Through the Working Class

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Ecologies of Labour

An Environmental Humanities Approach

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Abstract How do concepts of labour and working class relate to ecology? How can the Environmental Humanities make sense of the ways in which people experience nature through their work? Based on an ecofeminist approach, this chapter invites us to unpack the notion of labour and to see the multiple forms – not only production, but also reproduction and care – through which labour shapes and is shaped by the biophysical environment. The chapter is divided into two parts: the first introduces materialist ecofeminism as a perspective that allows us to rethink labour in ecological terms; the second proposes a three-way approach to investigating the ecologies of labour. The concluding section highlights the connection between the 'ecology of labour' approach and environmental justice.

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Keywords Ecology of labour. Working-class environmentalism. Environmental humanities. Ecofeminism. Environmental justice. Environmental studies. Political ecology.

We have mixed our labour with the earth, our forces with its forces too deeply to be able to draw back and separate either out.

(Raymond Williams, "Ideas of Nature", 1980)

1 Introduction

Labour and working-class are concepts rarely found in the environmental humanities, and in environmental studies more in general. But does this mean that they are of no relevance to environmental scholarship? Or is this rather a reflection of the declining interest that they have suffered in the social sciences and humanities in the past three decades? Based on research in environmental history and political ecology that I have developed in the past decade, this essay intends to offer an alternative narrative of environmental change, one in which labour matters. Rather than a coherent theory, I aim to convey a sense of openness, imagination, and hope,

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concerning the possibility of rethinking the relationship between ecology and labour in the age of climate change. Inspired by J.K. Gibson Graham, Stephen Resnick and Richard Wolff's edited volume *Class and its Others*, this essay will follow their invitation to 'opening up the field of class identity', and to building 'an antiessentialist language of class' (2000, 9-10). It will describe the condition of working-class as being in relations of not only production and exploitation, but also of reproduction, interdependence, and community with both human and non-human others in a shared biophysical environment. Such expanded understanding of working-class, I argue, would help us to discover new dimensions of that messy intersecting of the social and the biophysical that Serpil Opperman and Serenella Iovino (2016) consider the *stuff* of the environmental humanities.

The 'ecology of labour' is a materialist ecofeminist approach that calls attention towards labour as a key dimension of the material and cultural interchange between human and non-human nature. It tells us that class matters to ecology, i.e. the position one occupies in the social/sexual/colonial division of labour is a key element in determining how one is to experience this embeddedness with the ecological whole. It invites us to unpack the notion of labour itself and to see the multiple forms - not only production, but also reproduction and care - through which labour shapes and is shaped by the biophysical environment. It shows us how environmentalism, and ecological consciousness in general, is also a diversified experience, fundamentally mediated by labour and class. In short, the ecology of labour describes a world that is broader, more complex, and richer of experience of human/non-human nature relationships than the white/ middle-class understanding of it. This, I believe, would allow us to make an important step towards those "new modes of knowing and being", which Opperman and Iovino call for, with the aim to "enable environmentally just practices" (2016, 2).

The chapter is divided into two parts: the first introduces materialist ecofeminism as a perspective that allows us to rethink labour in ecological terms; the second proposes a three-way approach to investigating the ecologies of labour. The concluding section highlights the connection between the 'ecology of labour' approach and environmental justice.

2 Rethinking Labour: a Materialist Ecofeminist Perspective

A fundamental contribution to opening the semantic field of labour has come from the feminist critique of political economy. This has given a graphic representation of the economy in the form of an iceberg, showing how most of the work carried out in society is made invisible by conventional ways of understanding the economy (Gibson-Graham 2006). In the iceberg-economy model, waged work occupies only the floating tip, the

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part that is represented in politico-economic language. But what really matters is what happens below the sea level, i.e. the myriad other forms of informal, unpaid, domestic, reproductive, care, and community work that keep the tip afloat, for they make possible the value exchanges that happen in the formal economy. Those activities are labour too, say feminist political economists – in fact, they form the vast majority of the labour carried out in society. Making them visible is a first, fundamental step to redefine what counts as labour. Such reframing of labour is very relevant to the environmental humanities, insofar as it allows us to visit the *terra incognita* of working-class lives in all their diversity and interdependencies, and think about their possible relationships to ecology.

The reductive view of the economy developed by classical political economy - including much of Marxist political economy - has influenced common representations of the working class as well. Since the late Nineteenth century, working-class identity has been constructed (and later celebrated) as the collective of male heterosexual waged workers in manufacturing, mining, and farming. As the above-mentioned volume Class and Its Others (Gibson-Graham, Resnick, Wolff 2009) exemplifies, such reductive and homogeneous representation of the working class has generated many critiques and has been partially redressed by a number of studies; nevertheless, the general tendency has been that of abandoning class itself as a relevant arena of research, rather than reformulating it. What counts more for the scope of this essay, there is still much work to do in rethinking labour and the working class from an ecological perspective - and vice versa, understanding ecology as something which profoundly affects labour and working-class people (Singh 2013; Barca, Leonardi 2016; Battistoni 2017). The traditional representation of the working class as male blue-collar labour, in fact, has made invisible reproductive and unpaid labour, even when performed by members of the working-class community (i.e. family members of the male wage-worker), considering it irrelevant to class formation and identity. Moreover, it has rendered invisible and irrelevant the work performed by non-human animals: as co-workers in exploitative relations (e.g. in mining and farming activities), or as help in domestic and subsistence work (e.g. in dairy production, in transport, in cattle raising); and the autonomous work of non-human nature in general in performing life-supporting activities essential to humans, such as photosynthesis or biodegradation.

The diversity, and equal relevance, of all forms of work performed in societies in their interchange with the biophysical environment was illustrated by a pathbreaking theoretical framework developed by historian of science Carolyn Merchant in the late 1980s: the 'ecological revolution' framework (1987, 1989). This represented the first, and most complete, attempt at linking production and reproduction with ecology, showing how ecological crises, and eventually radical environmental change (or

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'ecological revolution'), arise from contradictions between modes of production and social reproduction, on one side, and ecology and biological reproduction on the other. Adopting a Marxist approach, Merchant distinquished between two types of human production: for use-value or subsistence, and for exchange value or the market; she then defined human reproduction as the biological and social process through which humans are born, nurtured, socialized, and governed, i.e. the practices through which "sexual relations are legitimated, population sizes and family relationships are maintained, and property and inheritance practices are reinforced" (Merchant 1987, 270). Human production and reproduction, she noted. have been historically divided along gender lines, generating the sexual division of labour. Under capitalism, the division of labour between the sexes has meant that men bear the responsibility for and dominate the production of exchange commodities, while women bear responsibility for reproducing the workforce and social relations. Women's responsibility for reproduction includes both the biological reproduction of the species (intergenerational reproduction) and the intragenerational reproduction of the workforce through unpaid labour in the home, including the reproduction of social relations-socialization. While in subsistence-oriented economies production and reproduction are united in the maintenance of the local community, she explained, with the advent of capitalism production and reproduction separated into two different spheres, with the latter subordinated to the former.

A third aspect of social interchange with the environment, in Merchant's model, was consciousness, i.e. the collective ways of understanding and representing nature. These substantiate in mythology, cosmology, science, religion, philosophy, language, art, literature and folklore (rituals, festivals, songs, and myths). Not all representations of nature have equal power, of course: each mode of production requires certain ideas of nature to predominate in order to configure dominant forms of ecological consciousness. Translated into action through ethics, law, morals, and taboos, these specific forms of ecological consciousness legitimate and normalize human behaviour toward non-human nature.

According to Merchant, ecological revolutions could be understood as a complete reconfiguring of the relationships between the four spheres of production, reproduction, ecology, and consciousness. Applying her model to the history of New England, Merchant identified two ecological revolutions related to the introduction of the capitalist/patriarchal mode of production in North America: the colonial (Seventeenth century) and the industrial (Nineteenth century). Each had been premised on and shaped by a fundamental reconfiguration of both women's work in society, and of scientific-philosophical understandings of nature (or ecological consciousness). Merchant's 'revolution', clearly distinct from the concept of sizing power, was a complex concept integrating the bio-physical world with the

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social and the cultural: her subsequent work made clear that the next ecological revolution called for new forms of ecological conscientiousness and mobilization in the most complete and thorough sense of the term – i.e. involving the self, intended as the relationship between genders and between human and non-human nature, what she later called the "ethic of partnership", or "earthcare" (Merchant 1989; 1995).

The materialist ecofeminist approach - of which Carolyn Merchant is a widely recognized theorist - is consistent with and partly built upon feminist political economy. Materialist ecofeminism changes our understanding of the relationship between labour and ecology. First, it forces us to pay attention to productive and reproductive labour, and to mechanisms of social subordination regarding both, as the fundamental dimension of society's interchange with non-human nature. Second, it calls into question gender oppression (i.e. patriarchy) as a key mechanism through which environmental crises are produced, insofar as it serves the scope of subordinating reproduction and subsistence activities to production and exchange. Third, it calls attention towards particular forms of consciousness - e.g. capitalist political economy coupled with western science - as what legitimizes and governs ecological crises. Through these mechanisms, 'the economy' becomes redefined as a sphere of production and exchange whose unlimited expansion is a primary and incontestable social end. As ecofeminist authors have argued (e.g. Mies, Shiva 1993), all social progress, including women's emancipation, becomes dependent on this monstrous deity called 'the economy', whose feeding requires sacrifices. In short: the materialist ecofeminist perspective allows to radically and fully expose the production/reproduction dualism on which industrial societies are based as a root cause of the global ecological crisis.

3 Investigating the Ecologies of Labour

Investigating the ecologies of labour requires to start from the assumption that labour and working-class ecologies are primarily sites of environmental injustice. Environmental injustice, as I have argued elsewhere (Barca 2014a), is a dual process, made of both material and symbolic violence. The former consists in producing environmental costs that end up concentrating in a number of sacrifice areas, disproportionately affecting the disposable bodies (human and non-human) that inhabit them. The latter consists in erasing the collective memory of material environmental violence: hiding evidence, silencing voices, or simply looking the other way, in order to ignore those stories that would put into question consolidated regimes of truth. Investigating the ecologies of labour is thus an important way in which the environmental humanities can counteract the symbolic violence of environmental injustice, by collecting and narrating the al-

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ternate stories of environmental degradation and resistance that affect working-class people and the places where they live work and play. The environmental humanities can give an invaluable contribution to such an investigation, by interrogating all those sources – texts, oral histories, artefacts, films, photographs and paintings, and more – that embody the organic relationship between work and (human and non-human) nature in their multiple and mutually constitutive meanings.

In my article "Laboring the Earth" (Barca 2014b), I have suggested three, interconnected levels of investigation on the ecologies of labour: the labourscape, the working-class community, and labour environmentalism. Taken together, these three analytical levels illuminate the structural, contingent and contradictory conditions in which labour and working-class people experience 'nature' (intended as the biophysical environment) and develop own forms of environmental mobilization.

The first level of analysis is that of the labourscape, i.e. the study of how different landscapes physically incorporate different forms of work in different labour regimes, an idea originally formulated by the British literary critic and socialist intellectual Raymond Williams, a seminal inspiration for scholars in ecocriticism. Based on studies in environmental history and human geography, as well as on visual sources (e.g. photographs, video documentaries) we could investigate how people shape and are shaped by the labourscapes of different commodities in farming, extraction, transport, processing, and waste disposal activities. But labourscapes are also produced via the non-commodified, unwaged labour of environmental care, that takes place in conservation, restoration, maintenance, regeneration and nurturing activities, mostly in the commons. This is what feminist political ecologists have called the "forces of reproduction", or else "metaindustrial work", i.e. "a subliminal 'other' sphere of labor and value", that produced by the "peasants, mothers, fishers and gatherers working with natural thermodynamic processes who meet everyday needs for the majority of people on earth" (Salleh 2010, 205). Necessary to industrial production and exchange value, these workers typically inhabit "the margins of capitalism - domestic and geographic peripheries", and thus they are "unspoken, as if 'nowhere' in the world-system" (Salleh 2012, 141). Naming them "meta-industrial labour", while noting that they form the majority of the world's working class, is for Salleh an important way to make their work visible, and to value it as 'rift-healing', i.e. contrasting the degradation of bodies and ecosystems put in motion by industrial production.

A second analytical level where we can research the ecology of labour is that of the working-class community. My research on the history of industrial hazards in post-war Italy, conducted along the past ten years, with particular attention to three sites of industrial disaster (Barca 2012, 2014c; Barca, Leonardi 2016) has led me to develop an analytical framework that I call, together with Emanuele Leonardi, the Working-Class Com-

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munity Ecology (WCCE). The framework starts from the assumption that industrial workers and their communities typically embody the ecological contradictions of industrialism/capitalism, and thus develop specific forms of ecological consciousness. The WCCE is centred on particular workplaces and their connection with workers' bodies and those of other community members via the biophysical environment. This relationship, however, is mediated by multiple positionalities: not only occupation, but also skin colour, gender, age, ability, and others. These positionalities, in turn, intersect with the different forms of work that sustain and reproduce the working-class community in and beyond the workplace itself, including domestic and social reproduction work.

What characterizes working-class community ecologies, however, is their quasi-total economic dependency upon some external income generator, such as industrial manufacturers, mining or energy companies, agri-business, retail companies. Economic dependency from industrial work is correlated with a marked devaluation of all meta-industrial work. This social devaluation of reproduction work generates extreme vulnerability to the jobs blackmail - i.e. the corporate practice of threatening industrial workers with a choice between employment and environmental/ public health (Kazis, Grossman 1982) - thus strongly impairing people's ability to react to the depleting and degrading effects of metabolic rift on their territories. In other words: in the industrial phase of ecological revolution, the patriarchal gender order has given men the role of breadwinners, making them bargain for wages that heavily discount their health and safety, or accept job blackmails that compromise the health and safety of entire communities and their territories; it has assigned women the role of reproducers and caregivers, but also of economically marginal and/ or dependent subjects, with little or no bargaining and decision-making power in society.

Recognizing that environmental injustice is not a natural fact but a historical product, rooted in the sexual and racial division of labour, can lead working-class communities to overcoming the division between labour and environmental organizing, and to struggle for a radical transformation of 'the economy', based on principles of mutual interdependency between production, reproduction, and ecology. In other words, ecological consciousness as developed in working-class communities can originate a distinctive type of environmentalism, a 'working-class environmentalism'.

This takes us to the third analytical level of the ecologies of labour: labour environmentalism, or the environmental agency of labour organizations, which reflects the particular position of industrial workers as mediators of social metabolism. The experience of labour environmentalism in three countries (Italy, Brazil and the US) in the second half of the Twentieth century, shows how political consciousness of the environmental and public health costs of industrialization had been formed in the workplace,

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being physically embodied by working people in their daily interaction with the hazards of production. This in turn invited to a reconsideration of the active role that workers in the post-war era have played in shaping modern ecological consciousness and regulation, both within and outside (even, sometimes, against) their organizations: promoting a number of important legislative reforms, struggling for the improvement of work environments, demanding the extension of workplace health and safety regulations to society as a whole. Such method of struggle in labour environmentalism had been made possible, in different historical moments in the three countries, by the political alliance between trade-unions and environmental organizations – an alliance that was then put in crisis by changes in the respective political and economic scenarios (Barca 2012b).

Labour environmentalism has received attention from a number of scholars in sociology, political science and international relations, thus it is probably the most well-known of the three dimensions of the ecologies of labour. From an EH perspective, it is important to keep in mind that a major trend of the neoliberal era has been the convergence between labour and Ecological Modernization, that has generated what I have called labour's eco-modernism, and its contemporary divergence from anti-capitalist ecological movements and Environmental Justice. Adopting a material eco-feminist perspective on labour and working-class agency, I argue that the crux of the matter for a critique of labour's political ecology consists in broadening the semantic sphere of 'labour' towards including both industrial and meta-industrial work in their dialectical historical relationship. This, I argue, would allow us to broaden the scope of labour environmentalism by developing a decolonization of labour, both as concept and praxis, and rendering visible its potentialities as an agent of ecological revolution (Barca 2017).

4 Conclusions. Keeping the World Alive

This chapter has shown how a materialist ecofeminist perspective can help us not only to reconceptualize labour, but also environmentalism. Just as a restricted conceptualization of the economy has made invisible much work and its importance in society, so a restricted conceptualization of environmentalism has made invisible much environmental consciousness and action that takes place in society. Like the economy, so environmentalism can be seen as an iceberg: the visible part is formed of the white well-educated middle class that most environmental literature celebrates as its heroine. The larger part underneath, however, is made of low-income and racialized people such as working-class women in urban peripheries, indigenous communities, peasants, fishers and workers in the dirtiest jobs, whose bodies and territories are on the frontline of a global environmen-

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tal justice struggle against the hazards of production. These are to be considered working-class people in the extended sense of the term, i.e. people who make a living out of their metabolic interchange with nature, under conditions of social subordination and dispossession, and who fight the ecological contradictions of capitalism not only because they make altruistic choices on behalf of future generations and non-humans, or because they believe in the integrity of human-nature relationship, but also because they have a direct interest in defending nature and the integrity of their living environments and means of subsistence. As ecofeminist and environmental justice scholars have been documenting for decades, it is primarily working-class people - in this broadest sense - that get sick when pollution levels become too high, that starve when there is no more fish in the river, that get to migrate when there are no more trees in the forest, or sea levels rise too high, or in the wake of catastrophic climate events (Mies, Shiva 1993; Martínez Alier 2003; Salleh 2009; Garvey 2011). Taken together, these different sections of the iceberg of environmentalism may be seen as the largest collective effort at keeping the world alive.

Probably the most relevant contribution that the ecology of labour can offer to the environmental humanities is this awareness of the material and symbolic *pluriversality* (Escobar 2018) of environmentalism, intended as people's embeddedness with and affection for non-human nature. It is here, perhaps, that the ideological apparatus of modern environmental politics, based on cartesian dualisms between material and immaterial values, could finally fall apart, and new possibilities could open up for thinking sustainability with (rather than against) labour.

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