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The making of green knowledge: the contribution from activism[☆]

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Abstract

The paper discusses some of the contributions of environmental activism to the development of knowledge. The paper contrasts some of the main forms of knowledge-making that have emerged among activists and raises a number of questions both about the political and cognitive implications of such “green knowledge”. The general argument is that, in the future, new types of interaction and new spaces for communication will need to be developed if green knowledge is not to be incorporated into the dominant culture or reduced to ineffective forms of protest.

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1. What is green knowledge?

In recent years, the politics of environmental knowledge have changed in fundamental ways. Throughout the world, the general emphasis has tended to shift from the protection of an external realm of non-human nature, to the integration of an environmental concern into our own human societies. Environmental knowledge, we might say, is in the process of being appropriated into our cultures and our economies. In the name of sustainable development, the ambition has been to combine disparate forms of knowledge about nature and society into new kinds of theories and concepts. Green knowledge is not so much about the environmental conditions in which we live, so much as about how we can take those conditions into account in pursuing more sustainable paths of socio-economic development [1]. This paper

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identifies some of the different types of contributions that have come from the world of environmental activism.

In order to capture what is significant, I discuss four “ideal–typical” categories of activism, which I call community, professional, militant, and personal. There could be more, there could be fewer, but I think that these four categories, which I have derived from Bron Szerszynski [2] can usefully cover the spectrum of what is most visible, while keeping us from getting lost in details. Within each category, there are some significant differences, both among countries and within countries, but there are also, I would contend, certain common characteristics. Presenting them in this way can, I hope, provide some new ways of conversing among them, as well as some new ways of considering what they represent.

2. Community environmentalism

The community environmentalists and the professional environmentalists share a secular, or instrumental, emphasis, a focus on results, on changing policies and political decisions rather than on changing beliefs. Some of them retain, in their own persons, something of the spiritual, or ethical, motivation that played such a strong role in the early days of environmentalism, but in most of their activities, the spiritual side of things is toned down. In terms of their relations to knowledge, both the community and the professional environmentalists tend to favor the factual, the empirical, or scientific–technical, approaches, over the normative, or moral–philosophical; and their practices, or dissemination strategies are more argumentative and rational than exemplary and ethical. They have, in many countries, emerged from a common “movement” origin, but, as the years have progressed, they have tended to drift apart, as the community environmentalists have tried to uphold the original strong democratic ambitions, while the professionals have responded to the expanding range of opportunities that have opened up. In the 1970s at least some activists found ways to turn their environmental engagement into professional careers, and the career trajectories have diversified and multiplied ever since.

The community environmentalists consist of the primarily decentralized groups that oppose particular cases of environmental destruction and develop alternative initiatives for environmental improvements in their communities. As such, their work consists, in large measure, in the mobilization of “local” knowledge and experiences. There are, of course, many different kinds of such groups around the world, but what they all have in common is the ambition to empower local groups or communities, by providing some new kind of factual information, or data that the community previously did not possess. Such information is primarily of two main types: empirical details about particular environmental problems and information about solutions, or what to do about the problems that are already known. What is involved is thus a kind of local research, a process of discovering new knowledge about the place in which one lives or works, as well as a popularization of the research findings.

Until the 1990s, most of this community environmentalism was technical or medical, a kind of grass-roots engineering and lay epidemiology, or what Alan Irwin [3]

has called *citizen science*. The idea was to disclose the hazards, risks, and environmental dangers that were lurking behind the scenes in the local community, and develop ways of mobilizing local skills in the creative resolution of those dangers. And while there still are a lot of amateur, and now highly competent, citizen scientists, working throughout the world to identify problems and develop solutions, what has been added in the 1990s is an ambitious and much broader social agenda. For sustainable development is not merely about environmental problems; it is also about local governance, about making democracy work. As such, the knowledge and the skills that are involved have become much broader. They include techniques of communication, translation of concepts, and, most crucially, combination and synthesis. Community activism today is about combining local knowledge and experiences with global challenges, and it is important that we understand the difficulties involved. No longer “environmental-centered”, the challenge for local activists is to create processes of dialogue, and facilitate what might be termed social innovations of strong democracy.

In Europe, which I know best, it has been primarily under the rubric of local Agenda 21 that such groups have been given both a mandate, but also an ever more influential role to play in environmental politics and policy-making in recent years [4]. Many of these activities were started in the immediate aftermath to the Brundtland report of 1987, *Our Common Future*, which was the work of an international commission headed by former Norwegian prime minister (and environmental minister) Gro Harlem Brundtland, now director of the World Health Organization (WHO). In the Scandinavian countries, as well as in Germany and The Netherlands, there were rather substantial “follow-up” programs that were set up after the report, and in Norway, Brundtland’s home country, there has been, as might be expected, a somewhat more organized effort to respond to the call for sustainable development than in many other countries.

In 1992, the United Nations Conference on Environment and Development in Brazil produced an ambitious political agenda for the twenty-first century, the so-called Agenda 21, which formulated a large number of specific tasks at different levels of society as a way to implement more sustainable paths of socio-economic development. In many European countries, laws were passed requiring all municipalities to produce their own Local Agenda 21 documents, with various plans and projects for implementation. One criterion for these plans has been the involvement, or participation, of the public in measures to achieve sustainable development. But, of course, the interpretation of what public participation actually means in practice has varied enormously from municipality to municipality and from country to country [5].

In many developing countries, there is also a substantial community-based environmentalism, often supported by development assistance organizations in the industrialized countries. These efforts at *green development*, as William Adams [6] has called them, were, at an early stage, stimulated by the training programs and other activities of the United Nations Environmental Program, which was established after the UN Conference on the Human Environment in 1972. Through the years, the involvement of non-governmental development and environmental organizations

in these projects has increased, so that many environmentalists have developed expertise in project management and particular techniques of public participation and collaboration.

Ideas and procedures of “participatory rural appraisal” and the concept of sustainable development itself, linking environmental protection to economic production, were born out of these experiences. In the 1970s, the World Wildlife Fund, the International Union for the Conservation of Nature, and the United Nations Environment Programme together formulated a World Conservation Strategy, which criticized the relegation of environmental protection to a special, and often marginal, sector in the world of “development”. What has changed over the past fifteen years is the involvement of the private sector. Now, as elsewhere, there is often a commercial interest in many of these projects. As development assistance has been linked in many countries to the needs of the national industry, it is sometimes more difficult than before to see who is actually benefiting from specific sustainable development projects.

Many of the programs that have been established in the 1990s follow the precepts of ecological modernization, or green business, in trying to “economize” ecology and translate community activism into new forms of management and engineering. As such, the meanings of participation are highly varied, and often incompatible. The participation of a local government official is often a very different thing than the participation of a potential consumer of the products from a “cleaner” local factory. While empowerment is the aim for all participatory activities of community environmentalism, it is important to recognize that empowerment is not without contradictions. In the words of Robert Chambers, “whether empowerment is good depends on who is empowered, and how their new power is used. If those who gain are outsiders who exploit, or a local elite which dominates, the poor and disadvantaged may be worse off” [7, p. 217].

In many respects, these new kinds of activities can be considered an outgrowth of the environmental activism that first manifested itself in the 1960s and 1970s. It was primarily as a collection of specific local groups, with specific local grievances, that an environmental movement emerged in many parts of the world, and this category of resistance thus represents a kind of continuity across the decades. What has changed and developed is what might be termed the social, or political consciousness, among them.

The NIMBY, for “not in my backyard”, label came into use in the 1970s, as this kind of environmentalism took on a greater political significance, particularly in the United States, in the so-called toxic waste protests, starting in the Love Canal area of Buffalo, New York, when local citizens discovered poisons buried under their communities [8]. Like most such labels, it was coined by the opponents of the resisters, and is thus not particularly helpful in understanding what community-based environmental activism is all about.

In Europe, as well as in North America, these kinds of protests have had a number of common features that are perhaps useful to characterize. On the one hand, they have been lay protests; that is, the mobilization, or organization, has been that of concerned citizens, often new to politics, who have reacted to particular local prob-

lems. On the other hand, they have been specific protests, in the sense that they have focused on particular cases of environmental degradation. And thirdly, they have been temporary; that is, they have usually been confined, or limited, in time. There have been recurrences, or remobilizations, and there have been, in many cases, expansions or extensions, or even institutionalizations, in terms of forming local parties, or alliances with other similar groups. But the actual process of resistance has been difficult to sustain, or make into a permanent feature of community life.

In some European countries, the recent wave of community-based environmentalism has been, to a large extent, state supported, and organized through particular projects and local initiatives. The critical, and oppositional, elements of environmental activism — and knowledge making — have inevitably tended to be toned down, and the result, in many countries, is a kind of popular science activity in the name of ecology that serves as a complement to official research and development programs. What has emerged is thus a kind of surrogate and highly circumscribed movement, which receives public support for its activities, but, on the other hand, is given little role to play in official decision-making processes.

3. Professional environmentalism

The second category has, to a large extent, evolved out of the first; the rise of an environmental movement in the 1970s created a vast range of opportunities for new kinds of professionals to emerge within its ranks [9]. In many countries, as the movements fell on hard times in the period of “counterrevolution” of the 1980s, it was the professionals who kept the environmental movement alive. In countries like Britain and the United States, where the neo-liberal backlash was particularly intense, many of the environmental protest activities were incorporated into what came to be referred to as mainstream environmental organizations. But, at the same time, there developed sources of tension between those ever more professional organizations and local activist groups, who often felt that they knew more about their situation and their particular struggle than the campaigners, or fund-raisers, or experts, from the professional organizations.

In many European countries, the professional organizations — especially the newer ones like Greenpeace — tended to “take over” the mantle of the movement, both in terms of media attention as well as in regard to general public interest [10]. But even more importantly, Greenpeace and the World Wildlife Fund, as well as the national conservation societies, became the agenda-setters, the agents who formulated the strategies for the movement as a whole, and who took on the responsibility of representing the broader social and political interest in the environment. Together with the Green parties that started to win their way into local government and even into some national parliaments in the 1980s, the professional organizations became the “stand-ins” for the broader public, and the forms of agency through which civil society was offered opportunities to participate in what came to be called sustainable development. It is perhaps no accident that the term itself was originally formulated by the World Wildlife Fund in its World Conservation Strategy, that was produced

together with the UN Environment Programme and the International Union for Conservation of Nature (IUCN) in 1980.

It is important to remember that many of these organizations predated the environmental movement of the 1960s, and thus embody traditions and “residual” cultural formations that have been difficult for the organizations to transcend. As conservation societies and ornithological associations, as tourist organizations and rural preservation councils, as wildlife federations and wilderness clubs, these organizations became a part of the political cultures of most industrialized countries in the early twentieth century, and many of them extended their reach into the so-called developing countries, in the immediate postwar era, when the former colonies began to win their independence. There are thus discursive frameworks and organizational experiences — a kind of traditional knowledge — that many of these organizations are able to build upon and mobilize in their contemporary activities. But it also becomes difficult for them to escape from the limits of their histories, to transcend their traditions.

Already in the 1960s, these organizations, dating back to the nineteenth century, came to be complemented, and, in some places, challenged, by new organizations that were reacting to the new kinds of pollution and urban environmental problems that had been identified in the public debate. Many of their founding members were young people who had been associated with the older organizations, but now found them too staid and established. Friends of the Earth and Greenpeace were formed at that time and they soon grew into international alliances, as the UN Conference in 1972 helped transform this new environmentalism into a global movement. A number of other national organizations and green parties emerged in many countries to coordinate the efforts of the predominantly local action groups that sprung up to oppose nuclear energy and other types of environmental problems.

By the 1980s, the new and the old organizations had become ever more professional, and particularly when new forms of “grass-roots” protest started to emerge in the late 1980s, it became increasingly common to refer to the larger organizations as a “mainstream” environmental movement that, in many respects, had come to have interests of its own. According to many observers, they had become institutions, rather than movements, more like bureaucratic organizations than local activists [10,11].

The activist, or social movement, organizations that were so prominent in the 1970s, when environmentalism represented for many young people around the world an alternative way of life, based on an ecological “world view” and oppositional forms of political action, have been displaced by a differentiated realm of so-called non-governmental organizations, or NGOs, with an international reach. Among other things, these NGOs provide advice for business firms, government agencies and public education programs, lobby for legislative and policy reforms, and take part in a wide variety of international development assistance projects. They also participate, directly and indirectly, in negotiating environmental agreements on such issues as climate change, biodiversity, and technology transfer. Explicit activist organizations still exist, of course, but they are, in many countries, merely a small part of what has become an expansive “non-governmental” realm, or environmental movement sector.

The large variety of non-governmental organizations that are part of what I term professional environmentalism makes it difficult to generalize, but there are nonetheless some characteristic features that many of these organizations seem to share, particularly in terms of their forms of knowledge-making, or cognitive praxis [12]. On the one hand, they have paid staff employees who do most of the work. They are, to be sure, open to volunteers, but they are all formalized in the sense of having some people who work for them for a living who make, or produce, environmental knowledge as a vocation, as a job. This is related to the second defining characteristic, namely the priority that is given to expertise. All of these organizations are based on a particular kind of expert competence, be it legal, scientific, administrative, commercial, educational, or disruptive. They derive their organizational identity from a particular kind of cognitive input that they provide to environmental politics. They are the experts of activism. Like all producers of expert knowledge, they are thus dependent on patrons, on those who provide the resources for collecting, analyzing, sifting, presenting expert knowledge.

Finally, they are permanent, or at least established organizations with an ambition to be permanent, which means that organizational growth and survival are important factors in their choice of topics to work on and methods to apply. They need, in other words, to find a “niche” in the social ecology of knowledge production, neither duplicating what is done in other places, nor competing with those who are able to do a particular task more effectively. This organizational dynamic, or niche-seeking, is perhaps the main factor behind the specialization, and division of labor, that exists among professional environmentalists. The problem, however, is that there is no organized coordination of activity, no collective setting of agenda, and, even more seriously, no accountability to any particular user of the knowledge that is produced. These organizations are only accountable to their formal directors, either elected governing boards (as is the case with the large membership-based organizations) or self appointed leaders, who operate much like the directors of business firms.

The identity of these organizations is derived primarily from their representative character; they have defined themselves as giving voice to a particular part of the public, as representative stand-ins. And this means that their own mode of operation is based on a view of representation, but also on one or another ideological perspective. There is an important sense in which the identity of these organizations is derived from an organizationally defined ideology of environmental politics, with clear conceptions of what politics is, but also what kind of politics the particular organizations considers to be its “brand”.

While many, if not most, of the NGOs are primarily concerned with achieving political results, that is, in affecting or influencing policies, laws, and agreements, there are other organizations whose primary activity consists of knowledge making and dissemination. There have developed throughout the world both independent “think tanks” of various kinds, as well as units associated with universities, intergovernmental agencies, as well as research and consulting firms, that provide information and education in environmental policy, and the sub-sets of substantive issues that comprise environmental politics.

Some of these green experts are directly associated with local activists and civic

groups, providing advice or training of one kind or another. The Wuppertal Institute in Germany, the Centre for Science and Environment in India, and the World Resources Institute in the United States are all examples of professional environmentalists that mediate between the more “traditional” scientists and engineers at universities and the general public and its environmentalist representatives.

The products of these green experts are highly varied, but most of them are the factual reports about particular environmental issues — transportation, industrial pollution, climate change, energy technology — that are primarily collections of scientific information, popularizations at best, vulgarizations at worst. These reports, such as those produced by the Worldwatch Institute, are typically written by journalists with some scientific training, or by scientists with some journalistic training, and they tend to be sector-specific, policy-oriented and directed to non-expert readers. While the works that are produced by professional environmentalists continue to find audiences — and indeed the finding of audiences, the selling of the products, the “public relations” have become an important element of the cognitive praxis of many environmental organizations — the knowledge that is produced is rarely subjected to serious academic scrutiny.

Perhaps the main challenge for professional environmentalists — both in the academic and non-governmental domains — is to help reestablish a sense of coherence in relation to all of the increasingly disparate movements, networks, campaigns, and alliances that they relate to. For the large organizations, this would involve the development of an explicit process of organizational reflection, by which the aims and strategies that first inspired the organization are continually examined and brought up to date. In Europe, this means, in particular, a much more open-ended discussion about the impact of Europeanization on environmental policy; that is, the emergence of the European Union as a major actor. Many professional organizations are well connected to their own national policy bodies and environmental authorities, but the challenge increasingly is to extend their international range, or global reach. For the transnational organizations, such as Greenpeace and WWF, the challenge is to develop new forms of communication with other national groups and organizations, but also with the new “players” in environmental politics — in business and academic life, as well as in civil society and government. Much like companies, the transnational NGOs have pursued their own organizational aims, largely without any broader political or social strategy; but as corporations and corporate interest organizations increasingly seek to set the overall agenda for environmental politics, the NGOs need to articulate a clearer and more coherent political program.

4. Militant environmentalism

While the community-based and professional environmentalists, for all their differences, are mostly interested in changing policies and affecting political decisions, there are a large number of environmentalists whose main concerns are more moral, or spiritual. But, as with the political environmentalists, the moralists are also highly varied and contradictory in their aims. My distinction here, between militant and

personal, is meant to bring out the fundamental difference between those who practice their environmental morality in public, and those who do it more privately. In the first category, which I call militant environmentalism, we have the groups that have broken away, usually for ideological reasons, from the mainstream organizations — so-called splinter groups — as well as the ever more militant groups that have sprung up in recent years in many parts of the world to liberate animals, reclaim the streets, and generally disrupt the normal operations of social and economic activity [13].

In the 1980s and 1990s, new kinds of organizations emerged, such as Earth First! and the Sea Shepherds, which have brought new issues onto the agenda, as well as new methods of protest. Many of these more recent organizations have been inspired by so-called deep ecology, and they have also been influenced by anarchist, syndicalist, and even terrorist political and ideological traditions. In philosophical terms, many militant environmentalists share a belief in what might be termed species equality, a form of biocentrism or ecocentrism that places human beings on equal footing with other life forms.

Carolyn Merchant [14] has given this idea framework the name of “partnership ethics” in order to accentuate the dimension of sharing — of resources, space, nature — that is central to many militant environmentalists. The idea of partnership, for Merchant and many other radical ecologists, is related to the “gender equality” that has been propounded by feminists, and there is, in much militant environmentalism, a strong influence from “ecofeminist” thinkers such as Merchant and Vandana Shiva. As Merchant puts it,

A new cultural politics and a new environmental ethic arising out of women’s experiences and needs can provide an ethic of sustainability. Many of the goals and gains of feminists are central to that new discourse and ethic. Women’s interests and nature’s interests intertwine. The goal is a sustainable partnership with the natural world [14] (p. 205).

It is important to recognize, however, that there are widely divergent meanings of both deep ecology and partnership ethics, most especially perhaps in terms of the role they play in the identity of the activists. A useful rule of thumb is whether the ideas of deep ecology or animal liberation or partnership ethics serve as an ideology or as a utopia, in the sense that Karl Mannheim once defined those terms [15]. An ideology relates to a pre-conceived framework of belief, while a utopia envisions not-yet-existing relations and orients behavior to exemplifying the utopian vision. The ideological “use” of deep ecology is thus a translation of the idea of species equality to a principle of action, while the utopian use is a translation of much the same idea to a criterion of living experimentation. Where the one tends to “reduce” the ideas to a code of conduct, the other opens the ideas to innovative application.

Deep ecology, as a label for the more spiritually minded, and often violently driven, environmental activists who occupy building sites and prevent forests from being cut, is, in any case, something quite different from deep ecology, as it was first discussed by Arne Næss, the Norwegian philosopher, who coined the term. For

Næss, deep ecology was to be distinguished from the shallow, from the mundane political struggles, and it was not so much proposed as an alternative to traditional environmental politics as a necessary complement. But it was also, for Næss, a philosophy, a kind of belief system, inspired by respect and humility for non-human nature, that was strongly influenced by Indian philosophy and, particularly, by the teachings of Gandhi [16].

As an ideology for militant environmentalism, deep ecology has taken on a life of its own. It developed in the United States in the 1980s, primarily as a way to react to the increasing rapaciousness of the forestry companies in the American western states. Like many other ideologies before and since, deep ecology

has become an attractive phrase for many people, who tend to bend the term to their needs without bothering to learn what it was originally meant to imply [16], p. 203].

The founders of Earth First! and other spiritually minded American environmentalists adapted deep ecology to their own purposes, and, by so doing, gave it an extremist connotation. Later, activists in Britain, in launching their own brand of militance to oppose the proliferation of highways across the countryside, transferred deep ecology back to Europe, apparently after discovering it in publications of the American organization, Earth First! [17].

If the mainstream organizations stand for a kind of “incorporation” of activism into the dominant culture, the splinter groups can be considered to represent what Raymond Williams [18] once characterized as “residual” cultural formations in relation to green knowledge-making. On the one hand, they are often infused with political ideologies, such as anarchism and even terrorism, or sabotage, that are part of a tradition of protest in many countries. On the other hand, they are characterized by a defense of practices and ways of life and, for that matter, animal species that seem to be in danger of elimination. Their resistance is based on an active identification with a lived tradition, of small-scale farming or shopkeeping, for example. They oppose any and all sorts of incorporation, seeing the dominant culture of commercialization and globalization as the main enemy. When Raymond Williams referred to residual cultural formations, he was thinking of such things as a “rural way of life” or a sense of rural community, which, although weakened, and all but incorporated into the dominant culture, could nonetheless provide sources of opposition and alternative values that were still vibrant and alive.

Militant environmentalists, in their active resistance, are an important part of the environmental movement, but, like the community-based activists, they have a tendency to “reduce” the struggle to the defense of one particular value, and disregard the need for compromise and innovation. Their protest can thus become what Williams termed “archaic”, defending a remnant of the past that cannot realistically or meaningfully be revived in anything but a symbolic manner. This is even more apparent in the case of the animal liberation groups that have sprung up in the 1990s, particularly among youth sub-cultures, often of a vegan orientation. In Sweden and Finland, where these groups are perhaps especially prominent and visible, it is not

deep ecology, as much as a traditional Nordic primitivism from the Viking age, that seems to be an active ingredient in the “cosmology” of the animal liberation struggles [19].

While Earth First! activists appropriated deep ecology into the strongly religious, or spiritual, American environmental discourse, Nordic animal rights activists have primarily appropriated the ideas of Peter Singer, an Australian philosopher, and one of the first to call for the liberation of animals in the 1970s. But while Singer, then as now, has developed his arguments for animal liberation from a primarily utilitarian perspective, the young activists in Sweden and Finland have often translated Singer’s ideas into a very different kind of discursive framework. For many of the young militants, there is both an interest in paganism and anti-modernism, as well as animal liberation, as such.

5. Personal environmentalism

The final category of ecological resistance is the most amorphous and variegated. It includes all of the myriad attempts to make the political personal, from the mystical teachings of new age philosophy to the individual efforts to shop in an environmentally conscious manner. What is most striking about personal environmentalism, at least to me, is its increasing diversification over time, the fact that ecological, or green, values and attitudes have spread into so many different kinds of lifeworlds since they first began to be articulated in the 1960s and 1970s. Very few global citizens have remained unaffected by ecological ideas in their personal behavior, although the sheer variety of what is called ecological makes it hard to say what, if anything, it all means in regard to broader patterns of cultural transformation. Here is where environmental activism has had perhaps its most meaningful impacts, but the meanings, because they are inevitably so individual and personal, are extremely difficult to decipher and evaluate.

Most visible, at least in the industrial countries, has been the new age culture, or sub-culture, which has, in many way, continued what was started by the so-called hippies of the 1960s counterculture. The members of the counterculture expressed themselves by wearing colorful clothes, but also in a voluntary simplicity and a youthful openness to non-Western cultures that led many to move to the countryside and take journeys to the East, as well as take ecological ideas and environmental problems seriously. As the environmental movement developed, the personal and the political have tended to separate out. The new age has grown into a substantial and innovative genre of music and art, as well as inspired a number of schools of therapy and spiritual networks, with activities spread throughout the world. What has changed through the years is both the variety and diversity of the new age culture, which have increased enormously, as has the commercial flavor or tone of much of what is on offer. Even the new age has been colonized by the dominant culture.

The less spiritual, and more secular, sides of personal environmentalism have taken on a new importance in the 1990s, in particular in relation to the marketing of the new genetic technologies [20,21]. There is a widely felt anxiety about these new

products that seems to indicate that the human exploitation of non-human reality has reached a new kind of threshold. Whatever value genetic technologies may have — and there can be no denying that, both in food production and medicine, there is much that they can contribute — large segments of the public remain unconvinced. It is as if tinkering with genetic material is simply going too far, that this is the point where the utilitarian ethic, the human imperialist dominance over the rest of the planet, must be limited, even curtailed.

But even though the opposition to GMOs has provided a focus of contention for many consumers and consumer organizations, green consumerism is filled with ambiguities. For some, particularly those who are already involved in environmental politics in a more organized way, it is meaningful to connect one's lifestyle to one's politics. In relation to food consumption, in particular, eating green can become an important part of one's identity, and, at least, on the individual level, a way to internalize ecology. In a similar fashion, gardening and various forms of ecological craftsmanship can provide meaning to a contemporary, fragmented lifestyle. Describing the so-called ecological footprint that we leave behind as we travel through life has become an important task for many personal environmentalists, and, in recent years, the organization Friends of the Earth has even provided some quantitative methodological guidelines [22].

One difficulty in aggregating from individual experiences, and individual footprints, is simply in knowing what is ecological. There are so many different forms of eco-labelling and so many different criteria, or schools, of ecological, or organic, or biodynamic, or health food, that the actual meaning of ecological consumption tends to be dissipated. And it is all but impossible to be consistent. Consumption choices are not made in a vacuum, but are rather part of broader strategies of “everyday life” that are difficult to conduct in a rational fashion. An understanding of the cultural dynamics of personal environmentalism requires in-depth investigation among relatively small groups of people. The motivations that stimulate new age cultural expression, as well as green consumerism, are extremely varied, and it has proved difficult to turn a personal commitment into a more all-encompassing process of social and cultural change. But there can be little doubt that personal environmentalism will continue to flourish and grow, and, in particular, provide serious problems for the biotechnology industries to market their products successfully.

6. Conclusions

In this cursory review of some of the main contributions from activism to green knowledge, I have tried to identify a number of dilemmas that affect the kinds of knowledge that are being made, and, in particular, the kinds of barriers or constraints that the emerging ecological culture is up against. One of the most striking problems, however, is the fact that, however much we do, and however creative we try to be, there are simply fewer places in which we are allowed to operate. There is a diminishing public sphere, or public space, that is open for the flowering of the ecological culture. It gets harder and harder to share the earth.

A major part of the problem is the aggressiveness of the dominant culture. Through its enormous array of products, its seemingly endless capacity to commercialize any possible human need or vice, and, not least, its colonization of other life worlds, the dominant culture draws us into its grasping arms. Even in the various projects of “public participation” that have been carried out around the world in the quest for sustainable development, it is the private sector, the business culture, that all too often takes the lead. It is not that business involvement is not desirable, it is that all business involvement carries a price tag with it. No company, no money-making operation is interested in doing something for nothing.

And that is why it is so crucial that there remain open in our societies other spaces, non-corporate spaces for social learning and cognitive praxis. We need a public sphere that means something; we need to have opportunities for coming together, for sharing what we know, for discussing freely and critically the challenges that confront us collectively, as communities and societies. Effective public engagement in environmental politics needs, of course, people who are willing to be involved, who, in one of its various forms, have an “ecological consciousness”; but there are also a number of supportive conditions, or social innovations, that are even more important if that consciousness, so to speak, is to be cultivated and contribute to cultural transformation.

There is, it seems to me, an important role for engaged academics, and other “intellectuals” to play in keeping the spaces for communication and recombination open. Indeed, this is an increasingly crucial, but often neglected, task in the evolving politics of the environment. In the 1960s and 1970s, environmental and other new social movements carved out public spaces for creative experimentation that provided opportunities for interaction among concerned scientists and concerned citizens. There were science shops, alliances of workers and academics, radical science journals, citizen review boards, renewable energy workshops and a rather wide-ranging search for new forms of cognitive praxis and public involvement in knowledge making.

In the intervening years, the conditions for such interaction have changed dramatically, as environmental movements have become differentiated and subdivided, and as activism has become more and more a business like any other. In addition, universities throughout the world have grown ever more commercialized, and the academic way of life has come to be strongly colored by the acquisitive and highly competitive values of the marketplace. Academics are more or less required to become entrepreneurs if they are to be successful in their careers, seeking funds and opportunities, as well as making direct and indirect connections with business firms. There is nothing intrinsically wrong with this opening of universities to the commercial marketplace, so long as opportunities remain for other kinds of activities, as well. But the result has been, in many countries, that the spaces for critical reflection are getting smaller and, if they exist at all, they are seldom to be found at universities.

Universities have traditionally prided themselves on their autonomy and their pursuit of academic freedom, and those remain important values to uphold. But they should not become vague abstractions, defending “neutrality” and inaction at the expense of critical reflection. As many universities now align themselves ever more

closely to corporate and business interests, at least some of them, or some of us within the universities, need to contribute more of our resources, time and intellectual energy to working with other “actors” in the society. The risks are fairly obvious: while the brokers of green business are busily recruiting the most enterprising and entrepreneurial, it is often the most militant and extreme of the “critical ecologists” who remain willing to take them on. It is perhaps time to raise the call: Bridge-builders of the world unite, you have nothing to lose but your loyalties!

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