the 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (1995); Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (1995); Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998); Protocol on Water and Health to the 1992 Convention on the Protection and use of Transboundary Watercourses and International Lakes (1999); Cartagena Protocol on Biosafety to the Convention on Biological Diversity (2000); International Treaty on Plant Genetic Resources for Food and Agriculture (2001). See Dinah Shelton, "Resolving Conflicts between Human Rights and Environmental Protection: Is there a Hierarchy?" in Erika de Wet and Jure Widmar (eds*.) Hierarchy in International Law: The Place of Human Rights*. (Oxford: Oxford University Press, 2012) 206 at footnote 8.

[421] See S.V. Kravchenko, "The Aarhus Convention and Innovations in Compliance with MEAs", (2007) 18:1 Colorado J Int'l Envt'l L & Pol 1.

protection of human health. Specific weaknesses in Basel's PIC procedure and compliance mechanism are discussed below.

The PIC Procedure

Instead of establishing substantive rules or specific targets to accomplish its objectives, the Basel Convention takes a State-to-State procedural approach to regulating transboundary movements of hazardous waste. A mutually agreed upon process for trading hazardous wastes (the Procedure of Informed Consent - PIC) is established through the treaty in order to protect human and environmental health. The scenarios in which this process applies depend entirely on national legal definitions of 'hazardous waste'. These national definitions are often determined according to domestic industry interests rather than public or environmental health risks.

Some national definitional omissions regarding hazardous waste clearly undermine global "legal" efforts to curb waste transfers from developed to developing countries. The problem is easily illustrated through the example of Singapore. Singapore is considered a major transit hub for global e-waste trading because of its links to ports worldwide, its domestic electronics manufacturing industry, and its place in the centralized repair and refurbishment networks of certain multinational corporations.[422] Due to the importance of e-waste for the local economy, the

[422] Lepawsky and McNabb *supra* note 215, and ILO, *The Global Impact of E-waste: Addressing the Challenge* (Geneva: ILO, 2012).

government does not prohibit e-waste imports or exports, but instead outlines a different set of procedural guidelines depending on whether the equipment is intended for reuse, repair and refurbishment or recycling and recovery.[423] While Singapore is a Basel Party and its national legislation integrates the Basel Convention's hazardous waste defintions, shipments of e-waste from Annex VII countries to Singapore (a non-Annex VII country) may take place, without triggering the PIC procedure. In turn, Singapore may subsequently ship that e-waste to any other non-Annex VII country, without this transaction posing a problem under the Convention, as the latter does not regulate trade between countries of the same group. In this way, non-Annex VII countries may easily receive e-waste generated in Annex VII countries via Singapore. Many Asian nations, despite have adopted formal legal frameworks to control e-waste flows, do not provide environmental inspectors or customs officers the authoritive power necessary to ensure effective enforcement.[424]

In addition to the problem of possible evasions of the PIC procedure, the effectiveness of the PIC procedure in protecting human and environmental health

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[423] See Singapore, National Environmental Agency, *Correspondence to Traders, Freight Forwarders, Cargo Agents and Carriers*, 24 March 2008. Online: <http://www.nea.gov.sg/docs/default-source/anti-pollution-radiation-protection/chemical-pollution/import-and-export-of-e-wastes-and-used-electronic-equipment.pdf?sfvrsn=0.>

[424] See Wendell's discussion of different regulatory approaches used by Asian countries and their weakenesses. Katelyn Wendell, *Improving Enforcement of Hazardous Waste Laws: A Regional Look at E-waste Shipment Control in Asia*, 9th International Conference on Environmental Compliance and Enforcement (2011) at 628 – 639.

also merits closer examination. For Okereke, the PIC "reflects an ideological commitment to the notion of free trade" and emerged as the preferred regulatory mechanism under Basel,

> because of the successful move by powerful interests to frame the scandalous waste deals not as 'toxic imperialism' or 'environmental racism' but as the natural fallout of the otherwise mutually beneficial activities relating to industrial development and international trade.[425]

The critical flaw with the PIC process is that it provides the possibility for hazardous waste transactions to take place without a real assessment of the potential human health and environmental risks of such transactions on the population of importing countries. The Convention does require the State of Export to submit to the importing State proof that the environmentally sound treatment of the waste in question is part of the contractual obligations between the exporter and disposer, but as Kummer points out, the State of export is not required to verify the exactitude of this information.[426] As for the importing State, the Basel Convention provides no specific criteria on which consent to a shipment should be based. In this regard, it is imperative to note that unless the importing State's consent to the waste shipment is based on actual environmental and social impact assessments of the disposer's activities, it cannot be said that the protection of human health and the environment has been seriously factored into the decision-making process. The Basel Convention remains silent in this regard.

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[425] Okereke, *supra* note 415 at 97.

[426] Kummer *supra* note 309 at 66.

The perception that the PIC procedure is an adequate mechanism to minimize the flow of toxic waste into developing countries does not take into account the immense economic, political and technological assymetries between developed and developing countries, that may compel poorer nations to consent to waste imports despite the environmental risks involved. Moreover, relating back to the example of Singapore, we see that the limited reach of the PIC system implies that the Basel regulatory regime wholly evades the issue of assymetries between non-Annex VII countries themselves, and their relative positions in the global economy.

Finally, to view an intergovernmental mechanism such as the PIC system as an effective regulatory tool to protect human health dismisses the reality that governmental decisions are often determined according to the interests of elite industrial actors, to the detriment of public health and other social communities involved in the waste trade. Wani's critique of the Basel Convention in the early years of its adoption placed emphasis on the troubling aspect of its state-centricity, bringing to the forefront the question of what interests are upheld by sovereign, contracting states. Specifically, Wani pointed to the continued political marginalization of the general population in developing countries as a serious democratic concern and impediment to the Basel regime's potential to protect human and environmental health in any meaningful way.[427]

[427] Ibrahim J. Wani "Poverty, Governance, the Rule of Law, and International Environmentalism: A Critique of the Basel Convention on Hazardous Wastes" (1991) 37:1 Kansas Journal of Law and Public Policy 37.

Well over a decade later, the disastrous public health effects of illegal hazardous waste dumping in Abidjan (Cote d'Ivoire) involving Dutch multinational commodity trading company Trafigura drew attention to the underlying problems of poverty and self-interested and economically-driven governments that persistently stifle implementation and effectiveness of the Basel Convention. In this infamous case, mislabelled petrochemical waste that was rejected at the Port of Amsterdam subsequently made its way to Cote d'Ivoire, where it was dumped at various points around the city causing immense harm to the local population. The Trafigura incident strikingly demonstrated mismanagement on the part of all Basel Parties that were engaged in the transaction, including the Netherlands, whose customs authority released a shipment of hazardous waste in blatant contravention of Basel obligations.[428]

Sadly, the major governance issues at play in the Trafigura case, which include falsification of notification documents by the exporter, communication and cooperation failures between Governments, lack of institutional transparency, corruption, and governmental failure to invoke international environmental law, are not exceptional to that one particular incident. These problems regularly afflict the

[428] For a detailed discussion of the Trafigura case see O. Fagbohun, "The Regulation of Transboundary Shipments of Hazardous Waste: A Case Study of the Dumping of Toxic Waste in Abidjan, Cote D'Ivoire" (2007) Hong Kong L J; Gary Cox, "The The Trafigura Case And The System Of Prior Informed Consent Under The Basel Convention – A Broken System?" (2010) 6:3 Law, Environment and Development Journal 263.

global waste economy.[429] A critical analysis of the Basel Convention's mechanism for compliance shows that serious structural deficiencies provide an ideal setting for tragic human health outcomes. The following section elaborates on two of these weaknesses: the lack of sanctions for non-compliance and the absence of a supervisory role for the Secretariat.

Compliance Mechanism

The Committee for Administering the Mechanism for Promoting the Implementation and Compliance of the Basel Convention (hereinafter the Compliance Committee) was established in 2002, to assist Parties to fulfill their obligations under the Convention.[430] The mechanism is non-binding and non-confrontational.[431] The Compliance Committee is composed of 15 Members, representing an equal geographical representation of the five UN regional groups. Its Members, who are nominated based on their scientific, legal, socio-economic or technological expertise on the Convention, are nominated by the Parties and elected by the COP.

The mandate of the Compliance Committee is to conduct general reviews of compliance and implementation as requested by the COP, and to examine specific

[429] For the e-waste sector, see INTERPOL *supra* note 389 and EEA *supra* note 173.

[430] See *DecisionVI/12 of the Conference of the Parties to the Basel Convention on the Establishment of a mechanism for promoting implementation and compliance*, UNEP/CHW.6/40, 10 February 2003.

[431] *Ibid* Terms of Reference, para.2, Appendix to Decision VI/12.

submissions regarding a Party's non-compliance. Specific submissions regarding non-compliance can only submitted to the Committee by the Parties, or by the Secretariat. However, the Secretariat can only make submissions when a Party's non-compliance concerns its reporting obligations.[432] The Committee has no authority to impose punitive measures on States for non-compliance of the Convention.

In general, Basel Parties have been reluctant to utilize the compliance mechanism. In its Report presented at COP-9, the Compliance Committee noted that it had not received a single submission, and even pointed out the inherent limitations of the compliance mechanism due to its disengagement with civil society and the inability of the Committee to initiate submissions on its own.[433] In its subsequent Report presented at COP-10, the Committee expressly recommended that it be granted the authority to request information from Parties in situations where it has become aware of "serious adverse consequences"[434]linked to a Party's non-compliance, and where a submission is unlikely to be made by the Parties or the Secretariat. However, this recommendation was not adopted. The Committee's recommendation that the Secretariat be allowed to initiate submissions beyond those related to non-

[432] *Ibid*

[433] See *Report of the Committee for Administering the Mechanism for Promoting Implementation and Compliance of the Basel Convention and proposed work programme for the Committee for the period 2009–2010*, UNEP CHW/9.3. (31 March 2008) at para 26.

[434] *Report of the Committee for Administering the Mechanism for Promoting Implementation and Compliance of the Basel Convention and proposed work programme for the Committee for the period 2012–2013*, UNEP CHW/10/9/Rev.1 (1 October 2011) at 9.

compliance with national reporting obligations was adopted, but only on a provisional basis.[435]

Not only did the Basel Parties limit the possibility for public participation in the compliance mechanism and restrict the Committee's authoritative powers, they have also remained reluctant to utilize the powers it does have. With Members nominated and elected by the Parties, and a work programme directed by COP decisions, Basel Parties themselves exercise a strong underlying control of the compliance mechanism. Despite the intimate linkage between the international waste economy and human health, the Committee's mandate remains entirely disconnected to the public health dimension of the Convention's implementation, in particular, to the issue of Basel Parties' obligations towards their citizens.

The Compliance Committee's lack of authority combined with the Secretariat's primarily administrative role in overseeing the Convention suggest that Basel Parties cannot effectively be held responsible for non-compliance through this mechanism. What is troubling is that non-compliance with basic obligations such as national reporting, is rampant.[436]

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[435] *Ibid.* See also *Decision BC/10-11 of the Conference of the Parties to the Basel Convention on the Committee for Administering the Mechanism for Promoting Implementation and Compliance of the Basel Convention*, Report of the Conference of the Parties to the Basel Conventionon the Control of Transboundary Movements of Hazardous Wastes and Their Disposal on its tenth meeting, UNEP/CHW.10/28 (1 November 2011). Annex 1.

[436] National reporting to the Basel Secretariat by the Contracting Parties remains inconsistent, and the Secretariat is not even able to evaluate the data it receives. (See Robert Wolfe and Shane Baddeley, *Regulatory Transparency in MEAs: Controlling exports of tropical*

As illustrated, the procedural and institutional aspects of the Convention reaffirm the primacy of governments, and their appointed technical experts, in shaping international hazardous waste rules. And even where Basel Parties turn to technical expertise to lead the implementation mechanism, they are reluctant to allocate power to this entity. With the Convention placing no real enforceable obligation upon contracting States, while imposing limitations on the participation of civil society and environmental NGO actors in regime development,[437] it appears that from a practical point of view, the treaty remains procedurally and institutionally far removed from questions of environmental justice.

Although concern for human health and inequality is undoubtedly at the epicentre of the treaty, the treaty governance structure assumes that a technical and managerial approach to hazardous waste regulation can provide adequate mechanisms to protect public health. The conception of environmental justice as an outcome that can be handed down by governments without the meaningful

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timber, e-waste and conflict diamonds, Paper prepared for the OECD Workshop on Regulatory Transparency in Trade in Raw Materials, 10-11 May 2012, Paris).
The Compliance Committee noted that for the 2009-2010 reporting period, not a single Basel party fulfilled its reporting obligation within the prescribed time period. The Committee has also noted that compliance with national reporting obligations is declining. (Compliance Committee Report *supra* note 434).

[437] While environmental NGO's may be admitted to COPs and subsidiary bodies of the COP as observers, and their advocacy is widely credited to have influenced progressive developments under Basel (see Marguerite M. Cusack, "International Law and the Transboundary Shipment of Hazardous Waste to the Third World: Will the Basel Convention Make a Difference?" 5:2 Am U Int'l L Rev 393 and Clapp, *supra* note 192) they are still formally excluded from monitoring, enforcement and liability structures.

participation of non-State, non-professional, non-hegemonic actors placates our globally-spread history of corporate and governmental oppression against marginalized populations disguised as environmental protection concern. It is a construction of environmental justice that goes against the lived experience of environmental justice, which in physical form has always been a *people's movement* against the dominant environmental paradigm, with workers and contestation at its foundation.[438]

The legal outcome of the Trafigura incident in Abidjan starkly demonstrates how governments can actively work against environmental justice and use law and legal institutions specifically for this purpose. In 2007, Trafigura and the Ivoirian government came to a settlement agreement of $198 million that was supposedly intended to compensate victims, but ultimately was used for other purposes, as noted in a Report of the UN Special Rapporteur:

> On the basis of the settlement, Trafigura paid $198 million to cover damages suffered by the State, reimbursement for decontamination costs and compensation for victims. The State agreed to indemnify directly any individual claiming to have suffered harm. Victims' associations appear not to have been consulted before the agreement was signed. […] [T]he settlement required the State to waive all current or future action for liability and damages. The Special Rapporteur also received complaints about inequitable distribution and an overall lack of clarity in the subsequent use made of the settlement payment.[439]

[438] For a discussion of the linkages between the civil rights and environmental justice movements in the United States, see Robert Bullard, "Environmental Justice for All" in R. Bullard, ed, *Unequal Protection: Environmental Justice and Communities of Color*, (San Fransisco: Sierra Club, 1994) 3.

[439] *Report of the Special Rapporteur Ibeanu*, United Nations General Assembly, UN doc. A/HRC/12/26/Add.2, 3 September 2009.

In 2006, 30000 victims of the incident pursued Trafigura by submitting an Application to the High Court of Justice in London, represented by British firm Leigh Day. The dispute was resolved in a settlement agreement in which Trafigura agreed to compensate the Applicants the sum of 34 million Euro,[440] under the condition they agree to a joint statement denying any wrongdoing or liability on Trafigura's part.[441] A large part of this compensation was pilfered by a fraudulent organization that had succeeded in obtaining a decision from the Court of Appeals in Abidjan to appropriate the funds, despite widespread protest from the 30,000 victims represented by Leigh Day.[442] It was only in May 2012, after the newly instituted government launched a criminal investigation into the matter, that a high-level Ivoirian government official who had been appointed to facilitate distribution of the compensation and two other individuals were suspected of having embezzled the funds.[443] While thousands of victims of the incident suffered through protracted

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[440] Delphine Denoiseux, "L'exportation des déchets dangerux vers l'Afrique : Le Cas Du Probo Koala" Courrier Hebdomadaire CRISP, no. 2071 5.

[441] See the Agreed Joint Statement. Online: <http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/20_09_09_trafigura_statement.pdf>

[442] See Amnesty International UK, "Trafigura case: Authorities must ensure compensation reaches victims" (5 November 2009). Online: <http://www.amnesty.org.uk/press-releases/trafigura-case-authorities-must-ensure-compensation-reaches-victims>; BBC, "Fear over Ivory Coast ruling on Trafigura waste pay-out" (22 Januray 2010). Online: <http://news.bbc.co.uk/2/hi/africa/8475362.stm>; Leigh Day, "Agreement gives hope to Ivory Coast toxic waste claimants" 14 February 2010. Online: <http://www.leighday.co.uk/News/2010/February-2010/Agreement-gives-hope-to-Ivorian-toxic-waste-claima>

[443] See Business and Human Rights Resource Centre, "Trafigura Lawsuits" Online: <http://business-humanrights.org/en/trafigura-lawsuits-re-côte-d'ivoire>; Leigh Day,

dispute settlement, and more importantly, continue to suffer through the devastating socio-economic and health impacts of the dumping incident,[444] Trafigura adamantly denies any responsibility and proudly affirms to be continuing its normal business operations in Cote d'Ivoire, with investments of "millions of dollars in infrastructure and facilities in the port of Abidjan and the Ivory Coast."[445]

The Trafigura legacy vividly demonstrates the broad societal risks of leaving environmental justice outcomes in the hands Governments and corporations alone. But an international environmental treaty such as the Basel Convention seems to do exactly that.

"Leigh Day welcome police investigation into Ivory Coast compensation scandal" 23 May 2012. Online: <http://www.leighday.co.uk/News/2012/May-2012/Leigh-Day-welcome-police-investigation-into-Ivory->

[444] See B.A. Koné et al, *Impact socio-économique du déversement de déchets toxiques à Abidjan en 2006 à l'échelle des ménages*, (2011) 104 Bulletin de la Société de pathologie exotique 14.

[445]Trafigura, online: http://www.trafigura.com/media-centre/probo-koala?title=agreement-between-trafigura-and-the-ivorian-government

3.6. The Phantasmagorical Nature of Legal Space

Given the analysis above, what does the Basel regime say about the relationship between the waste trade, environmental protection and social justice? Interestingly, while the term 'international law' triggers the sense that a universalization of standards or protections is underway, the Basel Convention ultimately reinforces State sovereignty in waste trading. The "global" forum and instruments proposed, of information exchange and voluntary "legal" cooperation engage stakeholders selectively and fail to address the global pollution crisis from a public or occupational health perspective. Remarkably, the treaty entirely distances itself from the question of labour, the *sine qua non* of the recycling and manufacturing industries where human health impacts are most dire. New attempts to resolve the e-waste crisis are narrow, based exclusively on industry-led technical *definitionalizing* of waste, with minimal focus on the latter's impact with respect to people, work and human health. The dominant discourse on transboundary movements of waste in which Basel Parties are engaged remains blind to the broader sociological reality of the global waste economy. It attempts to tackle the deeply complex issues of human health protection and environmental injustice, through the constricted lens and language of mutually agreed upon trading concessions. This constitutes an inherent limitation of the regime and renders it incapable of addressing the unfair distribution of toxic health risks to the most marginalized sectors of the recycling workforce and their communities.

An ever-expanding body of scholarship that includes contributions referred to throughout the present work attests to the centrality of informal recycling livelihoods in discussions of the globalized waste economy. Yet there is no mechanism set in place by the Basel Convention to compel its Parties to include the voices and actors on the margins of the recycling industry into their visions of sustainable trade and environmentally sound management. In essence, the Basel regime does not aspire to challenge the current organizational dynamics of the global waste-resources value chain. Its international, technical trade discourse moves the regulatory gaze away from the real concrete context of human health in the waste economy.

It is difficult to see new legal prospects for the protection of human health against the waste trade arising from within the Basel Convention. The regime embodies the most traditional and limiting aspect of international law, that is, State-centricity. This State-centricity is the main obstacle to addressing the socially and environmentally unjust impacts of the hazardous waste trade. The Convention essentially refers back to individual national legal systems as the ultimate sources of law on hazardous waste trading and classification. As such, the Basel Convention does not pierce through, but instead reinforces, the protective shield of national sovereignty under which States defend their socio-economic exclusion of marginalized populations, such as informal waste workers. Basel Convention mechanisms offer no possibility to further our understanding of how informal

recycling labour – the real *site* of the e-waste health crisis - is transnationally coiled into the global metals industry.

The concepts of environmental justice and sustainable development can be envisioned as coming together in the delinkage of productivity and reproductivity from toxicity and inequality. This chapter has shown that instigating mechanisms of the Basel Convention cannot be relied upon as an effective means to humanizing the global recycling economy. The Basel Convention seeks to enhance "green" global growth through the reutilization of waste resources, yet turns away from the most pressing issue related to the global waste economy, which is the protection of human health, in particular, of the informal workers and their communities. The principles that are contained in the Basel Convention regarding human health protection, have been approached and implemented from a trade perspective, in a regulatory framework that provides no formal space for civil-society, for individuals, workers, their associations, and their environmental justice movements. Nowhere to be found in the Basel framework, the realities of people and places of the global waste trade are tied to highly localized places of production, oppression and contestation that remain invisible to the international legal realm.

My review of the international legal regime governing the e-waste trade reveals that international environmental law is currently de-sensitized to the oppressive realities of the globalized recycling market. The Basel regime provides governments with a forum in which to negotiate greater liberalization of the waste trade,

irrespective of the real social and environmental impacts of this form of international commerce on vulnerable populations in developing countries. Although international law evokes a sense of expanded governance, formalist regimes are actually narrow, interest-driven extractions from the real-world pluralist *interlegal* space that cuts across the local, transantional and international. Local practices and narratives offer insight into international law's major blind spot, which is the spatial and relational connectedness between the multiplicity of actors in the global recycling economy – informal and formal labour, multinational corporations, State authorities and international institutions. The goals of "protecting human health" and "environmentally sound management", which will perhaps always remain abstract in the international legal realm, are only concretely manifested and understood at the local level, where we see they inherently concern poverty, space and political recognition. Statist conceptions of law, be they local, national or international, present innate limitations to informal workforce emancipation on a structural level.

Informality may be invisible within international legal instruments, but it is certainly visible to the international community, institutions and NGO's alike. There is an increasing number of initiatives under the Basel Convention, the International Labour Organization and other international bodies dedicated to ameliorating the conditions of informal e-waste workers, for example through capacity-building, promotion of the formation of worker cooperatives and fostering of upstream

linkages.[446] Despite their progressive outlooks, the unanimous narrative of informal workers that have been engaged in these formalization initiatives is that the oppressive forces of the State remain the greatest obstacle to their autonomy and well-being.[447]

As discussed previously in the context of Agbogbloshie, the continued analysis of informal communities, through the top-down theoretical lense of formalization, risks simplifying the complex and multidimensional struggle of informal workers. Addressing informality through one particular fragmented lens delivers an impoverished understanding of the structural forces that bind informal populations into places of subjugation. In the end, all formalization efforts take place within the Statist ideologies of liberalization and privatization, forces that work against marginalized populations in all regions of the world.

By introducing procedural controls to global trading in hazardous wastes, the Basel Convention attempts to foster a precautionary dimension to what is a high-risk business activity, particularly for the workers implicated. The existence of this globalized waste economy creates work and employment opportunites for a broad

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[446] ILO, *Tackling informality in e-waste management: The potential of cooperative enterprises* (Geneva: International Labour Organization, 2014); Manhart et al, *supra* note 177; SBC (2011) *supra* note 181.

[447] See ILO (2012) *supra* note 415 and Hill's discussion of the Self-Employed Women's Association in Hill, *supra* note 56. See also findings from the WIEGO Informal Economy Monitoring Study that examines the lives of informal workers in 10 cities in Africa, Asia and Latin America. City reports and sector reports. Online: <http://www.inclusivecities.org/iems/>.

and diverse scope of individuals, from informal waste collectors to multinational waste processors. Yet the Convention's emphasis on state sovereignty, its limited scope of application, lack of binding authority and prevalent legal ambiguity intensify the social and economic risks that are faced by those who work at the very base of waste industries. Lack of participatory mechanisms for the general public or for waste workers' associations within the Basel framework results in a scaling away of these important stakeholders and their concerns from the international governance regime. At the national level, governmental attempts to formalize waste industries and enforce the environmentally sound management of wastes commonly result in uninclusive social environmental outcomes for informal economies, as evidenced by Ghana's draft e-waste legislation discussed in Chapter 2.

For this reason, the question of environmental justiciability for the informal population must be shifted from the state-centric "international" to the urban sphere, and at the same time reframed, that is, pulled out of law's dominant discourse of formalization and embraced instead under the notion of spatial citizenship, the right to the city. Studying informality under this rescaling and reframing offers critical insight into the people and places that are silenced in an international legal regime such as the Basel Convention. It is an approach that allows us to consider more deeply how informal populations carve out legal spaces that contest the contours of formalist law. In essence, this international environmental law, with its deeply economic and state-determined focus, cannot guarantee a pathway to the human health protection of the people most acutely

afflicted by the dangers of the global waste trade. In the following chapter I explore how this pathway emerges from the people themselves, in the places they live and work. Instead of arguing for the introduction of a human rights dimension to international waste law (along the lines to what has been done in many progressive MEA's), I bring the analysis to the site and scale of informal waste work – the city.

I argue that the concept of the right to the city extends beyond the narrow and technical confines of formalization discourse. While state-centric formalization discourse insists upon law as regulation and social protection, the notion of a right to the city emphasizes the multidimensionality and plurality of law as it is actually lived, in particular, law as it emerges from the informal world.

CHAPTER 4. Navigating Beyond State Law's Disengagements

4.1. Challenging Legal Paradigms

The previous chapter presented the idea that international regulatory landscapes of waste trading and environmental management fail to acknowledge the labour and human rights concerns associated to work in those industries, thus contributing to precarious and dangerous working conditions in the global waste-resource market. *People* and *work* have been strikingly disengaged from these two regulatory realms. As for their relationship with each other, international environmental law and international trade law have, to date, shown only minimal meaningful interaction that remains distant from any kind of unity. Examples such as India's newly adopted e-waste legislation, which remains inattentive to the near 80,000 informal workers in its recycling sector; Ghana's E-Waste Bill that echoes a similar insensitivity; or the WTO panels' inferences to the effect that international environmental law has limited authority in relation to world trade law reflect the dominant cross-regional and cross-scalar legal culture anchored in segmentation. At the same time, both the WTO and Basel regimes work collaboratively to shape the way that the problem of e-waste globalization is understood and regulated, simplifying and isolating a complex social, environmental and economic phenomenon into a mere technical trade matter. Under these regimes, the global life of resources and wastes becomes an economic project shaped and maintained by a group of specific, hegemonic actors: global manufacturers of IT and other metal-containing products (who also

happen to be large-scale producers of hazardous wastes), as well as commodities traders and multinational recyclers.

Arguing that the WTO and Basel treaties fail to recognize the central place of people and work within the global trade and environmental management systems, I questioned whether these 'global' bodies of law could hold anything beyond textual promise for the protection of human health or sustainable development when the 'human' remains but an abstract, voiceless concept within their respective legal contexts. I posited that the Basel Convention's archaic structure, in which the citizens of its Member States can compel nothing of their Governments in respect to the Convention's human health protection objectives (due to the lack of public participation or enforcement mechanisms), is reflective of a broader system of multilateral governance which supports the free flow of goods and capital across borders, while simultaneously distancing itself from humanity's multifarious demands for equality, dignity and recognition.

This Chapter attempts to navigate beyond international law's disengagements with people and work in the waste trade, by proposing a spatially and socially sensitive analysis of the global e-waste trade that is centered on the notions of place, people and the lived experiences of informality and law in Agbogbloshie. This inquiry instantiates a moment along the global e-waste trade chain and in doing so, enters into a microspace of globalization, urbanism and informality. In this way, I adopt a lens on the globalization of e-waste that permeates much deeper into the issue of

human health protection, by addressing the power, history and culture of the waste economy, rather than reducing the latter to a trade liberalization matter.

My analysis seeks to understand the relationship between informality and law in concrete context, by going to this particular place, or moment, of the global e-waste chain that remains hidden from the top-down views of international and national environmental legal realms. As I have argued in Chapter 2, Agbogbloshie is a transnationally-linked place commonly understood by the global community as embodying oppressive work realities (i.e. a place of international environmental injustice), yet for which international law proposes no remedies, no prospects for justiciability. Certainly, we can point to treaties in the international human rights and labour law systems[448], and even Ghana's Constitution[449], that oblige Ghana to ensure the realization of citizens' fundamental rights to health and to decent work in a healthy environment, yet the obstacles informal workers face in realizing these rights are numerous and include, the lack of clarity on how labour law protections might apply to people outside a standard employment arrangement, municipal bylaws that curtail people's rights to exercise certain economic activities (for example, street vending and waste collection), and the perceived illegal status of some informal workers as squatters.

[448] International Covenant on Civil and Political Rights (1966) as well as the fundamental "core" ILO Conventions that Ghana has ratified.

[449] Constitution of the Republic of Ghana, art. 24.

In this chapter I argue that the concept of the right to the city extends beyond the narrow and technical confines of legal formalization discourse, which were especially illustrated in Chapters 2 and 3. In Chapter 2, I drew on the existing empirical literature to inform my understanding of the relational and spatial dynamics that characterize e-waste work in Agbogbloshie and argued against formalization discourse. In the current Chapter, I perform an alternative critical reading of this space as one of "cosmopolitan struggle".[450] The first section builds upon the theoretical framework introduced in Chapter 1, based on Lefebvre's concept of the right to the city. The remaining part of this chapter uses this framework to examine the Agbogbloshie e-waste market located in Accra. My observations focus on how informal communities working and residing in Agbogbloshie assert a right to the city against socio-spatial restrictions imposed upon them by the State, and how the State responds through formalist law. Hence, law is explored from a multidimensional perspective, as a political and regulatory tool that emerges from both state-imposed ideals and from informal contestation to those ideals. My analysis shows that informal people's struggle for equality in lived space is an issue much more complex than imagined under formalization discourse. Formalization strategies on their own do not contest, or even address, the globalized and localized neocapitalist structures that give rise to the profound social and spatial injustices faced by informal populations. At the heart of informal populations' cosmopolitan struggle is a challenge to dominant conceptualizations of

[450] De Sousa Santos, *Toward a new legal common sense : law, globalization, and emancipation* (London : Butterworths LexisNexis, 2002).

the ownership of land and resources, in other words, the legal paradigms within which formalization proceeds.

4.2. Spatializing Informality and Law

In previous chapters I have attempted to show that viewing informality and the international waste trade from a spatial perspective provides a portal into the "legal life"[451] that exists before and beyond formal legal spaces. Spatial awareness reveals how informal, formal and State actors produce and transform relations of justice, thereby capturing interdependencies that remain officially unrecognized. In the shift from formal legal orders to space, the geographic and interlegal aspect of justice emerges. The relevant question pertaining to informality and law transforms from traditional formalization discourse to the question of how the informal workforce "seeks spatial justice."[452]

As introduced in the first chapter, the spatial theoretical contributions of Lefebvre and De Sousa Santos embody ideas of law as emanating from lived space rather than from States. The present section builds upon this initial spatial analysis of the first chapter to show that in bridging together the spatial theories of Lefebvre and De Sousa Santos, we are able to view informality as a kind of local and global, spatial citizenship.

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[451] *Ibid*

[452] Soja *supra* note 114.

The *right to the city* as imagined by Lefebvre cannot be understood independently from his theory of space, developed mainly in his study *Production of Space* (1974/1991). Just as Santos' theory of interlegality frees law from the traditional binary perspective under which it tends to be theorized, Lefebvre's spatial theory moves space out of its historical fragmentation and binary fixing. Instead of imagining space as being *either* physical (nature, the 'real' world) or mental (logical and formal abstractions, the 'ideal' world) Lefebvre's theory affirms the interconstitutiveness of these two spatial fields and introduces a third field, social space, that is the space of human agency which subsumes both the physical and mental. Lefebvre describes social space as a "social product", the "space of society, of social life", that

> incorporates social actions, the actions of subjects both individual and collective who are born and who die, who suffer and who act. From the point of view of these subjects, the behaviour of their space is at once vital and mortal: within it they develop, give expression to themselves, and encounter prohibitions; then they perish and that same space contains their graves. From the point of view of knowing (connaissance), social space works […] as a tool for the analysis of society.[453]

Lefebvre's spatial theory is rooted in the idea that space, rather than being a passive receptacle or neutral plane upon which things happen, is a socially constituted, creatively active and politically contested site of mental and material dimensions:

> (Social) space is not a thing among other things, nor a product among other products: rather, it subsumes things produced, and encompasses their interrelationships in their coexistence and simultaneity – their (relative) order and/or (relative) disorder. […] Itself the outcome of past actions, social space

[453] Lefebvre *supra* note 116 at 33.

> is what permits fresh actions to occur, while suggesting others and prohibiting yet others.[454]

How is this triadic theory of social space relevant to the present study of informality and law? First and foremost, spatializing informality, instead of analyzing it within the narrow realms of either employment *or* housing *or* property, correlates to the actual lived experience of informality, where the separation between informality in work, shelter and access to resources, is often only imaginary. In *Production of Space* (1974), Lefebvre draws attention to the inherent linkage between labour, housing and social relations, and how these social spaces cannot be understood in isolation from each other.[455]

Secondly, Lefebvre's spatial theory emphasizes the political possibilities and element of creative appropriation within spaces of informality. Rather than framing informal populations in terms of their illegality vis-à-vis labour or housing, or as "dead capital" à la DeSoto, Lefebvre's theory emphasizes their autonomy, resilience

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[454] *Ibid* at 73.

[455] See Lefebvre *supra* note 116 at 191, where he explains that the space of work subsumes:

> "the (repetitive) gestures and (serial) actions of productive labour, but also – and increasingly – of the (technical and social) division of labour; the result therefore too, of the operation of markets (local, national, worldwide) and lastly, of property relationships (the ownership and management of the means of production). Which is to say that the space of work has contours and boundaries only for and through a thought which abstracts; as one network among others, as one space among many interpenetrating spaces, its existence is strictly relative."

See also at 86:

> "Considered in isolation [social] spaces are mere abstractions. As concrete abstractions, however, they attain 'real' existence by virtue of networks and pathways, by virtue of bunches or clusters of relationships."

and high-level social ordering. He briefly addresses informal settlements in *Production of Space*:

> "The vast shanty towns of Latin America (favelas, barrios, ranchos) manifest a social life far more intense than the bourgeois districts of the cities. This social life is transposed onto the level of urban morphology, but it only survives inasmuch as it fights in self-defence and goes on the attack in the course of class struggle in its modern forms. Their poverty notwithstanding, these districts sometimes so effectively order their space - houses, walls, public space – as to elicit a nervous admiration. Appropriation of a remarkably high order is to be found here."[456]

What Lefebvre is stating here is that informal populations continually challenge the repressive tendencies of dominant, hegemonic, State-produced or formally conceived space. Space is thus recognized not only as a political or organizational instrument of the State, but also that which makes possible the political action of counter-cultures. As evoked by Bayat's notion of "quiet encroachment"[457], the lived space of informality is beyond resistance, it does not reflect a reformatory agenda or objective, it doesn't seek to overpower or dominate State-produced space with a particular ideology. What makes this space emancipatory is that it is irreducible to a simple refusal to comply with the State or an exercise of hostility towards the State, it is in fact a liberation from legal and political restriction, "an active presence in the configuration and governance of urban life."[458] Informality, understood as a

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[456] *Ibid* at 374.

[457] Bayat (2000) *supra* note 14.

[458] Asef Bayat, *Life as Politics : How Ordinary People Change the Middle East* (Palo Alto: Stanford University Press, 2013) at 16.

representational space, embodies emancipatory possibilities and continuously shapes the everyday reality of spatial practice, as it does the abstract conceived space imagined by State authorities. Hence, the State's hegemonizing agenda, though powerful, remains perpetually incomplete:

> in addition to being a means of production [space] is also a means of control, and hence of domination, of power; yet that, as such, it escapes in part from those who would make use of it. The social and political (state) forces which engendered this space now seek, but fail, to master it completely; the very agency that has forced spatial reality towards a sort of uncontrollable autonomy now strives to run it into the ground[…].[459]

In the passage above, Lefebvre captures the tension between State and informal spheres, yet refutes the proposition that the former somehow exclusively determines the latter, or is wholly separate from it. Informality fits into the spatial triad as a *lived space*, a reflexive and emergent response to repressive or exclusionary spatializations of the State. Moreover, the interactional nature of the triad implies that informality influences, or acts back onto, spatial practice (everyday life) and representations of space (space as planned by State). This interactional analytical framework is different from traditional approaches to informality and to early conceptions of the subaltern position as either submissive or dangerous, what Bayat has referred to as the "revolutionary/passive dichotomy."[460] For instance, under the early dualist economy approach, the space of the State and the space of informality were cast as either truly distinct (Hart, 1973), or perfectly compatible (ILO, 1972). While the structuralist position recognizes the

[459] Lefebvre *supra* note 116 at 26.

[460] Bayat *supra* note 460 at 37.

existence of a relationship between State space and informal space, the underlying assumption is that informal space is planned, controlled and dominated by the State. Under De Soto's and other more contemporary theoretical approaches, the relationship between State space and informal space continues to be characterized in the context of regulatory void, where law is treated as a state-imposed ideal that should be extended to the informal, in the form of a combination of property rights, labour rights and business rights.[461]

For the UN Commission on Legal Empowerment for the Poor (CLEP), these three categories of rights, along with access to justice and the rule of law, constitute the four pillars of legal empowerment. The CLEP's prescriptive guidelines with regards to the legal empowerment of the poor operate on a simplistic assumption that the rule of law itself, as expressed through the judiciary, land and public administration systems, is neutral, fair and willing to recognize and accomodate customary and informal legalities. The underlying reasons for official legal systems' historical and continuous rejection of informal populations in urban spheres remain unaddressed. While the CLEP's recommendations to governments to repeal laws that "are biased to poor people", to encourage courts to "give due interest to the interests of the poor" and to establish "effective and impartial policing" are certainly aspirational, the magnitude of these struggles and their deeply political nature cannot be underestimated. Legalistic dispossessions of the urban poor in the name of urban

[461] See UN Commission on Legal Empowerment for the Poor, *Making the Law work for Everyone* (CLEP, 2008).

renewal constitute a systemic form of injustice that can be witnessed in developed and developing countries alike. As Harvey has noted, judgments of the Supreme Court of India have "rewritten" the Indian Constitution so that the State's obligations to protect the well being of the entire population and to guarantee rights to housing and shelter can be interpreted so as to deny compensation to displaced slum dwellers based on the "illegal" status of their occupancy, while the U.S. Supreme Court has interpreted the government's right of eminent domain so as to allow the displacement of urban residents for "higher-order" and higher-taxed land uses like condominiums.[462]

Labour law approaches to informality that stay within the confines of formalization discourse remain silent on this prevalent global trend that can be defined as the use and interpretation of law for the urban exclusion of the working poor, and the diminishing sphere of labour law in the era of globalized urbanism. Chen notes that formalization may not be "feasible or desirable" for all categories of informality, yet outlines a comprehensive approach to the formalization of informal enterprises and informal jobs, in which law assumes a regularizing and protective role.[463] The ILO has recently adopted a recommendation on 'facilitating gradual transitions from the informal economy to the formal economy.' However, as La Hovary notes, the narrow and continued focus on formalization as an objective of the global economy must be questioned, particularly in an era in which the benefits of formalization have

[462] David Harvey, *supre* note 113. At 326.

[463] See Chen (2012) *supra* note 56 at 16.

steadily, in some cases, drastically, receded.[464] The labour conditions of *formal* migrant workers in post-industrialized economies, and those of *formal* factory workers engaged in today's manufacturing economies, both illustrate that precarity, insecurity and social injustice are pervasive struggles that often persist in urban spheres despite formal recognition and thus the struggle for justice presents a deep and continuous challenge to labour law systems.

Under dominant formalization approaches, informality is largely regarded as a social reality that may be woven into the culture of law through a generous extension of the latter's protective mechanisms. Lefebvre's spatial dialectic offers an alternative to these theories, in making way for the recognition of informality as a counter-space of legal reflexivity that contains the potential to displace dominant, hegemonic spatializations of the State under neocapitalism, through the acts of spatial appropriation and participation. This *other* legal reflexivity can be seen as manifesting itself in informal populations' struggle for a right to the city:

> The right to the city manifests itself as a superior form of rights: right to freedom […] to habit and to inhabit. The right to the oeuvre, to participation and appropriation (clearly distinct from the right to property), are implied in the right to the city.[465]

Lefebvre did not envision the right to a city as formal, positivist law. Rather, as Purcell notes, his idea called for "radical restructuring of social, political and

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[464] See Claire La Hovary, "The informal economy and the ILO: A Legal Perspective" (2014) 30:4 Int'l J Comp Lab L & Ind Rel 391; Judy Fudge "Blurring Legal Boundaries: Regulating for Decent Work" in Judy Fudge, Shae McCrystal and Kamala Sankaran, eds. *Challenging the boundaries of work regulation* (Oxford: Hart, 2012) 1.

[465] Lefebvre, *supra* note 127 at 174.

economic relations in the city and beyond. Key to this radical nature is that the right to the city reframes the arena of decision-making in cities: it reorients decision-making away from the state and toward the production of urban space."[466] As such, this 'right' is not merely legal, it is a demand, a claim upon society that exceeds the legal sense. The right to the city is thus expressed through urban inhabitants' appropriation (i.e. usage) of space and through their *effective* participation in urban decision-making, in a form that moves beyond "tokenistic forms of participation and towards actual leadership, or *autogestion* (self-management)."[467] Hence, the right to the city is exercised in one's meaningful inclusion in the global reality of urban centrality:

> If it is true that the words and concepts 'city', 'urban', 'space', correspond to a global reality (not to be confused with any of the levels defined above), and do not refer to a minor aspect of social reality, the right to the city refers to the globality thus aimed at. […] To exclude the urban from groups, classes, individuals, is also to exclude them from civilization, if not from society itself. The right to the city legitimates the refusal to allow oneself to be removed from urban reality by a discriminatory and segregative organization.[468]

In Lefebvre's visualization of a right to the city, which he also describes as a "transformed and renewed right to urban life" lies the idea of legality in emergence, one that emanates from urban inhabitants to interact with the legality that is imposed by the State. As a right that is claimed and exercised autonomously of the State and of the official legal order, the *right to the city* effectively brings the

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[466] M. Purcell, "Excavating Lefebvre: The right to the city and its urban politics of the inhabitant" (2002) 58 GeoJournal 99 at 101.

[467] Butler *supra* note 456 at 145-146.

[468] Lefebvre(1996) *supra* note 127 at 195.

language of law - of rights - out of its formalist, State-centered origins. It also bypasses the limitations of disciplinary fragmentation, by surpassing, indeed ignoring, traditional categorizations and hierarchizations in rights discourse.[469] In essence, the notion of a right to the city evokes the possibility of an emancipatory mode of law as put forth by De Sousa Santos, that is, a reinvention of law that fits "the normative claims of subaltern social groups and their movements and organizations struggling for alternatives to neo-liberal globalization."[470]

Lefebvre's right to the city resonates deeply with De Sousa Santos' concept of subaltern cosmopolitanism, which aims for the extension of cosmopolitanism's "unconditional inclusiveness" to those groups that have been historically excluded from it, an "oppositional cosmopolitanism", "the cultural and political form of counter-hegemonic globalization."[471] The right to city engenders an image of "cosmopolitan legality" in that it reincarnates law "without falling into the conservative agenda."[472] My reliance on both Lefebvre and Santos' spatial sociology rests in their complementarity. While both frameworks set out what can be seen as a bottom-up approach to law and urban centrality, each one emphasizes a distinct part of the counterhegemonic struggle. The right to city emphasizes informal

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[469] For a discussion of the employment of hierarchization in international law, see M. Koskemmeni, "Hierarchy in international law: A Sketch" (1997) 8 EJIL 566; see also Tom Farer, "The Hierarchy of Human Rights" (1992) 8(1) Am U Int'l L Rev 115. On hierarchy in legal education see Duncan Kennedy, "Legal Education and the Reproduction of Hierarchy," (1982) 32 Journal of Legal Education 591.

[470] De Sousa Santos, *supra* note 450 at 446.

[471] *Ibid* at 460.

[472] *Ibid* at 443.

communities' reflexive appropriation and transformation of the urban fabric, what Bayat has captured as "social nonmovements"[473] that "interlock activism with the practice of everyday life."[474] Subaltern cosmopolitan legality entails to a globalized activism that seeks the subversion of "interstate hierarchies and borders"[475] and emphasizes linkages between culturally and geographically disparate communities. The two frameworks can be seen as concerned with distinct but related dimensions of informal communities' political action.

Interpreted broadly, beyond its Lefebvrian origins, the right to the city embodies four major political features of subaltern cosmopolitanism.[476] Firstly, the right to the city is the right of urban *inhabitants*, and as such it is not the struggle of a particular class, but of humanity. Here I depart with Lefebvre, for whom "inhabitants" specifically meant "the working class."[477] It is Lefebvre's use of the notion of "class" that must be challenged, as the majority of working people (i.e. the global informal workforce) fall outside the confines of what is generally represented as the "working class." As Purcell has emphasized, Lefebvre's idea of inhabitance can and

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[473] Bayat, *supra* note 460 at 4.

[474] *Ibid* at 11.

[475] Boaventura De Sousa Santos and Cesar A. Rodrigues-Garavito, "Law, politics and the subaltern in counter-hegemonic globalization" in Boaventura De Sousa Santos and Cesar A. Rodrigues-Garavito, eds, *Law and Globalization from Below: Towards a Cosmopolitan Legality* (Cambridge: Cambridge University Press, 2005) 1 at 13.

[476] De Sousa Santos *supra* note 450 at 460-465.

[477] Lefebvre *supra* note 127 at 158.

must be read in the broadest sense, to include identities and interests other than the working class:

> […]it is precisely the analytical and political power of the idea of inhabitance that opens up the definition of the political subject to include a range of different identities and political interests. One's class and race and gender and sexuality are all fundamental to inhabiting the city. The struggles of inhabitants against marginalization are struggles against an array of social and spatial structures against which capitalism is only one. The concept of inhabitant is not limited to a single social category – it can incorporate these diverse entities and interests because it is defined by everyday experience in lived space.[478]

With this broadened understanding of inhabitance, the right to the city begins to resemble a subaltern cosmopolitanism, as it provides an opening to address and link together the multiple dimensions of inequality including worker exploitation, the social exclusion of women, the oppression of migrants and slum dwellers and other peripheral groups.[479]

Secondly, the right to the city responds to subaltern cosmopolitanism's call for "equivalence between the principles of equality and difference."[480] Lefebvre understood the urban to be an "ensemble of differences".[481] In *Production of Space* he states:

> the spatial body of society and the social body of needs […] cannot live without generating, without producing, without creating differences. To deny them this is to kill them. […] The 'right to difference' is a formal designation for

[478] Purcell, *supra* note 468 at 106.

[479] De Sousa Santos, *supra* note 450 at 461.

[480] *Ibid* at 461.

[481] Lefebvre *supra* note 127 at 109.

> something that may be achieved through practical action, through effective struggle – namely, concrete differences. The right to difference implies no entitlements that do not have to be bitterly fought for. This is a 'right' whose only justification lies in its content; it is thus diametrically opposed to the right of property, which is given validity by its logical and legal form as the basic code of relationship under the capitalist mode of production.[482]

Butler argues that Lefebvre's concept of the right to the city does not offer any mechanisms for resisting "local exclusions of difference"[483]and thus the right to difference must be necessarily seen as a companion to the right to the city. However, under Purcell's alternative interpretation of Lefebvre, "both rights are fully intertwined, […] each presupposes and necessitates the other."[484] Indeed, unless the right to difference is understood as an inherent component of the right to the city, the latter is inevitably reduced to just another homogenizing force replacing that of the State. In the passage above, Lefebvre points directly to the violence that is engendered by the denial of difference. In essence, the opinion taken here is that the denial of difference cannot be understood as anything other than being embedded in the "discriminatory and segregative organization" of urban reality that is precisely what is challenged by the right to the city.

A third way in which the right to the city can be interpreted as a form of subaltern cosmopolitanism is the way in which it makes room for multiple and different proposals for resistance - in other words, for urban inhabitants' self-management –

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[482] Lefebvre *supra* note 11 at 396.

[483] Butler, *supra* note 456 at 152.

[484] Mark Purcell, Review of Butler (2012) in Society and Space. Online: <http://societyandspace.com/reviews/reviews-archive/2799-2/>

thus supporting a horizontal democracy. In the same way that subaltern cosmopolitanism aims for "the constitution of a counter-hegemonic globalization encompassing several worlds, several kinds of social organizations and movements and several conceptions of social emancipation"[485] Lefebvre's spatial dialectics aim for a *differential space* that "nurtures and accentuates social differences, […] emphasizes appropriation rather than domination,"[486] thus overcoming the homogeneity of the abstract space that is envisioned by the State:

> By seeking to point the way towards a different space, towards the space of a different (social) life and of a different mode of production, this project straddles the breach between science and utopia, reality and ideality, conceived and lived. It aspires to surmount these oppositions by exploring the dialectical relationship between 'possible' and 'impossible'.[487]

Lastly, subaltern cosmopolitanism and struggles for the right to the city share a fourth political dimension, in that neither endeavor can be reduced to the simple mobilization of a unified theory or overarching system that aims for a specific "end point or final stage."[488] Both De Sousa Santos and Lefebvre use the open-ended metaphor of "horizon" to describe the direction of struggles for the right to the city and of subaltern cosmopolitanism, respectively.[489] This is remarkably different from the formalization discourse of De Soto for example, that aims to bring informal

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[485] Boaventura De Sousa Santos, "The Counter-Hegemonic Use of Law in the Struggle for a Globalization From Below" (2005) 39 Anales de la Cátedra Francisco Suárez 421 at 439.

[486] *Ibid.*

[487] Lefebvre *supra* note 116 at 60.

[488] De Sousa Santos *supra* note 450 at 463.

[489] *Ibid* at 462; Lefebvre *supra* note 116 at 423.

populations within the propertied sphere, without questioning the internal limitations or underlying philosophies of this sphere.

In essence, Lefebvre's idea of a right to the city interpreted as a form of subaltern cosmopolitan legality offers a novel basis from which to explore the emancipatory linkages between informality and law. The notion powerfully suggests that the existing power structures and laws of the urban world are transformed through political struggles over inhabitance and participation. Using the right to the city as an analytical framework in the study of informality brings to light the conflicts and compatibilities between the legal space that is sought for by informal populations and the legal order that is envisioned by official authorities. While formalization frameworks understand law in terms of social protection and regulation, and then attempt to bring the informal into the scope of law, understanding informality as a struggle for the right to the city reveals law as it is lived and claimed through human agency and on the terms of informal populations.

In the analysis below, the transnationally-linked and multidimensional space of Agbogloshie, where controversial forms of informal e-waste processing take place, is explored beyond the context of formalization, as a place of "cosmopolitan struggle." This widened perspective surpasses the binary deadlocks of illegality and legality, formality and informality, revealing a lived interlegality that emerges from informal populations' resistance to the globalized and localized neocapitalist

structures and legal paradigms which give rise to the social and spatial injustices they face.

4.3. Reframing Agbogbloshie: Cosmopolitan Struggle

Interestingly, most studies on Agbogbloshie's e-waste economy do not substantially engage with the socio-spatial or environmental history of Agbogbloshie prior to the e-waste sector's emergence in the mid-2000's, or with the relationships between the e-waste sector and other informal trading sectors in Agbogbloshie. In this section I build on the argument presented in my discussion of Agbobgloshie's e-waste economy in Chapter 2, according to which the limiting lens of the formalization framework does not give ample consideration to the deep political and structural obstacles that fuel inequalities experienced by the informal population working and residing at Agbogbloshie. I look into the history of Agbogbloshie to show that it constitutes a place that has always been a site of cosmopolitan struggle, and that the informal e-waste sector cannot be seen as immune to, or separate from, this struggle. The informal community's ongoing struggle for urban citizenship runs much deeper than the formal recognition of their work activities.

Historically, and even today, the Government's official spatial plans for Agbogbloshie are rooted in the expulsion of the population that began to settle there in the 1990's. Even though formal interventions to improve the working conditions of e-waste recyclers provide an immediate channel for the prevention and minimization of occupational health harms, they nevertheless constitute immediate, instrumentalist solutions that fail to engage with the deeper problematic at the

source of informal sector growth and insecurity, which is the restricted urban citizenship of informal communities.

The proceeding discussion of Agbogbloshie reveals that in the interest of satisfying neocapitalist interests the administrative system continuously represses the informal population that has come to claim this urban periphery as their place of life and work. Through the deployment of administrative and judicial strategies that restrict urban inhabitation and participation rights, State authorities have continuously reinforced the precarious and dangerous everyday life experience of this community. Informal e-waste workers are a new sub-section of a marginalized population that environmental legislation and 'sustainable development' planning have, for decades, excluded from their realms of social protection and economic benefit. None of the currently proposed formalization strategies resolves the restricted land and resource rights that shape the life of informal e-waste workers and the rest of the Agbogbloshie population. The formalization framework on its own possesses little capacity to deal with these issues of systemic social and environmental injustice.

The history of Agbogbloshie shows that both strategic environmentalism and the deployment of the notion of "public interest" have been utilized by official authorities to advance a profit-driven urban development agenda. The urban space of Accra and its peripheries, as conceived by the State, have never included a legal space for the informal working poor. Instead, environmentalism and urban

beautification have served as motivational bases for the government to repress informal populations' right to inhabit and to participate in the places where they live and work.

Struggles over Agbogbloshie between official authorities and residing communities date back to the colonial period and follow through to the current era. When the Government acquired the land in 1961 from the Korle and Gbese stools "in the public interest for development purposes" under the *Accra Industrial Estate (Acquisition of Lands) Ordinance no. 28 (1956)*, the area was allocated to the brewing, food processing, auto repair and light industries.[490] Through soil dredging, the government was able to recover flooded land along the Odaw river, some of which was designated for government use and the rest, including Old Fadama, was left unused. Waves of internal migration to the area began in 1991, as a direct result of the Accra Metropolitan Assembly's (AMA) urban governance agenda, which included "decongestion exercises" to eliminate informal traders from Accra's central business district.[491] In 1993, following the AMA's relocation of Accra's yam market to Agbogbloshie, population in the area continued to rise as workers from the underemployed food-producing North migrated to fulfill the extensive needs of the growing market.[492] Other contributors to the growth of Agbogbloshie and Old

[490] R. Grant, "Out of place? Global citizens in local spaces: A study of the informal settlements in the Korle Lagoon environs in Accra, Ghana" (2006) 17:1 Urban Forum 1.

[491] Center on Housing Rights and Evictions, *A Precarious Future: The Informal Settlement of Agbogbloshie, Ghana* (COHRE, 2004).

[492] *Ibid.*

Fadama settlements include tribal conflicts in Northern Ghana in 1995, rising costs of accommodation in Accra throughout the 1990's which forced poorer segments of the population to the city's peripheries, and sporadic "decongestion" exercises undertaken by the AMA to clear street hawkers from the central business district.[493]

The government's implicit acceptance of informal settlement in Agbogbloshie and Old Famada as part of its solution to "modernizing" the capital city came to end with the realization that the coastal and immensely polluted parcel of land contained immense economic potential if it were rehabilitated and developed for the tourism industries. From this point onwards, the AMA has actively sought to evict the informal population living and working in Agbogbloshie and Old Fadama. Hence, the decongestion exercise has spread, from the urban to the urban periphery with the Government's ever-expanding quest to recover and commodify space.

In the late 1990's, the Government of Ghana, supported by international partners, embarked on the multimillion-dollar[494] Korle Lagoon Ecological Restoration Project (KLERP) to rehabilitate the lagoon, restore its natural ecology and develop it into a "major tourist attraction."[495] This project has come in direct confrontation with the

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[493] *Ibid* at 21.

[494] The Government of Ghana received initial funding of $73 million from the OPEC fund for international development, the Arab Bank for Economic Development in Africa and the Kuwait Fund for Arab Development. An additional $48 million in funding came from the Belgian Government and a loan from the Standard and Charter Bank of London. See Grant *supra* note 491.

[495] K.O. Boadi and M. Kuitunen, "Urban waste pollution in the Korle Lagoon," (2002) 22 The Environmentalist 301.

urban inhabitation and participation rights of the informal communities in Agbogbloshie and Old Fadama. In this cosmopolitan struggle, official authorities have used environmental, economic and legalistic arguments to justify the eviction of so-called "illegal" communities. It is against this backdrop of an intense battle for space and political recognition that an informal e-waste industry has emerged. The language of formalization is not broad enough to capture the challenges to dominant legal conceptualizations of land and ownership that are embodied in this battle for space. The role of law in the cosmopolitan struggle over Agbogbloshie is explored in the section below and serves to inform my subsequent revisitation of the informal e-waste sector in the final part of this chapter.

4.3. The Battle of Dispossessions: Land and (Waste) Resources

The spatial struggle that underlies the informal e-waste economy can only be understood by looking into the history of Agbogbloshie and Old Fadama. By the 1990's, when informal settlement in the area was only in its infancy, the Korle lagoon and Odaw river had become highly polluted due to decades of uncontrolled waste dumping to which the AMA silently acquiesced, and even contributed directly, through its lax enforcement of environmental legislation and detrimental siting of waste dumps. References to the lagoon's highly polluted state date as far back as the 1960's.[496] Due to poor, and in most places nonexistent, municipal and industrial waste management infrastructure, it had become regular practice for all

[496] Edusei, Krobo (1963), *Korle Lagoon Project Official Opening,* Ghana Public Records and Administration Archives, cited in Debbie Onuoha, "Decongesting Accra" (2014) 7 The Johannesburg Salon 123.

manufacturing industries located in the Accra area to dump their waste, including chemical effluents, asbestos sludge and hazardous dyes directly into the lagoon.[497] The lagoon also served as a dumping area for all of Accra's municipal wastes and mortuary waste from the Korle Bu Teaching Hospital.[498]

Strikingly, despite clear evidence that the Korle lagoon's "death" was caused by several decades of the government's mismanagement of industrial and municipal wastes, the Government, its industry partners and even some researchers nevertheless pinpoint poverty as the primary cause of pollution, signaling out in particular "Sodom and Gomorra."[499] There has never been any attempt by the government authorities implicated, or their industry partners, to quantify the pollution load of the informal settlement *in comparison to* the pollution load of formal institutions located in the area. Nor has there ever been any serious consideration of socially inclusive alternatives to eviction. The government has forged onwards with its exclusionary urban development agenda even though a 2003 study commissioned by the Geneva-based NGO Centre on Housing Right and Evictions (COHRE) demonstrated that the successful rehabilitation of the lagoon was not dependent upon the eviction of Agbogbloshie residents. Furthermore, COHRE's study also pointed out that the Environmental and Social Impact Statement (conducted by a Belgian consulting firm) upon which the KLERP project was based, had been carried out in a manner that unjustly responsibilized the Old Fadama

[497] Boadi and Kuitunen *supra* note 497.

[498] *Ibid*

[499] *Ibid.* See also, COHRE *supra* note 493.

community for the extensively polluted state of the lagoon.[500]

The existence of the informal settlement continues to be officially regarded as entirely incompatible with the KLERP. A recent report of the Ministry of Local Government and Rural Development bluntly emphasizes the clear economic rationale for eviction:

> The second phase, which includes landscaping and the construction of canals has been completed. However, the existence and activities of Old Fadama (Sodom and Gomorrah) pose great difficulties for the continuation of KLERP. The cost of dredging is expensive (approximately US$85million) and it is therefore important the further dumping of wrecks and waste is prohibited in the area. It is in this light that measures are currently being made to remove the people of Sodom and Gomorrah, a squatter settlement near the project area.[501]

It is worth noting that the government's solution to ending waste dumping into the lagoon lies in eviction, rather than the provision of waste, sanitation and other essential public services to Agbogbloshie residents. While the AMA insists that Agbogbloshie residents refrain from dumping waste into the lagoon, it also adamantly refuses to provide the community with waste bins.[502] Spatial plans conceived by government simply do not envision Agbogbloshie residents as equal urban citizens. However, the community has been relentlessly counter-resisting the

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[500] *Ibid* at 7.

[501] Government of Ghana, MLGRD, December 2012 Environmental and Social Management Framework for Sanitation and Water Project for Greater Accra Metropolitan Area (GAMA) Report at 19.

[502] Onuoha *supra* note 498 at 129.

State's politics of non-recognition for over a decade.

4.3.1. Formal Law vs. the Living Law

Having been served with its first eviction notice on May 28, 2002, the Old Fadama community, assisted by the Accra-based NGO Centre for Public Interest Law (CEPIL), legally challenged the eviction notice at the Accra High Court. The community argued that because their claims for resettlement or compensation had been ignored, the eviction violated their fundamental constitutional human rights to life and to human dignity, as well as their rights to work, shelter and housing.[503] They also invoked the South African *Grootboom* case in support of their application, a groundbreaking decision in which it was essentially ruled that the constitutional rights of squatters could not simply be undermined due to the illegality of their status.[504]

The Accra High Court upheld the eviction without resettlement or compensation, insisting that as "trespassers," the Old Fadama community held no rights to the land and by that rationale, they were not entitled to resettlement or compensation. Not only did the Court misinterpret the *Grootboom* case, it compared the relationship

[503] Fundamental human rights and freedoms are guaranteed under Article 12(1) of the Constitution of Ghana. The community also invoked Article 23, which requires that administrative decision-making be fair and reasonable, and Article 33 which requires Courts to ensure Fundamental Rights.

[504] *Govt. of South Africa et al.* vs. *Irene Grootboom et al.*, Constitutional Court of South Africa, Case CCT 11/00, 4 October 2000.

between State authorities and Old Fadama citizens as one of licensor and licensee:

> Even when a person has been permitted or given a license to occupy any premises, that permission or license is at the mercy of the owner or licensor who is at liberty to recover the premises as and when needed.[505]

Using this analogy drawn from private law, the Court effectively legitimized the government's decision to suddenly halt its decade-old permissive approach towards informal settlement in Old Fadama. Troublingly, the Court's conclusions appear to ignore the fact that the relationship between public authorities and citizens, with respect to the protection of constitutionally guaranteed fundamental human rights, is not the same as the relationship between *equal* contracting parties under private law. In essence, the Court legitimized the permanent state of transiency of Old Fadama citizens, in its bid to uphold the State's power over public land.

By emphasizing that State authorities were not obliged to provide shelter or housing to illegal occupiers, the Court essentially condoned the idea that the State's responsibilities to protect the fundamental human rights of its citizens could be curtailed on the basis of their lack of legal title over public land. For the Court, lack of legal title translates inhabitance to illegality, at all times, irrespective of the history of the space and of the urban planning decisions that shaped it. Using the language of "invasion" and "lawlessness" and referring to Old Fadama citizens as "wrongdoers" and "nothing but trespassers", the Court denies the living law that

[505] *Supra* note 154 at 12.

unfolded over time[506] and under government acquiescence[507] to give rise to a vast and highly organized informal settlement of tens of thousands of people actively contributing to Accra's economy. The Court entirely dismissed the applicability of Ghana's Limitation Act (1972) under which Old Fadama citizens may have acquired rights to the land through the doctrine of adverse possession.[508]

The legal outcome of this dispute brings to light two key concerns. First, it points to a subordination of fundamental socioeconomic rights to private legal claims, neoliberalized legal thinking that draws out the innate tension between informal communities' right to the city and formalized notions of land and property. Second, and more importantly, the decision reinforces the view that despite international human rights norms and fundamental Constitutional guarantees, legal institutions are hesitant to interpret informal individuals as lawful citizens, or to read their resistance into the law.

4.3.2. The Living Law goes on

Despite their illegality having been reinforced by the judicial system, the Old Fadama community continued to pursue its battle for legitimacy through their continued occupation of the space and by advocating for their socioeconomic rights in extra-legal transcalar spheres. Their community scaled up its local battle for

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[506] Informal settlements were identified in Old Fadama as early as 1952. The current settlement is usually dated back to the 1990's, although some researchers date it back to the 1980's.

[507] See Grant, *supra* note 492 at 10.

[508] Atudiwe Atupare, "Reconciling Socioeconomic Rights and Directive Principles with a Fundamental Law of Reason in Ghana and Nigeria" (2014) 27 Harv Hum Rts J 71.

urban citizenship to the global level by aligning itself with COHRE, Slum Dwellers International and UNHABITAT in addition to creating the Slum Union Federation of Ghana.

Rigorous internal organization within the community, combined with an increased global awareness of Agbogbloshie through the implication of high profile international human rights actors such as UNHABITAT eventually compelled the Government to come up with a resettlement and compensation plan. In 2006, the Government announced that it had secured 10 million euros from the KBC Bank of Belgium to resettle the community as "necessary extension work" to the KORLE project.[509] However, the resettlement process itself has triggered a new wave of contested displacements[510] and the Old Fadama community has only been minimally engaged in determining the resettlement process, due to structural obstacles both within the community and outside it.[511]

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[509]The Statesman, "Government finds 10m Euro for Sodom and Gomorrah resettlement" Friday, July 21 2006 cited in Slum Dwellers International, "A Decade of Struggles and Lessons in Old Fadama" (8 November 2011). Online < http://sdinet.org/2011/11/a-decade-of-struggles-and-lessons-in-old-fadama/>.

[510] See Ghana TV3 Network, "Vanderpuije: There's no place to resettle displaced Sodom & Gomorrah residents" (24 June, 2015). Online: < http://tv3network.com/all-news/news/local/vanderpuije-there-s-no-place-to-resettle-displaced-sodom-gomorrah-residents.html>; Ghana, Atinka News, "CSIR secures court injunction on Sodom & Gomorrah land at Adjen Kotoku" (26 June 2015) online: <http://www.atinkaonline.com/index.php/politics/atinkanews/2180-csir-secures-court-injunction-on-sodom-gomorrah-land-at-adjen-kotoku.html>

[511] See Frederick Ato Armah, David Oscar Yawson & Alkan Olsson Johanna, "The Gap Between Theory And Practice Of Stakeholder Participation: The Case Of Management Of The Korle Lagoon, Ghana" (2009) 5:1 Law, Environment and Development Journal 75. The authors cite ineffective information flows between the AMA and the community, as well as within the community itself, as obstructing Old Fadama residents' participation in the policy cycle.

Over the last decade, the government's position on Agbogbloshie and Old Fadama has arbitrarily fluctuated, going from various attempts at forceful eviction and demolition through "dawn sweeps", to advocating for a more "humane" stance through negotiation and participation in decision-making[512] and back again to renewed campaigns for eviction and swift relocation.[513] All the while, the illegal status of the growing community and their permanent states of transiency and insecurity remain unchanged.[514]

While the conceived law of the State imagines the population as illegal, the lived law of Agbogbloshie conceretely manifests itself as an interlegality. The State refuses to acknowledge the urban citizenship of the community, by denying them essential public services like sanitation, waste disposal, electricity and water. The community is entirely self-reliant in these areas.[515] And yet, Agbogbloshie traders pay taxes and

[512] Ato Armah et al note that in 2007, civil society organizations within the community began playing an active role in KLERP policy implementation. *Ibid.*

[513] The last "official" renewal of the eviction order was in 2009. The latest 'sweep' occurred on 20 June 2015. See Josh Lepawsky and Grace Akese "Sweeping Away Agbogbloshie Again" Discard Studies: Social Studies of Waste, Pollution and Externalities. Online: <http://discardstudies.com/2015/06/23/sweeping-away-agbogbloshie-again/>

[514] Accra Metropolitan Assembly, *Slums upgrading document* (Accra: AMA, 2013). In this government document Agbogbloshie market and Old Fadama are classified (i.e. zoned) as "insecure" and "illegal".

[515] See Mariama Awumbila et al, *Can Rural-Urban Migration into Slums Reduce Poverty? Evidence from Ghana*, Working Paper 13, Migrating Out of Poverty Research Programme Consortium (2014) at 19.

vote like other Ghanaian citizens.[516] While some slums in Ghana have been granted legal recognition and transformed into municipalities, the looming profitability of the coastal space of Agbogbloshie and multimillion-dollar foreign investment into the area have destroyed any such inclusive possibilities for the residents of Agbogbloshie.

In February 2014 the AMA began relocating traders from Agbogbloshie's food market to the remote area of Adjen Kotoku, 35 km northwest of Agbogbloshie. The relocation places these informal commercial traders substantially farther away from the urban node of Accra on which their livelihoods depend, introducing new transportation and housing costs which are bound to strain their incomes further. Unsurprisingly, the municipal authorities involved have clearly stated in the media that the relocation is for commercial purposes only, and that no residential accommodations will be provided to the displaced traders.[517] Once again, the refusal of municipal authorities to acknowledge the housing and shelter needs of informal traders is reflective of the continued denial of their full urban citizenship.

4.3.3. Contesting Ownership of Land

The vast majority of Old Fadama and Agbogbloshie residents continue to resist their displacement. For decades now, they have undermined institutional forms of spatial

[516] Frederick Ato Armah, Local Participation in Water Resource Management: Case Study of Old Fadama Community, Ghana. Master of Science Dissertation (Lund University: May 2008) at 37 - 39.

[517] SpyGhana, "AMA relocates Agbogbloshie market", January 30, 2014. Online: <http://www.spyghana.com/ama-relocates-agbogbloshie-market/>.

organization, albeit in a permanent state of social and economic insecurity. By establishing and funding their own advocacy organizations, and investing in the upgrading of community infrastructure - in Lefebvrian words, through their high-level *autogestion* of the occupied space - the community incessantly battles its victimization and State-perceived "lawlessness", never ceasing the demand for recognition and inclusion. Their refusal to be removed continuously reshapes and rewrites the space of the urban economy.

The right to the city they claim against the law of the State does not neatly translate to formal recognition, regularization or increased social protection. At the core, their claims challenge both the contemporary property law of the State and the customary land law, official paradigms under which they remain illegitimate, devoid of even constitutionally protected human rights. Their struggle for a right to the city effectively confronts the State's traditional legal paradigms according to which access to land is determined by either indigenous birthright or the power of capital accumulation. It is impossible to capture this struggle within the confines of formalist law, or formalization discourse. James Holston introduces the notion of insurgent citizenship to describe oppositional stances to *space* and *citizenship* as conceived by the State. Ideas and practices of insurgency as a means of claiming rights and asserting legitimacy essentially contest the "modernist political project" rooted in the positivist law doctrine, according to which "the state is the only

legitimate source of citizenship rights, meanings and practices."[518] The "insurgent citizenship" of Old Fadama and Agbogbloshie communities is not rooted in state law or formal conceptions of law. Their continued occupation and shaping of the land is a direct and inescapable challenge to law as conceived and implemented by State authorities.

4.3.4. Contesting Ownership of E-Waste

E-waste recycling, which is quite possibly the most recent and lucrative trading activity to emerge within this contested public space, challenges the State's utopian spatial agenda far beyond the issue of land. The other spatial claim of Old Fadama and Agbogbloshie recyclers is over the ownership of waste resources, the "goods" upon which their livelihoods are based. Unlike Agbogbloshie's food and timber traders, who deal in what can be easily considered as non-controversial commodities, Agbogbloshie's e-waste workers deal with highly coveted waste, which contains valuable and non-renewable metal resources. Their implication in the e-waste industry and effective command over urban waste resources directly challenges the State's prospective agenda to eliminate the longstanding social claim of the informal sector over waste resources. As metals become scarcer and in higher demand, the proprietorship of wastes that contain precious metals becomes a point of controversy. Informal sector appropriation of e-waste clashes with the interest of global manufacturers of ICT and other electrical and electronic equipment, who are

[518] James Holston, "Spaces of Insurgent Citizenship" (1998) Making the invisible visible: A multicultural planning history 37 at 39.

continuously being pressured by national governments to take on environmental responsibility of their wastes from "cradle to grave." Expanding global trends towards the privatization of resources and shifting perceptions of waste from trash to resource, introduce a new vulnerability to the continuity of informal waste economies. Here again, formalization discourse that emphasizes the integration of the informal e-waste sector into the formal sphere does not go so far as to questioning the legal paradigm of privatization within which formalization is likely to proceed.

Taking into consideration the unequal urban citizenship of Agbogbloshie residents and traders, it becomes possible to see the innate limitations of current efforts to link informal e-waste recyclers with formal stakeholders. The very existence of the scrap yard and the informal sector's effective control over e-waste resources defy official, planned, utopian visions of 'sustainable development'. The AMA seems willing to treat the scrap yard as a temporary semi-formalized workspace, and while the arrangement benefits authorities in terms of rent collection and revenue generation, this form of "recognition" does not translate into anything beyond a highly spatially restricted and precarious form of urban citizenship for the informal recyclers. As discussed in Chapter 2, the continued precarity and insecurity of informal e-waste workers is enshrined within Ghana's E-waste Bill.

Unlike the food and timber traders at Agbogbloshie, the scrap traders are not set for relocation. Collaboration between the informal sector and local authorities,

international and local NGO's, academic research communities and industry stakeholders on various pilot projects that attempt to minimize the occupational health hazards of Agbogbloshie's e-waste recyclers, has not changed the unequal citizenship and officially "illegal" status bestowed upon this informal community. Along the same lines as KLERP, which essentially commodifies public space, expropriating it from its informal occupants, the government's draft legislation for e-waste management seeks, in the long term, to eliminate the informal sector's centrality and dominance in urban mining. The informal sector retains a physical stronghold within the system, but conceptually remains outside it. In essence, global capitalism and the informal e-waste economies contest each other over the proprietorship of waste resources. The strength of the informal e-waste economy to access waste means that recyclable resources are diverted away from the formal networks of multinational companies that have introduced these materials into the market as commodities, and that have increasing financial and legal interests to recuperate them at end-of-life.

Over the years, Agbogbloshie's informal e-waste workers have gained global visibility and are today actively engaged with various transnational actors, universities, intergovernmental organizations and national environmental authorities in projects that aim to create a sustainable e-waste recycling economy. In 2016, Ghana's EPA announced plans to strengthen the country's capacity to manage e-waste sustainably by establishing e-waste collection points and treatment facilities through funding received by the European Union, and implementation

cooperation from UNEP and the University of Cape Coast. The EPA estimates that the implementation of what is known as the HANISA e-waste model will create 320 jobs in e-waste management.[519] It remains to be seen to what extent these multistakeholder and multiscalar cooperative efforts influence legislative development on e-waste management. What kind of integration is being spatially nurtured between governmental, non-governmental, formal and informal actors, and how will these interactions relate to the official legal framework that is eventually adopted?

At the moment it is impossible to say whether this initiative is an alternative to, or whether it simply reinforces, the exclusive system that has been envisioned under Ghana's Draft E-waste Bill. A close study of the practical operationalization of this and other pilot e-waste management initatives that aim to integrate the informal sector into sustainable recycling chains will, over time, provide us with critical insight into the meaning, actualization and evolution of legal empowerment in the context of informal e-waste workers.

4.4. Demands and Horizons

The living and work conditions of Agbogbloshie's informal traders illustrates the inherent limits of the formalization thesis in a context of unequal urban citizenship. Although the people inhabiting this space are *de jure* citizens of Ghana, their migrant

[519] Seth J. Bokpe, "EPA, others to set up e-waste recycling facility" Graphic Online, 31 March 2016. Online at: < http://www.graphic.com.gh/news/general-news/epa-others-to-set-up-e-waste-recycling-facility.html>.

identities, ethnicity, education status and severe poverty lead to an inegalitarian citizenship that is legitimized through the Court, the popular media, and government policy. While, at best, formalization efforts would see these workers recognized as unionized or collectively organized wage workers, critical labour law scholarship reminds us to structure the formalization discourse carefully so as not to undermine the politicized nature of place, the entrenched marginalization of certain social groups and occupations, and the pervasive uncertainty of the labour market that condition the world of work.[520]

Prospective regulation of Ghana's e-waste industry sets out to abolish working practices of the informal sector that are deemed hazardous to public health and the environment, but falls short of recognizing the informal sector as equal stakeholders in waste management. In fact, the E-waste Bill provides the State with greater control over space and new *insurgent* powers to seize places and criminalize actors along the urban waste chain.

In viewing waste planning as primarily a technical and organizational issue, formalization discourse skips over the primordial matter raised by informality, which is the need to legitimate and deepen alternative, *oppositional* citizenships in the urban world. States and their industry partners prefer to talk about, dream

[520] Kamala Sankaran *supra* note 72; A. Blackett, *supra* note 80; A. Blackett, "Situated reflections on international labour law, capabilities, and decent work: The case of *Centre Maraîcher Eugène Guinois*" (2007) *Revue québécoise de droit international* 223; Harry Arthurs, "Labour Law without the State" (2007) 46:1 UTLJ 1.

about and manage waste systems in a way that excludes the issues of wealth distribution and health inequities along the urban-based and globally-linked recycling chain. Although I have used the example of Agbogbloshie, there are a plethora of examples to show that formalization under unequal urban citizenship perpetuates vulnerability and marginalization of already socially stigmatized occupational groups.[521]

Despite their exclusion from the legal sphere, it would be false to state that the voice of the Agbogbloshie recycling community is not being heard. Through their sustained exercise of a right to the city and subaltern cosmopolitanist strategies, Old Fadama citizens have formed a transnational community in support of their struggle. The informal e-waste sector is actively engaged in the development of new multi-stakeholder, cross-scalar initiatives that aim to find alternatives to harmful recycling practices in order to improve community and environmental health. Still there remain many unknowns. To what extent their "common" voice reflects the most vulnerable workers in the chain, or women that work in the scrapyard selling hammers and chisels to recyclers, or the vast number of recyclers that do not pay membership dues to the GASDA, remains unknown. In addition to the power relations in what is generally recognized as the recycling chain, there is a substratum of power relations within the informal world, involving informal

[521] See for example, Barbara Ehrenreich and Arlie Russell Hochschild, *Global woman : nannies, maids, and sex workers in the new economy* (New York : Metropolitan Books, 2003); Laurie Berg, *Migrant rights at work : law's precariousness at the intersection of immigration and labour* (New York: Routledge, 2016).

stakeholders who may be vertically or horizontally integrated into the sector, yet whose voices remain absent in formal understandings of the recycling chain. Alternatively, the concept of a right to the city makes way for a multifaceted solidarity that surpasses disciplinary and sectoral fragmentations.

To ponder the "formalization of the informal" is not to question the underlying political and economic dynamic of the recycling world, or to question the hierarchical organization of, or the distribution of wealth and environmental hazards along globalized cycles of production, consumption and reproduction. Ultimately, formalization discourse remains within the neoliberal capitalist framework that reinforces social and spatial injustices. Formalization discourse also remains bound by the ever-tightening limitations of labour law and its failure to embrace certain forms of labour as work. However, under the spatial claim for a right to the city, work becomes emancipated from the wage-labourer ideology. The possibility to transform work into alternative, oppositional forms of productive solidarity depends largely, if not exclusively, on peoples' access to, and control over, the land and resources on which their livelihoods depend. In this way, the concept of a right to the city provides a horizon towards another kind of urbanism, one that is embedded in the autonomy of people and place rather than in neoliberal relations.

It is likely that structural injustices that lead to geographically uneven development and to the oppression of informal economies cannot be resolved by propping the marginalized into formally-recognized positions at the bottom of the mainstream

global economy as visualized by the State; they require a redefining, a reversal, of dominant conceptions of the mainstream. This reversal also requires a concomitant reversal of traditional understandings of legitimacy as being exclusively determined by the State. The people that live and work in Agbogbloshie challenge the closure of the legal system and the normative space of the State. What kind of law then can emancipate people from social and environmental injustices? It has been suggested here that the solution lies in law that enables people to shape the places they live in, that flows from people inhabiting, participating and transforming urban space. The right to the city decenters legitimacy from the State, bringing it into the reaches of humanity, locating it not in revolution or violence, but in the "art of presence."[522] While the goals of formalization remain trapped in dominant neoliberal ideologies of work and social inclusion, the concept of the right to the city envisions the living law of marginalized workers as a counterpower to the State's insurgency over space that is propelled by its exclusionary legal utopia. Formalization, at its most progressive, leads us to think about the boundaries of law, encouraging us to invite people into those boundaries. Urban citizenship forces us to think of a radically different law, that is not a definitive boundary set by States but rather beginnings of ropes that human communities themselves are constantly in the process of weaving, linking, constellating and propelling outwards in spontaneous, creative and limitless ways.

[522] Bayat, *supra* note 460.

CONCLUSION

As pervasive computing and planned obsolescence continue to propel the already massive generation of electronic waste (e-waste) worldwide, we are faced with ever more critical environmental and human health impacts. The question of how to share resource wealth tied into toxic waste streams that flow in the *always higher tech* anthropocene, has woven global justice discourse into a deep constellational web.

Today's urban waste streams embedded with both precious and toxic resources circulate the globe, creating a multibillion-dollar globalized waste-resource value chain. This chain implicates society as a whole: citizens, consumers, multinational corporate actors and their subcontracting networks, as well as informal recycling economies made up of the most marginalized subaltern communities. The flow of e-waste across borders is a contentious environmental justice issue, governed by international and regional trading regimes as well as various bodies of environmental law. These regimes have been fixated upon the technical trading aspects of e-waste's globalization, refusing to venture into the issue of the unjust social relations and organizational configurations that are supported and maintained by the liberal flow of waste 'goods' around the world. Issues of governmental repression and inequality between hegemonic and non-hegemonic social entities engaged in the waste economy are overlooked, superceded by

concern over the mobility of materials, their *transboundlessness*, their *placelessness*. It is informal recyclers along this lucrative value chain and their communities that assume the most acute health risks of global hi-tech production, consumption, disposal and *reproduction*. As such, the persistent growth of the informal e-waste economy has evolved into a salient concern on global regulatory agendas. Still, the linkage of law and informality appears somewhat of a paradoxical project as informal workers have been *structurally* outcasted from the world of law.

Contemporary waste governance paradigms, in refusing to recognize and institutionalize the participation, engagement and livelihood concerns of socially and culturally outcasted waste communities, have led to a grossly imbalanced and environmentally unjust *globalization of e-waste*. The asymmetry of the global recycling economy forces us to re-examine the emancipatory role of law. The present work was undertaken in order to enhance our understanding of whether the expansion of law to informal spheres of the economy could lead to an effective empowerment of informal workers. The forefront objective was to determine who contributes to shaping new and forthcoming legalisms. My examination of international law relevant to the global circulation of electronic waste revealed that environmental justice is translated into the international legal sphere as the protection of human health (with an emphasis on developing countries) against hazardous waste flows, and is addressed within these regimes to the extent desired by State authorities and hegemonic industry actors. It is these specific actors that determine the substance, scope and direction of *waste justice* in multilateral realms.

Evidently, informal communities ever-present at the base of the global waste-resource economy are marginalized within these international legal realms.

Through a case study of Ghana's informal e-waste economy, I argued that social and environmental injustices linked to informality are not resolved by bringing informal populations under the "Law", through expanded regulation or social protection. Under dominant legal empowerment approaches, informality has been treated as a social reality that may be laced into law through the process of formalization. Legal empowerment of the poor is envisioned in the form of various combinations of labour rights, property rights, and business rights. I argued for a re-visitation of these State-centric understandings of legal empowerment, as they undermine the brutal legacy of the State's complicity in marginalizing the urban poor.

As argued in the first chapter, conventional framings of legal empowerment found within the current literature on informality fail to give full consideration to the importance of identifying the voice and place of informality in shaping the legal world. Conversely, the idea of spatial citizenship, inspired by Henri Lefebvre's concept of a *right to the city*, offers an alternative to existing legal empowerment theories, in embracing informality as a counter-space of legal reflexivity that displaces dominant, hegemonic spatializations of the State, through the acts of spatial appropriation and participation. Chapter Four explored how this *other* legal reflexivity could be seen as manifesting itself in informal populations' struggle for a right to the city, in other words, their social claims over urban space and resources.

It was ultimately proposed that the notion of spatial citizenship provides a social and environmental justice apparatus surpassing ideological limitations of legal formalization discourse, and presenting the epistemological transformation necessary to rework the longstanding conceptual opposition between informality and law.

Throughout this work I have argued that the prevalent discourse on informality, which centres upon the idea of formalizing the informal through State-led legal empowerment, does not challenge the structural forces that lock the informal economy into places of oppression. I have offered an alternative, spatially-informed discourse of legal empowerment. I have insisted that we need to anchor our understandings of legal empowerment in the spatial citizenship struggles of informal communities because the denial of urban space is a fundamental social and injustice faced by marginalized populations that conventional legal solutions such as the "formalization of the informal" are unable to address in any transformative way. In decisions related to the distribution of wealth and risk from globally-produced, globally consumed and globally re-produced resources, the culture and interests of non-hegemonic as well as counter-hegemonic actors must necessarily be considered and moreover, they must enjoy the same respect and privileges as the culture and interests of those who dominate the global economic sphere.

State law has never recognized or respected the identity or culture of subaltern communities and so it is perplexing that a thick stream of literature unanimously

and unquestioningly converges on the need to "formalize the informal" by inviting informal populations under law's great protective embrace. In reality, the professional institution that is law has never resonated with the informal public. And by keeping our focus on the formalization of the informal, we fail to address the very harsh reality that is the historical and still prevalent global trend of the use and interpretation of law for the exclusion and dispossession of the urban poor. A plethora of experiences in environmental governance and environmental justice struggles throughout the world show us that we cannot simply assume the neutrality of State law with respect to informal and other subaltern communities. In essence, the language of formalization tames what is a much deeper debate. Informal populations challenge the ideological foundations of our legal systems. And we can only see this by adopting a spatial perspective, because that is how the invisible gain visibility on their own terms, through the materiality of their social and legal relations and actions, the real aspects of their existence which simply do not make it into discursive representations of law.

In light of the limitations presented by the language of formalization, this body of work has essentially extended the discussion on informality from the closure of legal categorizations such as business rights, property rights and labour rights, to the more fluid and inclusive reality of space, under the rationale that legal empowerment is meaningless when it is not formulated with respect to spatial realities. Instead of deploying unitary legal categories in a prescriptive manner, the focus has been to understand how informal populations challenge the normative

space of the State that seeks to remove them, to exile them from the urban sphere.

Our world is incessantly urbanizing and at the same time, poverty and informalization keep rising in these urban spheres. In this context, it behooves us to understand how people are enacting urban space and resources as a counterpower to the State's exclusionary legal utopias. This study has proposed that one way to do so is by looking into people's spatial citizenship struggles. Under the notion of spatial citizenship, space becomes alive, legally reflexive and transformative; people, through the acts of appropriation and participation, traverse official legal orderings.

Can State law be envisioned in a more inclusive way? Can we instill the resistive potential of the right to the city into the law? In Brazil, the right to the city has been constitutionalized. At the international level, there are calls for the World Charter on the Right to the City to be incorporated into the body of international human rights law. Does this institutionalization enroll the State in the radical political project of spatial citizenship? It is certain that institutionalization of the right to the city, if it were not merely rhetorical and textual but enforceable and accessible *to all*, would offer citizens a new form of social protection, a deeper and transformative citizenship. The life experience of the Agbogbloshie population clearly illustrates the need to read the right to the city as inscribed into State law if we want to reclaim the State and public space from unrestrained contemporary capitalist forces. As for legal materializations of the right to the city, at the very least, formal institutional recognition might offer a minimal degree of protection to counter-hegemonic actors,

from the potential violence of the State. Evidently, acts of "appropriation," even if they are intended to reclaim the city for social and environmental community purposes, always subject people to being illegalized and punished by official authorities.

The question of formalization aside, the power of spatial citizenship or the right to the city is that these concepts resonate deeply with the idea of subaltern cosmopolitanism. While citizenship is increasingly theorized beyond borders, it is just as important to theorize cosmopolitanism and citizenship in the other sense, inwards, towards the urban, in order to deal with society's internal exclusions. We can discuss endlessly about the great benefits of porous borders between nations, but if those porous borders only lead us into unequal neoliberal urbanities made up of massive populations of the chronically working poor and a small core of powerful financial and political elites, *global citizenship* loses its meaning. As for *national citizenship*, we must ask ourselves if it is a concept strong enough to contest existing monopolies of power, the absolute authority of the State and the dispossession of the internally excluded. The present work proposes that spatial citizenship may represent vastly more possibilities in this regard. And this idea has been vividly illustrated through the informal e-waste workforce at Agbogbloshie.

Taking a close look at formalization efforts underway in Ghana, we have seen that State-led strategies do not offer informal e-waste workers any real opportunity for social inclusion. In fact, the so-called sustainable waste governance system that has

been conceived, is almost exclusively concerned with capturing the economic potential of e-waste and diverting it away from the informal, towards the State and its corporate allies. This approach mimics what we see unfolding at the international level, in the context of the negotiation of the Technical Guidelines on E-Waste within the Basel Convention framework. Our massive failure to restrain the health and environmental externalities of the global waste trade indicates that the ideological underpinnings of our waste governance regimes need to be rethought and transformed to become more attentive to people living in the peripheries and to the ecosystems that sustain us.

An historical, socio-spatial look at the situation in Agbogbloshie has revealed that at every turn, on all scales, law - various bodies of law - have failed to recognize the internal migrant population from Ghana's North as legitimate urban inhabitants, and this is precisely what has driven them to occupationally hazardous activities such as informal e-waste trading in the first place. Not surprisingly, the ongoing environmental rehabilitation of Agbogbloshie is not being carried out so that its population can live and work in dignified conditions, the plan is to transform Agbogbloshie into a tourist paradise. Apparently in this case, there is no room for informality in sustainable development. The law is used in all ways to remove this population farther and farther away from urbanity. To fight this legal oppression, the informal population has insisted upon its spatial citizenship, mobilizing on local and transnational scales to claim their urban space, and through this, they keep strengthening their oppositionality. The resistant nature of their spatiality

transgresses the legal order, forcing governments and industries to enter into conversation with them, despite the law.

This dissertation's spatial investigation into the relationship between informality and law has signaled the limitations of formalization and the horizons of urban citizenship. Above all however, this work has highlighted the value of the notion of informality for legal scholarship. Informality propels the jurist to ask difficult epistemological and ontological questions about the law. Informality forces the jurist to deal with the uncomfortable reality that missing voices and blinded spaces are also legal creations. In studying informality, there is no escaping the segregative ideologies according to which law's boundaries have historically been drawn.

Finally, it is essential to signal both the limits and horizons of the present work. This dissertation has asserted the relevance of the idea of spatial citizenship and explained the justification for retheorizing informality and law under this lens. The formalization approach has been dissected and dismantled to convey the spatial blindness of legal regimes and institutions. In illustrating how how rights frameworks exclude spatial realities, the present work points us to the questions of how to resolve the spatial blindess of law and whether spatial citizenships can become constitutive of official legal realms. Answering these questions would require an examination of how spatial citizenship in practice, leads us or not, to more inclusive State laws, more inclusive institutions and more democratic democracies.

The *always higher tech* anthropocene is a turbulent epoch, in which the institution of law appears to be rapidly losing its already fragile link to civil society. In almost all world regions we are witnessing an intensified reticence towards "Law", a suspicion towards the intention of the authors of our laws, and towards the nature of interests that are protected by our official legal systems. Under these circumstances, the living laws of informality are revelationary to the jurist dedicated to imagining how we may cross the expanding ravine between law and marginalized populations. In revealing to us the ubiquity of the legal world and the spaces that law occupies in one form and understanding or another in all spheres of life, the globalized realities of informality incite us towards a new era of critical legal scholarship, that is not only inspired by, but rather centralizes, questions of urbanism, spatiality, *people* and *place.*

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