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Editorial Internalizing Animals and Ecosystems in Social Citizenship and Social Policy: From Political Community to Political Country

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Abstract: The aim of this editorial is to explore, conceptualize, and research the need to internalize both animals and ecosystems in our understanding of social citizenship and social policy. This editorial should be seen as a brief overview of the themes that should be covered in the contributions to the Special Issue, "Internalizing Animals and Ecosystems in Social Citizenship and Social Policy: From Political Community to Political Country". This Special Issue argues the importance of integrating animals and ecosystems as a way to re-politicize humans' social relation with both animals and our ecosystem as in sustainable development and social policy. If environmental policy becomes social policy, we would re-construct social citizenship to include consideration for animals and ecosystems as integral part of social policy. This expansion in scope is a progression from seeing humans as part of a political community to becoming more involved in their political country. This aligns with the concept of Country—an all-encompassing term in Australia, involving a people's territory, land, water, biological resources, the complex obligations and relationships involved.



1. Bringing Nature into Social Policy

Nature is a complex and much disputed term. However, it is clear that the way we think about the world, and our place in it, has a powerful influence on the policies we implement. This is particularly the case with environmental and sustainability policies, which reflect our conceptualization of nature and our relationships to it. In this editorial we ask whether it is necessary to fundamentally re-conceptualize social policy and citizenship.

The aim of this Special Issue is to explore, conceptualize, and research the need to internalize both animals and ecosystems in our understanding of social citizenship, social policy, and sustainable development; to rethink the nexus of social policy and the environment by bridging the strands of deep ecology, environmental justice, and citizenship/animal rights literature; and to integrate social policy with climate justice, international development, and environmental protection/conservation. This Special Issue argues that we need to integrate animals and ecosystems in humans' social relation.

Our starting point and endpoint is that both humans and animals share the same social world and, therefore, we need to rethink "the social" in ways that re-integrate the human and natural world. The purpose is very specific: to think through how social policy and environmental policy can become united.

If environmental policy becomes social policy, we would re-construct social citizenship to include consideration for animals and ecosystems as integral part of social policy.



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Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). This expansion in scope is a progression from seeing humans as part of a political community to becoming more involved in their political country. The concept of country is an all-encompassing term in Australia, involving a people's territory, land, water, biological resources, the complex obligations and relationships involved [1].

This editorial aims to broadly scope the issues, setting the scene for the different contributions to further our understanding of the roles of animals and ecosystems in social citizenship. We take the reader on a brief journey through relevant discussions around the ideas that social policy is environmental policy and that human wellbeing cannot be divorced from ecological wellbeing.

2. Is Social Policy Environmental Policy?

To explore these issues, this paper examines how humans attempt to define themselves as separate from other species, delineating our social space from the environment and the ecology. We are probably the only species that reflects upon ourselves as something separate, or divorced from nature. The words "society" and "social" define our human social spaces as something inherently different from the world of animals. When we reflect upon ourselves mainly through texts, words and symbols we also engage in an alienation process, as no other animal or ecosystem can engage in written communication with us. In much of our writings and intellectual endeavors we tend to forget that our human life is far from a purely intellectual, disembodied experience but rather a joined-up physical, practical, relational, and connected existence, embedded within, dependent on, and a part of nature.

What is the difference between humans and animals? This question starts our questioning of how humans define our relationship with our environment and what it should be—a utilitarian resource, relational, spiritual or something else? By defining ourselves as sometimes connected to and sometimes separate from animals and the ecosystem, we humans create parallel social spaces where animals do not possess the essential qualities to be active in our social, civil, and political communities.

However, if we see humans, animals, and ecosystems together as part of the social sphere, there is no justification for social and environmental policy to be separated, now or in the future. The next section briefly explores our relationship to nature and how concepts of utilitarian and intrinsic values impact our social understanding of our surroundings and ourselves.

3. Preserving, Conserving, and Wise Use of the Environment

The planet's diverse human cultures have many rich and intimate ways of defining their relationships with animals, non-human others, and their environments [2]. However, in this article we concentrate on the kinds of ideas that typify contemporary, Western environmental thinking and contemporary social policy approaches and its two dominant ways of conceptualizing animals and ecosystems—the "preservationist" and "wise use" schools of thought. These conceptualizations provoke very different responses to how we should regulate our shared social spaces with animals. One seeks to preserve nature, often defined as "wilderness" in a pristine state without human interference. The other argues for the use of the environment in ways that sustain natural resources for future generations [3].

The first mode—preservationist—sets up wilderness and nature as pure and pristine, uncontaminated by human involvement. It is as if modern humans cannot have any meaningful and sincere two-way relationship with nature and need to be kept apart from nature to protect it. This pure, wild form of nature is defined as a spiritual retreat, such that humans can only be temporary visitors in this wonderland of wilderness. Visiting this nature provides refuge from an ever-expanding human civilization, and its industrial "bads" of crowding, pollution, and exploitation.

The second approach—wise use—emphasizes the utilitarian values of nature, but limits enchantment. Nature is defined as a reserve of natural resources where human choices – in policy and practice – either deplete or conserve these resources for coming generations, often expressed as half-hearted, inter-generational concern. These two conceptualisations are characterized by social movements that campaign either for "wilderness" preservation or the "wise use" of natural resources.

The concepts of preservation and conservation have evolved with changing views about humans, nonhuman nature, and the intersections between social and ecological systems [4]. Conservation is therefore largely a normative endeavor [5]. Many conservationists ground their mission in ideas that nonhuman nature is valuable, for its own sake, and ought to be preserved, frequently referring to the concept of "intrinsic value" (IV) (e.g., [6,7]). The term intrinsic value signifies recognition of the fundamental goodness of the world (e.g., [8–10]).

The rise of the preservation ethic triggered a backlash against using IV of nature to motivate conservation (Compare [11,12]), with some conservationists rejecting the philosophical principles underpinning IV [13]. They seek more pragmatic and practice-oriented discourses based in what works in conservation policies and programs that actively involve people [14]. These more anthropocentric approaches focus on the human benefits of conserving and carefully managing natural systems [15] and on developing polices, programs, and practices that constructively involve people in the care of ecosystems and natural resources [14].

These more utilitarian approaches differ from the IV school of thought in that they align protecting the environment with human uses and benefits. The direct and indirect benefits humans derive from ecosystems are often referred to as ecosystem goods and services. Critics argue that the widespread use of market metaphors to define nature's value is leading to the extreme financialization of nature [16].

The IV and utilitarian approaches rely on fundamentally different underlying logics about whether the environment is valuable in its own right, or only when assigned to meeting human needs. However, both types rely to a degree on externalizing or projecting ideas about the environment's value. This leads to important questions about how we can value nature without also making our own values and preferences part of the equation.

When we deliberate the extrinsic and intrinsic value of nature, we are indirectly deliberating whether humans and their cultures, institutions, and ways of comprehending the world have an extrinsic or intrinsic value. In taking the position as an external assessor, and arbiter, of the value of nature, we must alienate ourselves from nature. This is a "noble lie" because we share the same material destiny of all living things on Earth, and therefore cannot be separated from it.

4. Internalizing Animals and Ecosystems into a Human Capitalist Order

After the birth of agriculture, re-shaping nature to create value for humans became humans' predominant activity. This endeavor intensified greatly with the industrial revolution and its great acceleration in the 20th century [17]. Humans add value to nature, as something manipulated to become products or property, using complex culturally determined property rights and valuation processes. This economic turn does not just result in the commodification of nature in the abstract, but also brings animals and ecosystems into the human capitalist order. This internalization has profound implications for our relationships with nature, at personal, political, and global scales. With the popularization of the concept of the Anthropocene we are now involved in contemplating managing the entire Earth as a system subject to human control and governance [18]. This expands the scope and the scale of the nature we aim to govern, stretches institutions that evolved in the era of nation states, and intensifies our custodial responsibilities. Climate change and other threats to planetary boundaries are becoming iconic concerns about our changing relationships to the Earth [17].

The neoclassical explanation of climate change is that emissions exist in the economy as externalities that are not reflected in the exchange of goods on the market. "To deal with such externalities, new methods of environmental valuation and market-based solutions to

the Clinton administration [20]. The reliance on markets to deliver utilitarian conservation outcomes reflects the dominance of the wise use movement's ideals of shepherding resources through markets to serve markets. Accompanied by a championing of neo-liberal reforms many governments became champions of markets as both ends in themselves and as governing mechanisms for regulating society and its resource use. This combination of ideas about ecosystem services, enlightened anthropocentrism, and neo-liberal marketization focuses on the utilitarian use of ecosystems through the lens of human valuation, resulting in an outcompeting and undermining of ideas about intrinsic value of ecosystems (e.g., [21]). The infatuation with marketized approaches also undermined other types of policy responses, such as traditional regulation. With this increasing financialization of nature, ideas about the intrinsic value of nature appear quaint, flawed, or old fashioned [16].

The ideal of intrinsic value is increasingly being supplanted by approaches that emphasize nature's instrumental value for humans. Defining these "ecosystem services" brings nature into the neo-liberal capitalist order as another financial product [16]. The consequence is that nature and its service need to be priced and emissions/environmental degradations are represented as direct costs. Many influential studies frame environmental problems in these market terms. These include the Economics of Ecosystems and Biodiversity (TEEB) and its publication, "Mainstreaming the Economics of Nature" [22] and the United Nations Environment Program (UNEP) report, "Towards a Green Economy" [23].

The main argument is that nature provides environmental goods and services for free, such as clean air, water, soil, and access to food, minerals, and energy. Without monetary values attached to these goods and services, their value is not recognized, understated or non-existent. Environmental destruction and degradation, such as air pollution, water pollution, soil contamination, climate change, natural resource depletion, and biodiversity loss have a "zero" price tag, leading to negative trade-offs and to a relationship of (self-) destructiveness that people have towards nature [22]. Such devaluing of nature has changed in recent years, with ecosystem services, nature conservation, and even carbon emissions included in economic policy considerations [24].

Many prominent economists argue that the environment in general, and carbon emissions in particular, should be understood in market terms, with prices attached to carbon emissions and environmental goods and services [25]. The main idea is that people, governments, and firms only value the environment if monetary values or prices attach to it. Ecosystem services were popularized within ecological economics by thinkers such as Robert Costanza and colleagues [26], spawning many thousands of ecosystem service valuation studies [27]. Yet, while the claimed policy impact of ecosystem service valuations is highly dubious [28]), the intellectual framework shifted to focus on improving valuations, rather than on changing practices and resource use through other policy instruments, like regulation.

Further, these monetary, calculative rationalities diminish the sense of reverence or custodial responsibilities that have characterized many cultures relationships with their environments [2]. Such reverential and custodial relationships may offer important pathways to enriching relationships with nature, but have often been dismissed as quaint and old-fashioned, in a world in which nature can be securitized and traded as a new frontier of the financial markets [16].

5. Opening up Social Policy for the Environment

With this financialization of nature and its many services we arrive at a new kind of world. In this new world, the social sphere is not shared by humans, animals, and ecosystems, but rather has become a global marketplace where animals, ecosystems, and their services are commodities to be harvested, sold, invested, saved, and consumed [16]. This marketization appears to be an extremist position, but in contemporary political discourse it is becoming the middle ground. Extremists on the market side argue that any restrictions on production, pollution, and consumption are unnecessary red tape that impedes human welfare and economic growth. Oreskes and Conway [29] convincingly argue that these pro-market positions' demonize regulation and red tape, successfully characterizing climate change policies as the greatest threat to free enterprise. Environmental protection policies and the science informing those policies were vigorously challenged because "if you believed in capitalism, you had to attack science, because science had revealed the hazards that capitalism had brought in its wake" [29] (p. 167). Treating climate science as "ambivalent" or containing the "possibility for reasonable doubt" opened up the space for this counter-narrative, which claims mainstream climate science involves a "leap of interpretative faith" [30] (p. 64).

Latour describes this position as "out-of-this-world," because one is required to ignore the realities of life on Earth. It is post-political in the most literal sense of the term: "a politics with no object," since it rejects the world that it claims to inhabit [31] (p. 38). Latour contrasts this with a "terrestrial" position, which acknowledges our deep dependence on the environment. His voice is one of a growing chorus of critical voices revaluating humans' position vis-à-vis the wellbeing and welfare of animals and ecosystems.

Environmental problems such as climate change can be understood as a result of "human chauvinism" of "anthropocentrism" [32,33]. Acknowledgement of nonhuman entities, and our interdependence on them, and the planetary systems of life, indicate the pressing need to develop reverence, respect and care for non-human others as part of our personal and cultural responses to the environmental crisis.

This interdependent position opposes notions that humans and nature are separate. As Eckersley highlights, eco-centrism "emphasize[s] the importance of a general change in consciousness and suggest[s] that a gradual cultural, educational and social revolution involving a reorientation of our sense of place in the evolutionary drama is likely to provide a better long-term protection of the interests of the non-human world" [34] (p. 59). Recognizing this interdependence challenges the fairy tale of eternal, limitless growth and deeply problematizes the capitalist narratives. It leads to different conclusions, such as the need for more regulation, a greater commitment to constraining and intervening in markets, and closer governance our ways of living. The eco-centric narrative accepts humans as one species among others, an integral part of nature [35] collectively inhabiting a single planet—the Earth [18].

The outline above reveals that social policy, as a social practice cannot reconcile a libertarian anthropocentrism and academic ecocentrism. These dilemmas are reflected in struggles to reconcile protection of human welfare, animal welfare, and environmental welfare. Recourse to utilitarianism is unlikely to resolve these persistent dilemmas.

The nexus between social policy and the environment has grown in importance since the end of the 1980s, attracting discussion on the greening of social policy [36] and the balance between ecological and social rationality [37]. A strong rationale exists, therefore, for addressing environmental issues in social policy [38–40], often by linking sustainability, low carbon development, and climate change mitigation with social policy [38,40–43]. Others suggest that we need to think about the goals of social policy and welfare increasingly in terms of sustainable wellbeing, rather than growth-driven economic wellbeing [44]. This includes a shift away from individual questions of wellbeing focused on income, work, health, and education that are connected with growth-driven logics of welfare. Instead, we need to use sustainable and resilient wellbeing concepts that enable us to resist and survive shocks caused by a warming climate, and which reconcile human development with ecological constraints [44].

Social policy should aim to protect both humans and the environment; however, this requires reducing wasteful over-consumption of natural resources, polluting technologies,

and engaging with the highly divisive topic of population control. It requires social policy based in an ecological rather than a human-centered perspective. This is a challenge for dominant social policies that are focused on protecting the living standards of most citizens from the volatile market. Only rarely do these policies focus on protecting the environment from the over-consuming living standards of developed countries. For example, the sustainable development goals (SDGs) and the sustainable development discourse link social policy and international development in a joint aspiration to generate growth and sustainability concurrently, with limited attention to the inherent contradictions between growth-driven development and environmental protection. "While social policies in terms of welfare institutions have a long history in developed countries, they have been deeply embedded and reliant upon a society marked by productivism, overconsumption, and economic growth... These are all objectives that most variants of green thinking oppose" [45]. Low-carbon development implies sharing costs equitably, across communities and nations. Therefore, social policy becomes increasingly important in sharing the burden. Whether the SDGs and adjacent policy interventions are radical enough to realize the goals of human welfare, and animal and environmental welfare, remain doubtful. As Meadowcroft observes, "the welfare state has always been seen as a complement to a growing economy" [46] (p. 8).

Ecological modernization implies a strong state that would drive ecological development. It is based on two major assumptions: low carbon technology would drive development and states would invest in it to boost their own competitiveness. These ideals are shared by green Keynesian scholars, who merge social democratic economics and welfare states, with low-carbon development and notions of a capitalist green economy. The idea of an "ecological state" that could replace the welfare state shares many parallels with this mode of thinking [46]. Yet, the modern welfare state has deep limitations in its capacity for developing ecologically grounded policy. The ecological state shares similar humanitarian concerns as the welfare state, with concerns about regulating social life and addressing market and voluntary failures, and altering existing economic interactions [46]. The normative foundations of ecological modernization are largely the same as those that informed the foundations of the modern welfare state, offering limited space for rethinking the role and purpose of social policy from an ecological perspective.

Some green Keynesian approaches argue for a global carbon tax instead of a reliance on carbon trading. This tax could be linked to direct regulations and more active and progressive redistribution through global transfers to developing countries [47]. These approaches advocate regulating markets, assuming that nation states, at national and international levels, will coax the markets and firms to invest in low carbon development [48]. Generally, there is a preference to finance this development through global carbon taxes and/or Tobin style taxes on "short term, cross-border foreign exchange transactions" [49]. It could also be financed through payments of developed industrial countries carbon debts to developing countries [47].

However, higher green taxes or high carbon taxes can be regressive since lower income households tend to spend a higher share of their income on energy, the costs will be disproportionately high for people with lower incomes. This is amplified by the fact that many people with lower incomes tend to live in energy inefficient houses, with higher energy costs. Hills [50] argues that carbon taxation requires complementary social policies, investing in low-emission housing, transport, communities while also protecting low-income citizens who have high carbon consumption. Scholars outside the traditional social policy discourse propose more actively curbing humans resource use vis-à-vis the environment. Some of these are explored below.

6. Progressive Alternatives to Business-as-Usual Social Policy

One of the most debated alternatives—the "steady state economy"—comes from Herman Daly, who proposes a policy framework for reducing humans' ecological footprint by limiting consumption [51]. This work raises difficult questions about restricting resource

use, individual "freedoms" and living standards. Daly pointed out in the 1970s that growth economies based relied on "externalisation of environmental costs in growth accounting" and "the systematic underpricing of natural resources to the societal dominance of the other production factors such as capital and labour" [52].

Daly argues economists focus too much on the economy's circulatory system and less on its digestive tract—the economy's consumption of resources and generation of waste. Growth of throughput means more resources pushed through an overgrowing digestive tract. Extending the digestive metaphor, the author [51] (p. 1) suggests the economy should be transformed from gourmands to gourmets, focusing more on quality rather than quantity of consumption. He argues for an "economy with constant population and constant stock of capital, maintained by a low rate of throughput that is within the regenerative and assimilative capacities of the ecosystem" [51] (p. 3). Three key policy tools are needed to transform societies towards a steady state economy: minimum and maximum limits on income and wealth, improving the tax system, and setting restrictions on population growth.

The de-growth discourse argues that economic growth is impossible to sustain. It questions whether it is possible to decouple economic activity and global emissions. In the famous book, "The Limits to Growth" by Meadows et al. [53], they argue that exponential growth in population and material output threatens the wellbeing of all and could lead to an uncontrolled global decline [53]. More recently, Tim Jackson [54] argued for "prosperity without growth" or prosperity within the ecological limits of our finite planet. Still the concept of growth and consumption is ingrained in public policy. "Someone once said that it is easier to imagine the end of the world than to imagine the end of capitalism" [55] (p. 76). De-growth approaches that focus on wellbeing and quality of life decouple these from a growing gross domestic product (GDP) or increased economic activity. This implies new macroeconomic approaches, which might mean, for example, a reduction in working hours [56].

However, the state would need to ensure that economic resources are more evenly distributed so that the poor would not be disproportionally affected. This redistribution also implies sharing the wealth of nations more equally. Scholars such as Lohman [57], Galbraith [58] and Speth [59] argue not only for higher global carbon taxes and higher investment in low carbon development, specifically low carbon energy and low carbon technology, but they suggest the need to replace reliance on the markets with "alternative democratic co-ordination and decision-making mechanisms" [60] (1026). These ideas imply that low carbon societies could only be sustained by low-growth, no-growth, or—in the case of Western developed countries—even de-growth strategies, executed using all available policy instruments. Scholars such as Speth [59] argue that we are currently on a trajectory towards either a collapse of the capitalist system or a collapse of our global climate.

One alternative scenario for global governance is that natural resources are collectively owned and co-operatively managed, with the use of natural resources subject to decentralized democratic decision-making. For this, people and governments need to be willing to accept lower consumption, lower growth, more distribution of resources, and higher social equality that result in "improved welfare, a better quality of life and greater democratic control of production and (renewable) resources" [60] (p. 1026).

Environmental socialism sees the environmental crisis as directly linked and caused by the crisis of industrial capitalism, arguing environmental issues cannot be solved unless there are radical restructurings of the international system [61]. This would need a complete reconfiguration of our understanding of welfare states, global social and the global market. Still, none of these socio-political perspectives force us to account for animals and ecosystems as integral parts of a shared social space.

7. Animating Welfare

To integrate animals and ecosystems into our social and political community we need to rethink our understanding of what community is and means. Animal communities work according to other principles, with species hunting, killing, and eating each other. Our ecosystems are not based on lions deliberating on whether to eat gazelles (or any other animals for that matter). If they did, a question would rapidly rise about how to keep a balance between species. Humans are top predators and animals but also custodians of the Earth. This custodial perspective sees overall wellbeing as the priority, meaning that the ecosystem as a whole should thrive, which may involve the culling of particular species or even hunting for food in a responsible way. This way of thinking clashes with the view that each individual animal is a rights-holder on equal terms with human beings.

If we are all citizens with individual rights then it is paradoxical for us humans to eat our fellow animal citizens. The wellbeing of ecosystems and animals are in this sense irreconcilable, leading to an inevitable clash between granting rights to ecosystem or granting rights to all sentient individual life. Bentham's [62] famous "Can they suffer?" quote asks whether animals share our emotions and our affective experiences. Caring for animals is situated in what an animal feels. Ross and Mason [63] (p. 46) see the outcome of animal welfare as "measurable, positive influences on animals' affective states." Duncan [64] suggests this is a purely hedonistic approach claiming that animal welfare should be understood through subjective feelings such as negative feelings and suffering on one side and positive feelings and pleasure on the other side. Animal rights arguments move away from ecosystem perspectives, focusing on individual animal's pains and pleasures and how to minimize the first and maximize the second. Animal rights scholars tend to start from a utilitarian perspective focusing on animals' ability to feel things, which makes them similar to human beings. Broom [65] argues that poor functioning is a welfare concern independent of an animal's affective state. Ross and Mason [63] suggest that some access to natural stimuli may be associated with "positive affective responses to stimuli that signaled safety and resources to our evolutionary ancestors", while Bracke and Hopster [66] highlight natural animal behaviors that are core to animal welfare "because these behaviors are pleasurable and because they promote biological functioning." Fraser highlights that living natural lives is welfare-enhancing and valuable in itself [67] (p. 76). Fraser et al. [68] argues that animal welfare should be based around conditions that allow animals to feel well, function well, and to express species-specific behaviors-

Most animal welfare discussions leave out the rest of the nature with no "concern for the welfare of plants, protozoa, or the lower invertebrates" [64]. This idea challenges us to expand our understanding of welfare beyond higher animals and to start thinking about the wellbeing of forests, lakes and rivers or other large ecosystems—like mountain ranges, oceans estuaries-and their inhabitants [69]. At these scales there is frequent references to environmental health. The question is whether, or how, we can reconcile these ideas about health and wellbeing from individuals to systems. There is a growing literature separating welfare/wellbeing issues from sentience, as evidenced in the fish welfare literature [70,71]. This steps away from what animals feel. Lassen et al. [72] found that citizens' concerns include not only minimizing suffering but also defining what "physical harm" and "a natural life" involve.

It brings us to the question of what a good life is for anything living. For this, we humanize the subjects of nature, adding concepts such as preference, which often imply how essential different environments or resources are to animals [73]. The discussion of what a good animal life should be includes the ability to perform natural behaviors and the features deemed essential for an animal to have good welfare [74].

There is an inherent conflict between looking at wellbeing in terms of how well the overall ecosystem works, or how individual species/animals feel, behave or function. This dichotomy translates into two fundamental paths in integrating nature/animals into our social sphere. We discuss these in the next section, looking at the wellbeing of individual humans and humans as a species.

8. Expanding the Scope of Social Policy

Integrating animals and nature into an overall framework results in conflicts between the functioning of overall ecosystems and the wellbeing of individual animals. We exemplify this chasm, taking up two approaches that attempt to breach the social boundaries between nature and humans.

The first approach attempts to include animals into our human community as members. Efforts to expand our political understanding of community to include non-human others, such as animals, include Donaldson and Kymlicka's "Zoopolis: A Political Theory of Animal Rights" [75]. They advocate beyond animal rights for animal citizenship, arguing that the interests of animals should be seen as essential to what we perceive as the common good. Donaldson and Kymlicka's [75] develop a rather advanced and nuanced understanding of inclusive citizenship that recognizes multiple communities with animal members, and with varying human obligations toward them.

Other scholars, such as O'Sullivan in "Animals, Equality, and Democracy" [76] highlight the need to include animals in a community based around liberal values and species egalitarianism. The authors propose uniform and egalitarian standards for animal treatment of the highest standards. Cochrane on the other hand argues for a more constrained equality where animal rights are based upon interests. "Rights possession simply means that their holders have certain important, basic interests that impose duties on others" [77] (p. 2).

These liberal perspectives give rights to animals as if they are humans, calling for consideration of the suffering of animals as if they live human lives. They propose that animals should live fulfilling lives without pain. However, ecosystems do not operate on the principles of the wellbeing of individuals and species. When a lion attacks a gazelle, it creates suffering in the individual animal, but it is vital for the overall ecosystem. Removal of apex predators alters the whole ecosystem.

The second approach expands the principles of justice to our environment and ecosystems. The environmental justice discourse focuses on the functioning of communities and ecosystems, instead of looking at individual suffering. Environmental justice originated in the USA, bringing attention to how race and ethnicity are intertwined with the distributions of environmental "bads", like pollution and technological risk [78] (p. 9). It underpins the political activism to "resist the imposition of toxic and polluting facilities in minority and poor communities" [79] (p. 356).

The focus of environmental justice often includes participation, recognition, and capabilities. Pulido [80], Faber [81], and Schlosberg [82] highlight the importance of process and production in environmental justice. Schlosberg and Carruthers [83] argue that indigenous demands for environmental justice are not just about distributional equity but also about the functioning of indigenous communities, and their traditions and practices that can protect the essential relationship between indigenous people and their ancestral lands. The capability/functioning approach expands the scope from individuals towards the functioning and capabilities of communities and their environment [83].

Schlosberg argues that adding a capability dimension to environmental justice enriches "conceptions of environmental and climate justice by bringing recognition to the functioning of these systems, in addition to those who live within and depend on them" [84] (p. 44). Taking environmental justice beyond its human-centric discourse, scholars such as Hillman [85] explore the importance of ecological integrity and the potential for self-repair and independent management of ecosystems [86].

Indigenous perspectives often recognize humans as inseparable from other living things, seeing the environment as an interconnected community (Compare [87,88]). This is important for social policy's scope, requiring wider environmental concerns to be included in processes normally perceived as anthropocentric [89]. "When we interrupt, corrupt, or defile the potential functioning of ecological support systems, we do an injustice not only to human beings, but also to all of those non-humans that depend on the integrity of the system for their own functioning" [84] (p. 44). This perspective includes ideas about the

functioning and capabilities individuals, communities, and the environment that forms the land of the communities.

Westra [90] links environmental justice with biological/ecological integrity highlighting the interdependence between functioning of indigenous communities and the functioning of the environment. "If the rights of indigenous peoples are based, first, on their rights to biological integrity and natural function; and second, these rights cannot be separated from the protection of the ecological integrity of their lands; then third, entrenching such rights would limit the freedom of Western industrial operations to commit crimes" [90] (p. 19). Environmental justice needs therefore to protect indigenous autonomy and the functioning of communities with the biological integrity of ancestral land to prevent "biological genocide" [90].

This thinking goes beyond the wellbeing of individual animals/species and look at the overall environmental community with humans as a part.

9. Environmental Social Rights and Welfare: Rethinking Social Policy as Environmental Policy

The existing interventions in social policy—both in the academic study and in the practices of governments—tend to have three things in common. First, social policy is in its very essence anthropocentric, concerned with human needs and wellbeing. Second, and largely as a result of this, ecological perspectives in social policy are generally a residual category: even when social policies respond to ecological questions, the policy consequences are understood through their impact on human needs and wellbeing (e.g., options for addressing the social inequalities arising from stricter environmental policies). Thirdly, policy solutions are largely focused on limiting and regulating human behavior. The nature of the policy problem is therefore fundamentally different from that which informed the foundations of the original welfare state. We have moved from a problem of addressing "wants" that could be resolved by redistribution and provision of greater resources to a problem of imposing "limits".

Welfare systems are, arguably, failing humanity when we compare their impact against the magnitude of the changes required to address the challenges of climate change. To respond to these challenges in a realistic way, and for welfare systems to play a central role in supporting both human and non-human life on our planet, the shift in social policy thinking needs to be more revolutionary than the original conception of the welfare state might have seemed in the late 19th century.

As government interventions the world over demonstrate, the key welfare policy challenge is to actually bring the target of the policy—the environment and the ecosystem—into focus. New policies must impose limits, regulate, and curb human behavior effectively and meaningfully. This innovation seems unlikely without new ideas, which equip us to think about the nature of the ecological challenges we face, and the policies we require. Donna Haraway emphatically articulates this need in her seminal work on developing a multispecies perspective when she argues that "it matters what ideas we use to think other ideas with [...] it matters what thoughts think thoughts. It matters what knowledges know knowledges" [91] (p. 34–35). The ideas, thoughts and knowledges matter because they frame what is thinkable. So, what might social policy look like if it took ecological perspectives seriously, replacing predominantly humanitarian questions with ecological ones and moved ecosystems to the center of our understanding of the social?

One way to approach this thinking challenge is to take the central concepts of the welfare state, and then "flip" them, shifting our focus from a humanitarian to an ecological perspective. William Beveridge's "five giants" of "want", "disease", "ignorance", "squalor", and "idleness" formed the key pillars of the Beveridge Report and the modern British welfare state [92]. Slaying these giants roughly translated to the welfare programs of social security, the National Health Service, free education, social housing and employment. These programs, embedded in governance regimes, illustrate the fundamental sticking points in thinking of social policy as environmental policy. Beveridge's metaphorical giants are best described as the "giants of too little", as opposed to the "giants of excess"

that define most of our contemporary welfare challenges [93] (p. 844). The solution to a policy problem defined by a lack of something is relatively simple: it can be resolved by providing more (although negotiating the necessary redistributive arrangements can be tricky). Dealing with problems of too much, however, are far more challenging, because policy solutions involve imposing limits and curbing human behavior.

More specifically, what might Beveridge's giants look like if viewed from an ecological vantage point? With social policy flipped the social becomes the residual category of environmental policy, and the consequences of social policy need to be understood in terms of its impact on nature (i.e., how do we deal with the environmental impact of progressive social policies?) Seeing "want" from an ecological perspective requires us to reconceptualize poverty. Rather than resolving the want of humans through social insurance and associated measures, can we instead conceptualize the central problem as ecological want: as the poverty of nature resulting from its relationship with humanity. Similarly, seeing "disease" from an ecological standpoint forces us think beyond an approach centered on a national health service and instead focus on ecological health. Health as a policy problem goes beyond the negative impact of ecosystem alteration to human health [94] to include an understanding of the positive impact of conservation and biodiversity on human health [95], while also considering the health of nature and ecosystems as concerns of equal merit to human health. Could the development of a multispecies perspective be thinkable, where sick forests and sick animals are part of our community, and where health policy might be driven by a common aspiration to realize species-specific behaviors as fully as possible [68].

What these two short examples show, is that by reconceptualizing the "giants" from an ecological perspective, the central policy problem—the problem of too much, of excess morphs into a problem of disequilibrium within a multispecies context. By locating ecosystems at the center of our thinking about welfare, we begin the process of reconceptualizing the policy problem. We are no longer seeing it simply as a case of imposing restrictions and regulations on society, in isolation from nature, but perceiving of society and nature as a single multi-species community. This presents policy tensions and challenges in terms of realizing a multispecies conception of rights, for example. But these are tensions and challenges of different order: we are beginning to shake up the ideas that we use to think other ideas with.

10. Conclusions

The above exploration of modern social and environmental policy leads to some stark conclusions. We should not forget there are similar logics for social and environmental policy. These lie in providing for shared needs and interests and in regulating the excesses and exploitation of capitalism.

Capitalism and its commodification processes have profound and severe environmental and social implications. The more destructive aspects of capitalism were seen in the 19th century when much of the western world's population became dependent on the industrialized markets for the survival. Karl Polanyi discusses labor as a "fictitious commodity" since it is not produced for sale and it cannot be detached from the rest of a human's life [96] (p. 72). Polanyi also points out the importance of adding environment to the analysis. He argues that land is also a fictitious commodity. Land is considered by Polanyi as "another name for nature, which is not produced by man" [96] (p. 72).

He argues that the commodification of land, natural resources, the oceans, among others, will generate collective "bads" that need collective responses from society. Polanyi argues for a more active role of the state in regulating the land and protecting natural resources from market forces: "[T]he commodity fiction disregarded the fact that leaving the fate of soil and people to the market would be tantamount to annihilating them" [96] (p. 73). If labor and land are fictitious commodities how can we prevent these from over exploitation globally.

De-commodification has often been linked to being a citizen in a welfare state with both duties and rights towards the state. The first conception of de-commodification, as discussed by Polanyi, "protected citizens from major social risks and insulated their living standards from dependence on wage payments" and "the counter-movement that pressed for social reforms lead to the creation of a welfare state dependent on public services paid for by taxes and social contributions" [97] (p. 62).

The welfare state moderated and mitigated the negative social implications of capitalism in the western world. Polanyi's perspective helps raise important questions about whether we should not see environmental policies in the same way as social policies, asking how could we de-commodify nature in general and animals and eco-systems in particular?

This would extend rights and obligations beyond those of individual citizens and their states, to people's collective territories, ecosystems, and interrelationships. It is therefore of utmost importance that social policy and social citizenship are de-colonized to include indigenous science and traditional ecological knowledge in ways that not only recognize rights, but also custodial obligations. These systems are holistic approaches to governance of communities and ecosystems, developed over thousands of years of learning, with cultures and landscapes co-evolving, forming what we now see as places with environmental ecological integrity [98].

To rethink our thinking, we could begin by recognizing that social policy and environmental policy have always been intermeshed in human cultures and the shaping of their living places. That is why we have to move away from simple ideas about political community to more complex relation concepts about political country, or territories, because country is, and always will be, social and political with us humans as a central part of these integrated processes.

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References

- 1. RiverofLife, M.; Poelina, A.; Alexandra, J.; Samnakay, N. *A Conservation and Management Plan for the National Heritage Listed Fitzroy River Catchment Estate (No. 1)*; Martuwarra Fitzroy River Council, Nulungu Research Institute, University of Notre Dame: Fremantle, WA, Australia. [CrossRef]
- 2. Descola, P. Beyond Nature and Culture, English Edition; University of Chicago Press: Chicago, IL, USA, 2012.
- 3. Schmidt, J. Water–Abundance, Scarcity and Security in the Age of Humanity; NYU Press: New York, NY, USA, 2017.
- 4. Mace, G.M. Whose conservation? *Science* 2014, 345, 1558–1560. [CrossRef]
- 5. Barry, D.; Oelschlager, M. A science for survival: Values and conservation biology. Conserv. Biol. 1996, 10, 905–911. [CrossRef]
- 6. Noss, R.F. Sustainability and wilderness. Conserv. Biol. 1991, 5, 120–122. [CrossRef]
- 7. Soulé, M.E. What is conservation biology? Bioscience 1985, 35, 727–734.
- 8. Korsgaard, C.M. Two distinctions in goodness. Philos. Rev. 1983, 92, 169. [CrossRef]
- 9. Moore, G.E. Principia Ethica, 2nd ed.; Balwin, T., Ed.; Cambridge University Press: Cambridge, UK, 1993.
- 10. Zimmerman, M.J. The Nature of Intrinsic Value; Rowman & Littlefield Publishers Inc.: Lanham, MD, USA, 2001.
- Chan, K.M.A.; Balvanera, P.; Benessaiah, K.; Chapman, M.; Díaz, S.; Gómez-Baggethun, E.; Gould, R.; Hannahs, N.; Jax, K.; Klain, S.; et al. Opinion: Why protect nature? Rethinking values and the environment. *Proc. Natl. Acad. Sci. USA* 2016, *113*, 1462–1465. [CrossRef]
- 12. Marvier, M.; Kareiva, P. Extinction is a moral wrong but conservation is complicated. Biol. Conserv. 2014, 176, 281–282. [CrossRef]
- 13. Tallis, H.; Lubchenco, J. A call for inclusive conservation. Nature 2014, 515, 27–28. [CrossRef]
- 14. Campbell, A.; Alexandra, J.; Curtis, D. Reflections on four decades of land restoration in Australia. *Rangel. J.* **2017**, *39*, 405–416. [CrossRef]
- 15. Marvier, M.; Kareiva, P. The evidence and values underlying 'new conservation'. Trends Ecol. Evol. 2014, 29, 131–132. [CrossRef]
- 16. Sullivan, S. Banking nature? The spectacular financialisation of environmental conservation. *Antipode* **2013**, 45, 198–217. [CrossRef]
- Steffen, W.; Richardson, K.; Rockström, J.; Cornell, S.E.; Fetzer, I.; Bennett, E.M.; Biggs, R.; Carpenter, S.R.; De Vries, W.; De Wit, C.A.; et al. Planetary boundaries: Guiding human development on a changing planet. *Science* 2015, 347, 736–747. [CrossRef]
- 18. Castree, N. Framing, deframing and reframing the Anthropocene. Ambio 2021, 1–5. [CrossRef]
- 19. Pearse, R.; Böhm, S. Ten reasons why carbon markets will not bring about radical emissions reduction. *Carbon Manag.* 2014, *5*, 325–337. [CrossRef]

- 20. Lohmann, L. Neoliberalism and the calculable world: The rise of carbon trading. In *The Rise and Fall of Neoliberalism: The Collapse of an Economic Order*? Birch, K., Mykhnenko, V., Eds.; Zed Books: London, UK, 2010; pp. 77–94.
- 21. Maguire, L.A.; Justus, J. Why intrinsic value is a poor basis for conservation decisions. *Bioscience* 2008, 58, 910–911. [CrossRef]
- 22. TEEB (The Economics of Ecosystems & Biodiversity). *Mainstreaming the Economics of Nature: A Synthesis of the Approach, Conclusions and Recommendations of TEEB;* TEEB: Geneva, Switzerland, 2010.
- 23. UNEP (United Nations Environmental Programme). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Reduction;* UNEP: Nairobi, Kenya, 2011.
- 24. Urban, F.; Nordensvärd, J. Low Carbon Development: Key Issues; Routledge: London, UK, 2013.
- 25. Stern, N. A Blueprint for a Safer Planet: How to Manage Climate Change and Create a New Era of Progress and Prosperity; Bodley Head: London, UK, 2009.
- 26. Costanza, R.; d'Arge, R.; de Groot, R.; Farber, S.; Grasso, M.; Hannon, B.; Limburg, K.; Naeem, S.; O'Neill, R.V.; Paruelo, J.; et al. The value of the world's ecosystem services and natural capital. *Nature* **1997**, *387*, 253–260. [CrossRef]
- de Groot, R.; Brander, L.; van der Ploeg, S.; Costanza, R.; Bernard, F.; Braat, L.; Christie, M.; Crossman, N.; Ghermandi, A.; Hein, L.; et al. Global estimates of the value of ecosystems and their services in monetary units. *Ecosyst. Serv.* 2012, 1, 50–61. [CrossRef]
- Laurans, Y.; Mermet, L. Ecosystem services economic valuation, decision-support system or advocacy? *Ecosyst. Serv.* 2014, 7, 98–105. [CrossRef]
- 29. Oreskes, N.; Conway, E.M. Merchants of Doubt; Bloomsbury Publishing: London, UK, 2011.
- Smith, P.; Howe, N. Climate Change as Social Drama: Global Warming in the Public Sphere; Cambridge University Press: Cambridge, MA, USA, 2015.
- 31. Latour, B. Down to Earth: Politics in the New Climatic Regime Polity; Polity Press: Cambridge, UK, 2018.
- 32. Devall, B.; Sessions, G. Living as if Nature Mattered; Peregrine and Smith Publishers: Layton, UT, USA, 1985.
- 33. Dobson, A. Sustainable development and the defence of the natural world. In *Global Sustainable Development in the 21st Century;* Lee, K., Holland, A., McNeill, D., Eds.; Edinburgh University Press: Edinburgh, UK, 2000; pp. 49–60.
- 34. Eckersley, R. Environmentalism and Political Theory; UCL Press: London, UK, 1992.
- 35. Martin, A.; Huckle, J. Environments in a Changing World; Pearson Education: London, UK, 2001.
- Cahill, M. The greening of social policy. In *Social Policy Review 1990–91*; Manning, N., Ed.; Longman: New York, NY, USA, 1991; pp. 9–23.
- 37. Ferris, J. Ecological versus social rationality: Can there be green social policies? In *The Politics of Nature*; Dobson, A., Loucardie, P., Eds.; Routledge: London, UK, 1993; pp. 145–160.
- 38. Huby, M. Social Policy and the Environment; Open University Press: Buckingham, UK, 1998.
- 39. George, V.; Wilding, P. British Society and Social Welfare: Towards a Sustainable Society; St. Martin's Press: New York, NY, USA, 1999.
- 40. Cahill, M. The Environment and Social Policy; Routledge: London, UK, 2001.
- 41. Roberts, J.T.; Parks, B.C. A Climate of Injustice: Global Inequality, North–South Politics and Climate Policy; MIT Press: Cambridge, MA, USA, 2007.
- 42. Gough, I. Climate change, double injustice and social policy: A case study of the United Kingdom. In *UNRISD Occasional Paper* 1: Social Dimensions of Green Economy and Sustainable Development; United Nations Research Institute for Social Development: Geneva, Switzerland, 2011.
- 43. Nordensvärd, J. Social policy and low carbon development. In *Low Carbon Development: Key Issues*; Urban, F., Nordensvärd, J., Eds.; Routledge: London, UK, 2013; pp. 66–79.
- 44. Laurent, E. Measuring Tomorrow: Accounting for Well-Being, Resilience, and Sustainability in the Twenty-First Century; Princeton University Press: Princeton, NJ, USA, 2018.
- 45. Fitzpatrick, T. Challenges for social policy. In *Understanding the Environment and Social Policy*; Policy Press: Bristol, UK, 2011; pp. 61–90.
- 46. Meadowcroft, J. From welfare state to ecostate. In *The State and the Global Ecological Crisis*; Barry, J., Eckersley, R., Eds.; MIT Press: Cambridge, MA, USA, 2005; pp. 3–23.
- 47. Bello, W.; George, S. A New, Green, Democratic Deal. 2009 The Transnational Institute. Available online: www.tni.org/en/article/ a-new-green-democratic-deal (accessed on 15 February 2021).
- 48. Rezai, A.; Foley, D.K.; Taylor, L. *Global Warming and Externalities. SCEPA Working Paper 2009–3*; New School University: New York, NY, USA, 2009.
- 49. Wagner, A. Redefining citizenship for the 21st century: From the National Welfare State to the UN Global Compact. *Int. J. Soc. Welf.* **2004**, *13*, 278–286. [CrossRef]
- 50. Hills, J. Future pressures: Intergenerational links, wealth, demography and sustainability. In *Towards a More Equal Society? Poverty, Inequality and Policy since* 1997; Hills, J., Sefton, T., Stewart, K., Eds.; Policy Press: Bristol, UK, 2009; pp. 319–339.
- 51. Daly, H. A Steady-State Economy: A Failed Growth Economy and a Steady-State Economy Are Not the Same Thing; They Are the Very Different Alternatives We Face; SDC: London, UK, 2008.
- 52. Altenburg, T.; Pegels, A. Sustainability-oriented innovation systems: Managing the green transformation. *Innov. Dev.* **2012**, *2*, 5–22. [CrossRef]

- 53. Meadows, D.H.; Meadows, D.L.; Randers, J.; Behrens, W.W., III. *The Limits to Growth: A Report to the Club of Rome*; Universe Books: New York, NY, USA, 1972.
- 54. Jackson, T. Prosperity without Growth; Earthscan: London, UK, 2009.
- 55. Jameson, F. Future city. *New Left Rev.* 2003, 21, 65–79. Available online: https://newleftreview.org/II/21/fredric-jameson-futurecity (accessed on 15 February 2021).
- 56. Victor, P. Managing without Growth: Slower by Design, not Disaster; Edward Elgar: Cheltenham, UK, 2008.
- 57. Lohmann, L. Climate as investment. Dev. Chang. 2009, 40, 1063–1083. [CrossRef]
- 58. Galbraith, J.K. *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too*; Free Press: New York, NY, USA, 2008.
- 59. Speth, J.G. *The Bridge at the Edge of the World: Capitalism, the Environment and Crossing from Crisis to Sustainability;* Yale University Press: London, UK, 2008.
- 60. Storm, S. Capitalism and climate change: Can the invisible hand adjust the natural thermostat? *Dev. Chang.* **2009**, *40*, 1011–1038. [CrossRef]
- 61. Clapp, J.; Dauvergne, P. Paths to a Green World: The Political Economy of the Global Environment, 2nd ed.; MIT Press: Cambridge, MA, USA, 2011.
- 62. Bentham, J. An Introduction to the Principles of Morals and Legislation; Clarendon Press: Oxford, UK, 1789. [CrossRef]
- 63. Ross, M.; Mason, G.J. The effects of preferred natural stimuli on humans' affective states, physiological stress and mental health, and the potential implications for well-being in captive animals. *Neurosci. Biobehav. Rev.* **2017**, *83*, 46–62. [CrossRef]
- 64. Duncan, I.J. A concept of welfare based on feelings. In *The Well-being of Farm Animals: Challenges and Solutions;* Benson, G.J., Rollin, B.E., Eds.; Blackwell: Ames, IA, USA, 2004. [CrossRef]
- 65. Broom, D.M. Animal welfare: Concepts and measurement. J. Anim. Sci. 1991, 69, 4167–4175. [CrossRef] [PubMed]
- 66. Bracke, M.B.M.; Hopster, H. Assessing the importance of natural behavior for animal welfare. *J. Agric. Environ. Ethic.* **2006**, *19*, 77–89. [CrossRef]
- 67. Fraser, D. Understanding Animal Welfare: The Science in Its Cultural Context; Wiley-Blackwell: Oxford, UK, 2008.
- 68. Fraser, D.; Weary, D.M.; Pajor, E.A.; Milligan, B.N. A scientific conception of animal welfare that reflects ethical concerns. *Anim. Welf.* **1997**, *6*, 187–205.
- 69. Kraut, R. What Is Good and Why: The Ethics of Well-Being; Harvard University Press: Cambridge, MA, USA, 2009.
- 70. Arlinghaus, R.; Cooke, S.J.; Schwab, A.; Cowx, I.G. Fish welfare: A challenge to the feelings based approach, with implications for recreational fishing. *Fish Fish.* **2007**, *8*, 57–71. [CrossRef]
- 71. Browman, H.I.; Cooke, S.J.; Cowx, I.G.; Derbyshire, S.W.G.; Kasumyan, A.; Key, B.; Rose, J.D.; Schwab, A.; Skiftesvik, A.B.; Stevens, E.D.; et al. Welfare of aquatic animals: Where things are, where they are going, and what it means for research, aquaculture, recreational angling, and commercial fishing. *ICES J. Mar. Sci.* 2019, *76*, 82–92. [CrossRef]
- 72. Lassen, J.; Sandøe, P.; Forkman, B. Happy pigs are dirty!—Conflicting perspectives on animal welfare. *Livest. Sci.* 2006, 103, 221–230. [CrossRef]
- 73. Appleby, M.; Sandøe, P. Philosophical debate on the nature of well-being: Implications for animal welfare. *Anim. Welf.* **2002**, *11*, 283–294.
- 74. Nussbaum, M.C. Beyond compassion and humanity: Justice for nonhuman animals. In *Animal Rights. Current Debates and New Direction;* Sunstein, C.R., Nussbaum, M.C., Eds.; Oxford University Press: Oxford, UK, 2004.
- 75. Donaldson, S.; Kymlicka, W. Zoopolis: A Political Theory of Animal Rights; Oxford University Press: Oxford, UK, 2011.
- 76. O'Sullivan, S. Animals, Equality and Democracy; Palgrave Macmillan: London, UK, 2011.
- 77. Cochrane, A. Animal Rights Without Liberation. Applied Ethics and Human Obligations. Columbia University Press: New York, NY, USA, 2012.
- 78. Bullard, R.D. Dismantling Environmental Racism in the USA. Local Environ. 1999, 4, 5–19. [CrossRef]
- 79. Walker, G. Globalizing environmental justice. *Glob. Soc. Policy* 2009, 9, 355–382. [CrossRef]
- 80. Pulido, L. *Environmentalism and Economic Justice: Two Chicano Struggles in the Southwest;* University of Arizona Press: Tucson, AZ, USA, 1996.
- Faber, D.R. Building a transnational environmental justice movement: Obstacles and opportunities in the age of globalization. In *Coalitions Across Borders: Transnational Protest and the Neoliberal Order*; Bandy., J., Smith, J., Eds.; Rowman & Littlefield: Lanham, MD, USA, 2005; pp. 43–68.
- 82. Schlosberg, D. Defining Environmental Justice; Oxford University Press: Oxford, UK, 2007.
- 83. Schlosberg, D.; Carruthers, D. Indigenous struggles, environmental justice, and community capabilities. *Glob. Environ. Politics* **2010**, *10*, 12–35. [CrossRef]
- 84. Schlosberg, D. Theorising environmental justice: The expanding sphere of a discourse. Environ. Politics 2013, 22, 37–55. [CrossRef]
- 85. Hillman, M. Situated justice in environmental decision-making:lessons from river management in southeastern Australia. *Geoforum* **2006**, *37*, 695–707. [CrossRef]
- 86. Karr, J.R. Ecological integrity: Protecting earth's life support systems. In *Ecosystem Health: New Goals for Environmental Management;* Costanza, R., Norton, B., Haskell, B., Eds.; Island Press: Washington, DC, USA, 1992; pp. 223–238.
- 87. LaDuke, W. All our Relations: Native Struggles for Land and Life; South End Press: Cambridge, MA, USA, 1999.

- 88. McGregor, D. Honouring our relations: An Anishnaabe perspective on environmental justice. In *Speaking for Ourselves: Environmental Justice in Canada*; Agyeman, J., Cole, P., Haluza-Delay, R., Eds.; University of British Columbia Press: Vancouver, BC, Canada, 2009.
- 89. Shrader-Frechette, K. *Environmental Justice: Creating Equality, Reclaiming Democracy;* Oxford University Press: New York, NY, USA, 2002.
- 90. Westra, L. Environmental Justice and the Rights of Indigenous Peoples; Earthscan: London, UK, 2007.
- 91. Haraway, D. Staying with the Trouble: Making Kin in the Chthuhlucene; Duke University Press: Durham, UK, 2016.
- 92. Beveridge, W. The Beveridge Report. Social Insurance and Allied Services; H.M. Stationery Off: London, UK, 1942.
- 93. Le Grand, J. The giants of excess: A challenge to the nation's health. J. R. Stat. Soc. Ser. A Stat. Soc. 2008, 171, 843–856. [CrossRef]
- 94. Myers, S.S.; Gaffikin, L.; Golden, C.D.; Ostfeld, R.; Redford, K.H.; Ricketts, T.H.; Turner, W.R.; Osofsky, S.A. Human health impacts of ecosystem alteration. *Proc. Natl. Acad. Sci. USA* 2013, *110*, 18753–18760. [CrossRef]
- 95. Kilpatrick, A.M.; Salkeld, D.J.; Titcomb, G.; Hahn, M.B. Conservation of biodiversity as a strategy for improving human health and well-being. *Philos. Trans. R. Soc. B Biol. Sci.* 2017, 372, 20160131. [CrossRef]
- 96. Polanyi, K. The Great Transformation; Beacon Press: Boston, MA, USA, 1944.
- 97. Gough, I. Economic crisis, climate change and the future of welfare states. Twenty-First Century Soc. 2010, 5, 51–64. [CrossRef]
- 98. Snively, G.; Corsiglia, J. Discovering indigenous science: Implications for science education. Sci. Ed. 2001, 85, 6–34. [CrossRef]