

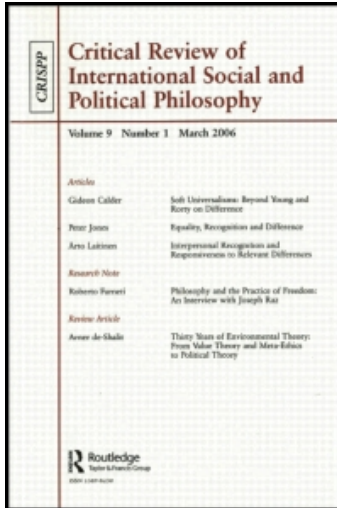
This article was downloaded by: [Hebrew University]

On: 25 March 2010

Access details: Access Details: [subscription number 919316368]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Critical Review of International Social and Political Philosophy

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713634601>

Cultural diversity and biodiversity: a tempting analogy

David Heyd^a

^a The Hebrew University of Jerusalem, Israel

Online publication date: 25 March 2010

To cite this Article Heyd, David(2010) 'Cultural diversity and biodiversity: a tempting analogy', Critical Review of International Social and Political Philosophy, 13: 1, 159 – 179

To link to this Article: DOI: 10.1080/13698230903326315

URL: <http://dx.doi.org/10.1080/13698230903326315>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Cultural diversity and biodiversity: a tempting analogy

David Heyd*

The Hebrew University of Jerusalem, Israel

What makes diversity valuable? The axis of the discussion will be the analogy between cultural diversity and biological diversity, an analogy which may prove enlightening in exposing some of the deep reasoning behind the value of diversity as well as point to the fallacies and dangers in the attempt of proponents of both types of diversity to draw support from the analogy itself. There is an extensive literature on cultural diversity on the one hand and on biodiversity on the other, but very little on the relations between the two.

The paper analyzes the difficulties in the conception of diversity as an intrinsic value, especially in non-essentialist and non-teleological views of the natural and the social world. The issue of diversity also raises the deep divide between a ‘person-affecting’ and an impersonal conception of value and the logical problem in the idea of ‘a right to an open future’ (especially in deciding *how* open it should be).

It is doubtful whether ‘reservations’ (both biological and cultural) can be thought of as preservations of diversity.

Keywords: diversity; biodiversity; cultural diversity

The culture of diversity

The heated debate about multiculturalism is primarily political. It usually takes up the issue whether cultural differences or cultural identity should be recognized as the basis for group rights, for autonomous status, or even for separatist claims. The debate takes place mostly in the context of the modern, culturally heterogeneous state and revolves around the question whether the politicization of cultural identity would lead to the promotion of justice, equality and rights or rather undermine them. Does democracy consist of the reinforcement of culturally based groupings or rather in the creation of a common civic identity which would leave cultural characteristics to the private sphere?

There is, however, another, perhaps more peripheral argument for multiculturalism, which is typically non-political. It has to do with the value of diversity. This does not mean that diversity cannot serve political goals and ideals, but proponents of diversity often advocate it as an intrinsic value,

*Email: msheyd@mscc.huji.ac.il

something which is good in itself. So, for example, globalization, inasmuch as it promotes cultural uniformity, is bad independently of the issues of inequality, exploitation, violation of rights and other political wrongs. This paper is concerned with the idea of diversity as a general philosophical (or axiological) issue, although it obviously may have direct political bearings on the dispute between universalism and particularism or that between global and domestic conceptions of justice.

The aim of the paper is to critically examine a widespread belief in today's liberal culture that diversity is good and should be maintained, even promoted. The axis of the discussion will be the analogy between cultural diversity and biological diversity, an analogy which may prove enlightening in exposing some of the deep reasoning behind the advocacy of diversity as well as point to the fallacies and dangers in the attempt of proponents of both types of diversity to draw support from the analogy itself.

Diversity is nowadays 'doubly PC', that is to say, both politically and philosophically correct. Historically, the culture of diversity (unlike cultural diversity as a social fact) is a relatively new phenomenon, having developed during the 1980s and the 1990s. Cultural diversity is but one manifestation of the culture of diversity, the other being biodiversity. It is by no means a coincidence that despite the different origins of the two movements, their evolution took place more or less simultaneously. The call for cultural diversity has its roots in the sense of crisis of the traditional, homogeneous nation-state and in the fear of globalization as a potential threat to domestic distinctions.¹ The fast-growing movement of biodiversity was the response, emerging more or less at the same time, to the rapid process of the extinction of species, the disappearance of old habitats, and the disastrous ecological effects on both the natural and the human world. Multiculturalists and friends of the earth are not necessarily the same people, although it has often been argued that some social and environmental ills have common causes and that only by preserving old cultural practices can the integrity of the planet be protected from an ecological doom.² The two movements have followed separate political courses and have grounded their respective ideologies in different philosophical reasoning. Nevertheless, they share a common underlying structure, which is the deep value of diversity as such.

Even the term 'diversity' is relatively new in the contexts of ecology and political philosophy.³ Biological science has been for a long time concerned with the role of 'variety' or 'variability' in the evolutionary process, and liberal politics considers 'pluralism' as a fundamental fact of modernity. Diversity, as we shall shortly see, is a more recent idea, roughly two decades old, which, unlike its two value-neutral predecessors, conveys an intended positive connotation. Variability and plurality are purely descriptive attributes of groups of entities, referring to the sheer number or quantity of different specimens in a group. Diversity is associated with the quality of the distinctions between the entities, the richness and complexity of the

group in question, the value the plurality has for us – as scientists or aesthetic evaluators – or for the group itself. Diversity is a kind of variety which is either interesting (for us) or which enfolds in it the potential for renewal and development (of the group of which it is an attribute).⁴ In the sphere of human action we expect a diversity of options, not just a plurality of objects of choice. For example, in a consumer society we aspire to a diversity of commodities that provide us with real choice (as well as possible significant changes in our choice) rather than a large number of different items of more or less the same kind from which we can at most pick one in an arbitrary way. We try to achieve ‘diversified’ workplaces or university student bodies, since the qualitative variety of people acting in those institutions is thought to be meaningful to their operation, productivity, and potential development.

In a comprehensive study of the history and culture of the concept of diversity in American society, the anthropologist Peter Wood notes the wide gap between real diversity and invented or concocted diversity and argues that the culture of diversity in contemporary America is of the latter form. Unlike the experience of real diversity in the early history of the European encounter with native Americans, which was characterised by awe, excitement, disgust and delight, the present plea for diversity is a superficial expression of lazy open-mindedness, which is typically widespread in university campuses (in both admissions and hiring policies). According to Wood’s scathing critique, diversity is used nowadays to trump the traditional constitutional principles of liberty and individual equality in the name of group rights and is based on the dubious hypothesis that diversity promotes the better functioning of institutions (learning at universities, productivity in the workplace). Much of what is hailed as cultural diversity is connected with the racial history (and guilt) of America which explains the crucial role of the 1978 *Bakke* case that gave a tremendous push to the rhetoric of diversity (Wood 2003, pp. 13–14, 73, 81). It is interesting to note that although Peter Wood’s lengthy book deals with a wide array of expressions of the culture of diversity (in the campuses and curricula, in religion, in the world of business and consumer behaviour, in the arts and in the law), it does not deal with *biodiversity*. This is surprising since from a cultural point of view of the kind taken by the author, biodiversity is clearly a typical manifestation of the general fixation with diversity.

Philosophically speaking, all order is constituted by some form of unity in plurality. The two extreme cases, which verge on meaninglessness, are accordingly boundless plurality with no unifying principle (complete chaos) and absolute unity with no distinctions (a Parmenidean One). How to describe the relationship between unity and variety, and to what extent the plurality of phenomena is real or apparent, is a metaphysical issue on which there is much debate. But diversity is an axiological issue, which is introduced in contexts where plurality is perceived as a value, not just as a given fact that calls for

explanation. One such context in the sphere of metaphysics is Leibnizian theodicy: evil is explained as a necessary accompaniment of plurality in the created world. Evil could have been avoided only if the world was a unity with no distinctions, but axiologically speaking, this would not have been the best of all possible worlds. The value of ontological diversity is the underlying principle of the whole tradition of the 'great chain of being' and the principle of plenitude.

But when the question of diversity is viewed not only as a matter of value but also as a moral guiding principle, human power and control over the desirable degree of variety must be assumed. On the ontological level, we do not exercise such control, since we cannot change the degree of variety of inanimate objects in the world and have to accept it as given – both as scientists and as metaphysicians. On the level of art, which in a way is the opposite of the ontological, we can be said to have unlimited control over the degree of diversity of the elements which we use in the making of works of art, since we create the elements themselves. But the degree of uniformity and plurality in art is a purely aesthetic matter. It is of no moral concern since it implies no cost outside the realm of art. But between the spheres of ontology and art lie the biological and cultural spheres over which we have *some* measure of control and in which the issue of diversity involves morally relevant costs (even if the considerations for the preservation of diversity itself are often, as we shall see, of aesthetic nature). In both spheres, human beings have gained in modern times the power to destroy diversity, but also to preserve it. This is why the concept of diversity as a moral question is most typically exemplified in ecological policies on the one hand and in the politics of culture on the other.

Yet, beyond these very general remarks about diversity, the manner in which the concept is deployed by environmentalists and multiculturalists, should be carefully examined, since its context of application is similar but also distinct in important ways. Two United Nations declarations may provide a good starting point for this comparison: The Universal Declaration on Cultural Diversity (2001) and The Convention on Biological Diversity (Rio de Janeiro, 1992). Article 1 of the cultural diversity document explicitly introduces the analogy between the two kinds of diversity, trying to reinforce the claim for cultural diversity on the more scientifically based grounds of biological diversity: 'As a source of exchange, innovation and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature.' And the biodiversity document, from its perspective, also wishes to connect the value of biodiversity with that of the preservation of traditional cultures, stating in Article 10(c): 'Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.' The connection here is bi-directional: the preservation of biodiversity is often dependent on the protection of traditional cultures which know how to

maintain the environmental balance; and the possibility of preserving certain cultures and ways of life is crucially dependent on the protection of their natural habitats.

The two documents are responses to the threat of loss or reduction in diversity, primarily associated with globalization with its unifying and homogenizing effect. Implicitly, they are attempts to check the process of an anthropocentric domination of nature (which disregards other species or the environment at large) and the process of Eurocentric cultural domination of other societies in the world (which violates the rights of people to pursue their traditional ways of life). Explicitly, the two documents register their double concern, the forward-looking and the backward looking. On the one hand, the imperative of the conservation of diversity is the only means of safeguarding 'sustainable development', both biologically and culturally. On the other hand, it is an expression of respect for the 'heritage' of the past, again both biological and cultural. Both documents point out in their opening section that diversity is inherent to the kind of value they wish to protect: culture is constituted by plurality, and diversity is crucial to evolution. 'Creativity and innovation' are repeatedly mentioned as the goals of the preservation of cultural diversity, and 'maintaining life sustaining systems of the biosphere' is the declared purpose of the convention on biodiversity.

This short reference to the two UN documents is meant only to highlight the main features of the common rhetoric of diversity since the 1980s and the attempt to connect the biological and cultural forms of diversity. UN declarations do not contain philosophical argumentation. The purpose of this article is to examine the analogy between the two ideals of diversity in a critical manner. It should be noted that although there is a vast literature on both biodiversity and cultural diversity, there is surprisingly little examination of the analogy between them.

Levels and degrees of diversity

Like any ontological taxonomy, diversity is a category-relative concept: it always raises the question, diversity *of what?* Since, as we have noted, diversity is not mere plurality, but plurality associated with some value, there is always a normative principle in the identification of diversity within a category of entities. In the biological sphere, diversity may refer to either the intra-species or the inter-species level. Within a species, diversity may refer to the existence of different sub-groups (or 'populations'). Within the human species, diversity refers to the plurality of races or ethnic groups. On the inter-species level, biological diversity applies to the overall variety of species in a particular environment or in the world at large.⁵ Here the normative guiding principle is not the prospect of a particular species but the survival of an ecosystem. This kind of diversity relates to some overall equilibrium of various species living side by side, such as the one giving rise to a food chain.

When this diversity is reduced, the ecological balance is upset, putting at risk the integrity of the environment and the chances of survival of the species living in it. But as biologists have noted, it is not the preservation of the quantitative variety of species that is the decisive factor, but rather the taxonomic and local differences between them. Thus, diversity of genera is more significant than that of species, or biological rarity and complementarity of species are the relevant standards for diversity (Sarkar 2002, p. 148).

The cultural counterpart reveals a similar two-level distinction. We often speak of the value of diversity within a given society, that is to say, the contribution of the heterogeneity of cultural or ethnic sub-groups to the overall prosperity or adaptability of that society. As a parallel to biological inbreeding, there is a view that 'closed' societies, which are too homogeneous, are at risk of stagnation and degeneration. Then there is the higher level of what may be called 'global diversity', in which the question of differences is judged from the point of view of humanity at large or of human history. From this perspective, cultures can survive and develop in a given environment only through mutual relations of influence, conflict, and 'cultural trade'. Multiculturalism may accordingly be understood as describing either the manifold identity of a given society or the degree of cultural variety in the world as a whole.⁶

Ecosystems are not necessarily global. When a 'foreign' species invades a territorially isolated ecosystem, it can overturn the ecological equilibrium and undermine its integrity. Something similar often happens when a powerful culture invades a relatively isolated society, destroying its traditional identity and inner social cohesion. Typically, the term 'migration' is often used to describe these changes in both the biological and the human world. Yet, although significant migration changes the existing equilibrium in a particular ecosystem or society, it remains a matter of evaluative judgment whether this is for the better or for the worse. White settlement of the Americas is seen by some people as a change for the better and by many as a disaster. The same applies to changes of the natural landscape in remote uninhabited territories when human beings first move into them. My general argument is that variety as such cannot decide the normative dispute.

A deep problem of circularity arises from these considerations. Diversity is used as an argument for supporting certain forms of natural habitat or social organization, but identifying those habitats or organizations as 'diverse' or contributing to diversity presupposes that the richness or variety of their constitution is good and desirable. In other words, the concept of diversity cannot be fully naturalized. The principle of 'the more, the merrier' makes sense only relatively to particular kinds of entities and in the light of their function, operation, or purpose. There is no a priori way to ascribe diversity to a system. Hence, there is no way to measure diversity and its degree independently of some normative principle. In ontology there is no way to decide in which of two rooms there are more entities (or objects) since we need a

principle of individuation of entities to make such a comparison possible. This principle may relate to some pragmatic or epistemological purpose. In the context of diversity, it is an axiological principle. Diversity is relative to some normative expectation. For example, one supermarket may offer more kinds of soups; the other may display a larger variety of brands of fewer kinds of soups. Again, there is no absolute measure to determine which supermarket offers more variety.

This non-essentialist picture of diversity seems more appropriate to the cultural than to the biological domain. Cultures lack rigid identity and are 'imagined' rather than natural, constructed and constantly re-constructed, and also inherently mixed (with elements of other cultures).⁷ Biological diversity seems to be rooted in natural distinctions, such as the biological taxonomy of species and the role of genetic variability in evolution. But as in the cultural analogue, biodiversity is relative: it could apply within a habitat or between habitats (Norton 1986, p. 112). The two forms of diversity do not necessarily coincide, and the choice between them is value-laden. Furthermore, the human selection of species for preservation is guided by cultural or normative principles. These are aesthetic or commercial, scientific or sentimental, rather than purely biological.

The desirable extent of diversity is therefore indeterminate. There is no *optimum* level of diversity as there is no optimum population size in demography (see Heyd 1992, pp. 140–153). There are various, incommensurable 'optima', each guided by a different view of the function or goal this variety serves for either present or future people and species. Intra-species diversity may be beneficial for the prospects of survival and adaptability of that species; inter-species diversity may be good for the ecological equilibrium of an environment (a habitat or the ecosystem). The same can be said about the value of a multicultural society vs. the value of the preservation of cultures in the world at large. The desirable degree of diversity is fixed from *within* the system, be it biological or cultural. It is consequently impossible to judge whether system A's diversity is more extensive than, let alone superior to, system B's diversity. And to the extent that the value of diversity is projected by *us* onto the system, it cannot be said to be inherent to the system but rather a reflection of our own needs and interests.

Synergism

Diversity is often associated with synergism, that is, with the belief that a certain quality of plurality guarantees a richer outcome than the sum of the elements constituting that plurality. Take, for example, J.S. Mill:

Whatever really tends to the admixture of nationalities, and the blending of their attributes and peculiarities in a common union, is a benefit to the human race. Not by extinguishing types, of which, in these cases, sufficient examples

are sure to remain, but by softening their extreme forms, and filling up the intervals between them. The united people, like a cross breed of animals (but in a still greater degree, because influences in operation are moral as well as physical), inherits the special aptitudes and excellences of all its progenitors, protected by the admixture from being exaggerated into the neighbouring vices. But to render this admixture possible, there must be peculiar conditions. The combinations of circumstances which occur, and which effect the result, are various. (Mill 1968a, p. 364)⁸

In those years of the development of evolutionary theory, Mill is quick to draw the analogy between the biological and the cultural benefits of cross-breeding, which of course requires the maintenance of some level of diversity. It is said that variability and chance are the power engine of natural evolution. Mill alludes to the same factors (a variety of combinations of circumstances and what he calls ‘peculiar conditions’) in the cultural sphere. Note also that the synergistic effect of such ‘admixtures’ is, according to Mill, more conspicuous in the cultural case than in the biological, since it is of a moral nature, that is, it is mediated by self-aware considerations and choice of desirable attributes. This is a very important point, since in biological hybridization there is indeed no guarantee that the new, combined attributes will be overall more beneficial than harmful.

The last three paragraphs of Chapter 3 of *On liberty* consist of a well-known plea for diversity. Mill first argues that on the individual level, ‘the unlikeness of one person to another’ draws our attention to the possibility of ‘combining the advantages of both, of producing something better than either’. But then he immediately proceeds to suggest that diversity on the collective level has the same value. What preserved Europe from stagnation (for which China is Mill’s example) is not any inherent excellence in it, but the ‘remarkable diversity of character and culture’. Mill warns that although Europe owes its success to ‘plurality of paths’ and ‘many-sided development’, it is now under the threat of the uniformity of public opinion and the ideal of ‘assimilation’ (Mill 1968b, pp. 129–130). With a prophetic sense anticipating today’s discourse about globalization, Mill mentions democratic education, with its levelling effect, easy communication and growing international commerce as the main causes of the creation of sameness in humanity. He associates individuality with cultural identity, both being dependent on conditions of diversity.

I would like to suggest that the synergistic value ascribed to diversity both in evolutionary thinking and in Mill’s philosophy is conceptually connected to their anti-teleological character. Life, both biological and social, is a constant process, but with no pre-given direction. It is accordingly impossible to list in advance the conditions for the future existence of species and cultures in general. Biological and cultural processes are projections from present conditions into the future rather than the realization of a timeless design. Having no essential nature, organisms and cultural beings evolve in

ways which are not fully determined by what they are. We might point to the analogy between the central role of chance in biology and freedom in human culture as the non-teleological force that moves life processes into an unpredictable future.

One way to interpret evolution is ameliorative or progressive. Mill certainly believes that diversity (cultural and individual) will lead to better forms of life and that uniformity means stagnation and degeneration. Although, as we have seen, there is no way to specify the particular sense in which future society will be better, due to the absence of essentialist or trans-historical criteria, sheer diversity guarantees an openness to further development which *is* ultimately the value standard. This view is not accepted, however, in modern evolutionary theory. The idea of the survival of the fittest by no means implies that in the later stages of evolution, species will be 'better' than, or superior to, past ones. It only means that adaptability is the major factor in the future of a species. From our contemporary point of view, which is much less optimistic than Mill's, this non-progressive concept of evolution is true also for cultures. However, since future conditions of the environment, both natural and social (political, economic), cannot be foreseen, the degree of adaptability cannot be ascribed to a species or a society as one of its intrinsic or essential attributes.

In the language of the liberal philosophy of education, the fundamental principle in a non-teleological and non-essentialist conception is 'the right to an open future', i.e. to conditions of survival and development. Since this open future is connected in nature with the unpredictability of evolution and in human culture with the scope of free choice, we cannot specify the content of this future. It is interesting to note here that the concept of 'sustainable development' has become a catchword in the rhetoric of environmentalists, and is the natural parallel to the right to an open future in human affairs. Its merit is that it circumvents the issue of the substantive direction of the desirable development by defining sustainable as 'a development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (whatever they are) (World Commission on Environment and Development 1988).

One important implication of this perception is that 'health' must also be characterized in the same open-ended, non-teleological vein. Biodiversity is very often identified with a healthy environment and a culturally diverse society (or workplace, student body) as a healthy society. But note that this notion of health is explicated by locutions such as 'vitality' and 'adaptability'. These are typically all linked to the potential to maintain life and pass it on to the future even in adverse external conditions. This minimalist concept of health is very different from the Platonic idea based on the correspondence of a particular human body or soul with its essential, pre-given nature, or, in the cultural analogue, from the conditions which manifest 'the spirit of the people' within a particular culture. Like the idea of 'an optimum', health

seems to be a system-relative concept. It relates to the function of an organism or a social system in terms of its relations with other systems or its place in the world. Consequently it makes no sense to apply the concept of 'health' to the world as a whole, natural or human, or to compare its relative health to counterfactual conditions of natural evolution or human history.

Respect or affirmation

Mill hailed diversity as a condition of cultural development and vitality. But there is another major strand in liberal thought which views cultural plurality as simply a given fact, an outcome of contingent modern historical processes.⁹ For Isaiah Berlin, pluralism is the resigned response to the incommensurability of values and is more of a tragedy of modern man than a lever of progress. Pluralism, even if not desirable as such, must be acknowledged and respected. The ultimate grounds of this respect are often formulated in individualistic terms. Since culture plays a constitutive role in the identity of individuals and in their ability to pursue a way of life of their choice, cultures, at least of significantly large minorities, should be protected from assimilationist pressures. This is a right-based argument for cultural diversity, an argument which is expanded by communitarians to include also views that hold that collectives or groups have cultural rights independently of the individuals composing them. But the whole point of rights is that the interests they protect are considered worthy of such protection partly because they are adopted or chosen by people rather than due to their objective value. In that sense, the object of respect is not cultures but individuals (or groups of individuals) and their will, choice and interests.

However, articulating the interest of people in maintaining their cultures is philosophically problematic. Although it is obvious that individuals need certain cultural conditions for leading their own lives successfully, it is far from clear whether it is in their 'interest' that these conditions necessarily persist into the future, for example for their children, and whether these interests should be protected by *rights*. Even if my identity is 'culturally bound', it does not mean that my descendants' identity can be considered to be bound in the same way. For this identity is still not 'given' and its perpetuation is exactly the issue when the long-term prospects of a disappearing culture are debated in the political sphere. Thus, even if the existence of Yiddish newspapers was in the interest of first-generation eastern European Jews immigrating to America, it is not clear whether it could be said to be in the interest of their children. If there were no such newspapers when these children eventually became media consumers, their identity would have developed as English readers who had no interest in Yiddish material (which is indeed what actually happened).¹⁰

The right-based argument for cultural diversity is not easy to apply in the biological domain. Nevertheless, some environmentalists, often known as

'deep ecologists', insist that the language of rights must be extended to the natural sphere. Some of them confidently speak not only of the rights of cats and dogs but also of flowers and trees. Their arguments are not easy to comprehend, but I will not engage in criticising them here. What should be noted in our context is that the problematic extension of rights to the non-human world does not lie merely in the ascription of interests and rights to non-rational creatures which lack consciousness (and hence free choice), but in the transition from the individual to the species level. Few environmentalists would respect the rights of a particular panda bear to lead its traditional way of life. It is the panda bear as a *species* which calls for protection. One might suggest that the protection of species is analogous to the preservation of human cultural communities in their collective ontological status. But it must be noted that the abovementioned idea of justifying cultural rights in terms of group rights maintains that the rights carriers are human beings capable of making decisions based on preference. This does not hold for natural species. The conclusion is that from the liberal point of view, the principal obstacle in the analogy between biodiversity and cultural diversity is that in the environmental sphere the collective right of the species cannot be reduced to the rights of individual members of the species in the way it can be in the human sphere.

What's good about diversity?

According to scientific speculation, 99.9% of the species that have existed in the history of the world have disappeared. Why are we so obsessed with the threat of disappearance of species in our lifetime? If we do not regret the extinction of the dinosaurs, why should we be concerned by the possible disappearance of the panda bear? A similar question arises regarding the disappearance of cultures or languages in the shorter history of civilised humanity. So many expressions of various past cultures have completely vanished without leaving a mark. Is this a tragedy? One may of course argue that the significant problem in our time on both the biological and the cultural fronts is the *pace* of extinction, when slow, long-term processes of evolution or cultural change are compressed into a few decades. But even if this is true, why should such an acceleration of change create moral concern? Well, say the anxious, such fast change is not 'natural': it is controlled by human beings and by direct political and economic decisions which are self-interested and prejudiced. But even if this too is true, the question remains whether it is wrong to let biodiversity and cultural diversity decline. Having set aside the arguments for protecting species and cultures in terms of rights, we turn now to the examination of arguments supporting diversity as such.

The 'person-affecting' argument: Diversity may have extrinsic, 'utility' value. This is more obvious in the biological than in the cultural realm. The preservation of species may be of much value in agriculture and medicine,

but it is more debatable whether the protection of cultures has a similar utility value. David Ingram argues that cultural diversity may not only have such utility value but may be ‘a matter of physical survival’, since globalisation may deprive local habitats of their traditional practices that satisfy their subsistence needs (Ingram 2000, pp. 257). This radical argument (appealing to the famous case of the African tribe of the Ik) is controversial. Empirically, it may be challenged by alternative interpretation of the evidence. Philosophically, we might argue that the chances of survival of cultural communities are better advanced by policies of adjustment and adaptation to modern conditions than by protective policies which strive to perpetuate them in their traditional form.

But even if diversity has no extrinsic value, practical or utilitarian, its intrinsic value may be viewed as still deriving from its being the object of human evaluation, from the way it ‘affects’ human interest, curiosity, aesthetic appreciation, etc. In other words, it is not an ‘impersonal’ value in the sense of being independent of the way humans relate to it. It would be accordingly senseless to say that biodiversity was valuable before the emergence of the human species or will be after its extinction. Like the treasures of the Louvre, natural diversity has no value in a human-less world. But this does not mean that now, when human beings exist and appreciate diversity for their own reasons, diversity should not be considered a value. And with regards to cultural diversity, Barry, following Weinstock, takes that person-affecting approach when he argues that there is no more value *per se* in a more culturally diverse world, since the question is always *for whom* the world is richer in options and who will benefit from that greater variability. Even if there was an objective way to measure degrees of diversity, the comparison between two (non-related) societies differing in the extent of their diversity would make little sense, since the identity of the individuals composing the two societies would be different and accordingly *their* way of appreciating what amounts to valuable diversity of options would be different (Weinstock 1997; Barry 2001, pp. 134–135). The person-affecting approach to value leads here to cultural relativism with regards to the value of diversity.

Impersonal value: Being person-affecting does not mean that the value of diversity cannot be intrinsic. Albert Musschenga, for example, maintains that beyond and independently of the adaptive value of cultural diversity, cultures are valuable in their contribution to the richness of human life. They maintain beauty and elegance, simplicity and uniqueness, even when they lose the evolutionary battle with other cultures (Musschenga 1998). Does this apply to biodiversity? Musschenga does not believe it does, since the analogy between cultures and organisms is implausible. However, Ronald Dworkin believes it does, suggesting that it would be ‘a shame’ if we let certain species die, even if they can be shown to have no aesthetic or scientific value for us (Dworkin 1993, p. 75). But then, we should note, Dworkin’s justification of the intrinsic value of diversity becomes explicitly ‘impersonal’ rather than

'person-affecting: it is a cosmic shame' if we, with our own hands, cause the disappearance of species. Typically, Dworkin's view is presented in his chapter on sacredness, which hints at a transcendental realm lying beyond human interests. This impersonal justification of diversity, particularly of natural diversity, is typical of metaphysical approaches of the kind advocated by Leibniz or of traditional religious views about human beings serving as stewards of the natural world. It is also the conceptual framework of 'deep ecology'. Since human cultures are not metaphysically 'essential' or the direct creation of God, impersonal justifications of cultural diversity are much less common.

Achievement: Dworkin considers the analogy between the value of the two forms of diversity as based on the similarity between the creative process leading to the formation of works of art and the evolutionary process leading to the formation of natural species. According to this approach, even though the evolutionary process is essentially random, the adaptation of a newly created life-form is an 'achievement' (1993, p. 76). Although Dworkin is not himself committed to this 'conservationist' view, he urges us to take it seriously. But I am not sure we should. Achievement is the result of intentional effort. It may be the object of our respect, but only as part of our respect for the achiever. Random evolutionary processes cannot be viewed as 'nature's investment which should not be wasted', and there is no person to whom respect is owed for the end-result. In nature things just happen.

The justification of diversity in terms of achievement is backward-looking. It consists of a duty we feel towards maintaining past 'creations'. The best expression for this kind of justification is the term 'heritage', which is common to both environmental and cultural discourse. It appeals both to the sense of awe we have towards the very long time it took for the biological world to develop into what it currently is, and to the sense of obligation we feel towards our ancestors who formed ways of life, languages and art which they held important for themselves but also wished to perpetuate. But awe and respect should be held distinct, especially in their normative implications. Dworkin himself speaks of a sense of shame rather than of a duty to preserve endangered species, but the difficulty in this romantic view is that this sense of shame does not apply to domesticated species, on the one hand, and to small or harmful species (like bacteria or rats), on the other. This indicates that the preservation of species is sought for other reasons. Cultures could be said to have an interest in their perpetuation; species do not have such an interest. Furthermore, as we have already noted, we do not feel sorry for the past extinction of the huge number of species that have disappeared 'naturally' in the history of evolution.

Beauty and rarity: We are again forced back to a more human-centred perspective in which biodiversity is celebrated for its aesthetic value. Variety, multiplicity and heterogeneity under some principle or order are indeed conditions of beauty. Routine and uniformity are boring. Curiosity and

wonder are the products of being exposed to variety. Upon encountering a strange animal, Jews bless God for 'having made creatures diverse' as a sign of admiration and respect for God's glory. And as already mentioned above, we are aesthetically attracted to the rare and the extraordinary and struggle to preserve species that look to us striking or unique. In that sense, it is not quantitative variety but qualitative and distinctive differences which inform the ideal of diversity. As in art, it is the way distinctions appeal to our perception which makes them valuable. The aesthetic value of diversity is itself culture-dependent and the current preference for multiculturalism is connected to the general (postmodernist) opposition to uniformity, hierarchy and domination.

The archival motive: The human thirst for knowledge demands also the preservation of whatever can produce knowledge. This explains the motivation to record, document and physically conserve not only ideas and thoughts but also material evidence. Dworkin's sense of shame in the irreversible loss of disappearing species may be explained in these terms of 'keeping for the record'. We are concerned with the preservation of natural and cultural forms of life just because they were there, that is independently of any particular direct potential benefit. It is no coincidence that the term 'reservation' is used in salvaging both endangered species and declining cultures. However, the archival motive aspires to a very limited notion of diversity. It accepts the fact that the form of life in question has disappeared as a natural or social *living* entity, and can at most be preserved in a museological or documentary sense. Zoos, genetic banks and artificial tribal reservations serve our curiosity but at the same time attest to the decline in actual diversity.

Autonomy and self-awareness: One moral argument refers to diversity as a necessary condition for the exercise of autonomy. From his liberal point of view, Raz rejects what I have called 'the archival justification' of diversity and claims that there is no reason for the preservation of fossilized or ossified cultures which cannot serve their members (Raz 1994, pp. 166–167). Variety as such has no value. It must contribute to the exercise of the meaningful choice of individuals. This means that the options should be worthwhile and also that they should be sufficiently distinct, that is, in our terms, diverse. But we have already noted that there is no objective standard of diversity, since what is considered a meaningful menu of options for choice changes with cultural conditions and values. Raz tries to address this relativistic challenge by characterising the spectrum of worthwhile options in terms of human virtues (which are more universal than culture-dependent values) but does not indicate what should be considered as its adequate scope. Furthermore, diverse forms of life, which express different (respective) virtues, may often belong to the same culture. Personal autonomy requires a variety of options within a culture rather than access or exposure to different cultures.

Multicultural society is justified by Raz in terms of the rights of individuals to membership in a culturally defined community. Without such cultural

identity, a person cannot hope to exercise autonomous choice, to have freedom and dignity, and hence to flourish. But this, of course, is only an argument for diversity in societies whose members *happen* to have different cultural backgrounds. It is not a plea for cultural diversity as such, i.e. the value of a mixture of cultures in a given society as a way to promote the autonomy of all its members. For Raz the potential of conflict and tension between competing cultures in a particular society is clearer than the beneficial effect it might have for individual autonomy for the simple reason that choice is typically guided by culturally bound practices and norms. But for Biku Parekh, the value of cultural diversity lies beyond its contribution to the free choice of individuals. Even if a neighbouring culture in my society is not a real 'option' for me (as is usually the case since it lies beyond my cultural identity), it provides me with a critical perspective about my own culture. Parekh offers a wider justification for cultural diversity, grounding it in enlightened self-awareness rather than in the practical exercise of autonomous choice. Parekh's fundamental idea is that no culture can express the whole spectrum of human values and capabilities and necessarily suppresses or neglects many of them. Cultures complement each other and widen our horizons, making us aware of alternatives to our own life forms and their limitations. Being provided with an external point of view on our culture, we become less dogmatic (Parekh 2000, pp. 167–168).

This looks like a compelling argument not only for multicultural diversity but also for a conservationist policy. Its major advantage over the narrower liberal argument in terms of individual rights is that it is not restricted to living cultures or practical options and hence explains the value of conservation as such. Within a society, the co-existence of diverse cultures fosters cultural tolerance and modesty. In the inter-social sphere, it allows us to experience completely different systems of belief and practice. After all, isn't this exactly the deep value of tourism, which in the modern world enables large numbers of people not only to read about distant cultures or view their material expression in museums but to actually encounter them as living communities, even if they are not actual options of choice for themselves?¹¹

Experimentation and open future: A typical nineteenth-century argument for diversity is the constitutive value of experimentation in the formation of both individuals and cultures. In a non-teleological world, all development is the product of experimentation with different options in changing contingent conditions. Experimentation is a condition of vitality and renewal and in its absence biological and cultural systems are condemned to degeneration. This is the case for both Nietzsche and Mill. Variability of conditions is necessary for meaningful experiments.

However, the experimentation model is problematic in both its cultural and natural applications. Experimentation in the strict sense involves intentional design, a devised programme controlling the relevant variables with the purpose of gaining new insight or knowledge. Nature does not evolve through

such a design. Furthermore, cultures too cannot be viewed as designed experiments in human possibilities, and in that respect their evolution is closer to that of natural species than to scientific or personal experiments of the kind Mill and Nietzsche had in mind. Diversity of options is important indeed for the individual who wants to check the boundaries of experience and human capacities, and a rich culture serves that purpose. But this does not necessitate a diversity of cultures.

A milder form of the argument from experimentation is that of the value of an open future. Variability is good since it leaves open various courses of development for an organism or a habitat, thus enhancing its potential for survival and renewal. Bryan Norton further argues that diversity augments diversity and hence promotes the chances that new species, which might be beneficial to humans, evolve.¹² In the philosophy of education there is a common argument about the child's right to an open future. This is associated with forms of non-dogmatic ways of raising children, leaving them as much free choice in the future as possible. One typical use of this argument, which connects the natural with the moral, is the alleged right to an open genetic identity.¹³ Cloning is often considered an unacceptable restriction on the way the identity of a future child is formed and is accordingly considered a violation of this principle of openness, or rather the natural, uncontrolled process of the formation of human life. Clones are perceived as a primordial threat due to their uniformity and their predictable character which leaves no room for either free choice or natural chance. Although there is something intuitively appealing in this argument, it is based on a simple mistake: the genetic determination of the life of a naturally created animal or human being is no less fixed than that of a clone animal or human being. Furthermore, due to the well-known non-identity problem, originally articulated by Derek Parfit, there is no *subject* to this right to a genetic open future (e.g. not to be cloned) since the alternative of being what one is (e.g. a clone) is to be someone *else*. And as I have noted elsewhere, this critique of the argument for the right to an open future applies in the context of education, especially in the sphere of the formation of the deep, 'identity fixing' characteristics of children after they have been born (Heyd 2008).

Preferential treatment: Diversity is often mentioned as the goal of inverse discrimination in admissions policy to universities or in strategies of hiring employees. The assumption here is that gender, religious, ethnic and racial plurality is good. But is it good as such, or is it good in terms of the particular ends and function of the institution in question? Most sorts of variety are either insignificant or potentially harmful to the goals of the institution. George Sher has correctly noted that even if diversity is a beneficial policy of admission or employment, preferential treatment in its name is justified only when it can be shown that the preferred groups have been discriminated against in the past. In that context the argument from diversity is necessarily backward-looking. The intrinsic aesthetic value of diversity cannot serve as

the basis for a social policy of preferential treatment (Sher 1999, pp. 85–104). It must be emphasised that Sher does not talk about the conservation of cultural diversity *per se*. But his argument can be extended to that level, since there are voices that call for extra investments for sustaining cultures that are under threat. Policies which actively support cultural diversity are usually motivated by guilt for past injustice and suppression rather than by an abstract ideal of diversity for its own sake.

It is interesting to draw the analogy here to biodiversity. Although we do not use the concept of preferential treatment in this context, ecologically sensitive societies make particular efforts to protect those species about which they feel guilty for having endangered them to the point of extinction – eagles, panda bears, elephants, buffalos. Obviously, this priority cannot be considered a matter of justice. Conservation is not a policy of compensation for past violation of rights (if indeed animals and animal species have rights!). But it is perceived as containing a moral dimension. The species that merit special concern are not just declining in a natural evolutionary manner, but are ‘victims’ of base human behaviour, usually associated with greed or plain cruelty. Such motives of biological preservation should be considered, like preferential treatment, as corrective measures rather than as serving diversity as such. Giving an equal chance of survival to these species is considered as justifying extra human investment.

Nature and culture

The temptation to use the same philosophical discourse in discussing biodiversity and cultural diversity has well-known origins. We tend to view cultural distinctions and development in natural terms belonging either to essential, ‘built in’ properties of peoples or to their determination by the non-human, physical and biological environment (climate, type of land, or access to natural resources). But we are equally inclined to ‘moralize’ our environmental discourse, ascribing value to natural phenomena.

Herder’s famous plea for the preservation of national cultures is based on a naturalized concept of culture. He says that nature ‘placed in men’s hearts inclinations towards diversity’, but at the same time made us satisfied with what we actually are by hiding from us most of the alternative options. It is thus a sign of decline when cultures aspire to resemble foreign cultures (Herder 1969, pp. 186–187). Herder’s anti-universalist view about the uniqueness of particular cultures is based on his naturalistic view of the importance of climate in the identity of peoples and in his belief that the historical evolution of humanity is grounded in the diversity of cultures and the ‘manifold flowering’ of man (1969, p. 223). He upholds cultural diversity on the vertical, historical axis, that is, as part of the essential conditions for the development of humanity. On the horizontal axis this diversity is hidden, and particular cultures flourish only when they manifest the uniformity of their natural identity. Contrary to

the progressivist views of the Enlightenment, Herder's romantic conception of history is open-ended, in a way similar to biological evolution. It fits well into the current double apprehension of global uniformity (which is the outcome of globalization) and of over-heterogeneity of national societies (which is the outcome of mass immigration).

From the opposite direction of the analogy, Elliott Sober examines the moral and aesthetic value of the preservation of species (Sober 1986, pp. 173–194). The utility of some species for human purposes is obvious, but there is no utility value in such preservation for its own sake, since even Benthamite utility can be ascribed only to individual animals rather than species. But the aesthetic argument seems to confirm the analogy between natural species and works of art (or, for our purposes, cultures). Both are unique and un-imitable; rarity enhances their value; we want to preserve them in their 'natural' setting (context, habitat); and both have no value independent of human appreciation. Sober's general view is that the value basis of cultural and environmental diversity is the same, since the distinction between the natural and the artificial, the wild and the domesticated, is morally irrelevant.

The natural and cultural perspectives seem to reinforce each other in the plea for diversity. It is hard to avoid holding products of long natural evolution as having some moral status; hence terms of awe, shame, and even responsibility and guardianship, guide much of the environmental discourse. It is symmetrically tempting to view the long-term cultural achievements of human beings as part of some grand plan of nature. This explains the attraction of the analogy between the ideals of biodiversity and cultural diversity. But both the value of diversity itself and the analogy between its natural and human forms are typically culture-relative, as is manifest in some dominant ideologies of our time.

However, as our examination has shown, there are serious pitfalls to this analogy. If *awe* in the face of long-term natural development that is independent of humanity is the guiding principle of a 'do not touch' policy, then it can hardly apply to humanly created products like cultures and languages. That is to say, even if we are not allowed to interfere with processes that precede our existence and control, we may destroy our own creations or let them die. On the other hand, if we feel *respect* for past human effort, achievement, or cultural aspirations, this may serve to justify cultural diversity but it does not apply to biodiversity, which is not the consequence of a voluntary or purposeful design. The analogy between cultural and biological diversity holds only if we either regard the two respective spheres as guided by teleological principles or if we view them both as driven by causal-mechanical forces. But most of us hold that natural evolution is a blind causal process while human development is at least partly driven by choice and purpose.

Unlike the natural/artificial distinction, which seems to have no morally relevant consequences, the difference between the protection of species and the protection of individuals' interests is significant in its moral implications.

Since environmentalists are not concerned with individual animals or organisms but rather with species, the justification of biodiversity takes either the impersonalist line (appealing to the value of the existence of species ‘for its own sake’), or a person-affecting direction (referring to the value of the species *for* human beings). But cultural diversity is supported in terms of the rights and interests of past, present or even future members of the culture concerned.¹⁴ The impersonal sense of awe or reverence for nature is, as we have seen, too general and vague as a justification for biodiversity (we are selective in the kind of species diversity we strive to maintain). The human-centred justification is limited and often empirically dubious, since we know so little about the way current changes in biological and cultural diversity are going to affect the sustainability of future natural and historical development and, furthermore, we do not even know what future people would count as ‘sustainable’.

It seems then that the natural (or should I rather say cultural!) temptation to view bio- and cultural diversity as analogical should be critically checked.

Notes

1. Anthony Appiah notes that the rhetoric of diversity, especially in the US, intensified in direct proportion to the actual decline of cultural diversity in American society. He also makes the interesting historical remark that cultural diversity is a concept based on the German concept of ‘Kultur’, which relates to the particular identity of ‘Volk’, rather than to the French ‘civilization’, which is associated with universal progress and which has fallen into ‘conceptual disrepute’ (Appiah 2005, ch. 4). As a commentator at the presentation of this paper at the Center for Human Values in Princeton University, Professor Appiah had some very helpful insights and suggestions for which I am much indebted.
2. For one of the many interesting studies of the value of cultural diversity for the preservation of biodiversity, see Wertz (2005). The native North Americans understood the value of biodiversity for themselves and for the environment and although they had no grasp of the scientific basis of their agricultural practices, we can learn much from respecting their culture about the way to preserve biological diversity.
3. A quick look in the *Philosopher’s index*, under the entry ‘diversity’, provides compelling evidence to this general claim.
4. The Hebrew term for diversity (*givun*) is the equivalent of ‘multicoloured’, basically connoting the aesthetic satisfaction derived from such kinds of variety. The difference between the French adjective ‘divers’ and the English ‘diverse’ illustrates the distinction between the value-neutral and the value-positive meanings.
5. Strictly speaking, biodiversity refers exclusively to the latter, the inter-specific level, and hence, as Anthony Appiah suggested to me, cultural diversity is a *species* (rather than a full analogue) of biodiversity. It can be put as the analogy between the diversity of genes and that of memes. However, we should note that this hierarchy of the levels of diversity is valid only from the biological point of view (of the analogy between bio- and cultural diversity).
6. Anthony Appiah maintains a similar distinction between ‘internal’ and ‘external’ diversity. He salutes the former (on the condition that the richness of a given culture is associated with universal values rather than with values which are themselves

- culture- or identity-dependent). As for the latter form of diversity, Appiah believes that it can be considered as good only from the point of view of a 'liberal spectator' (Appiah 2005, pp. 147–149). I am not sure that the liberal point of view holds on the global inter-cultural level (rather than to individuals or communities within a society) and hence see the value of global (external) diversity in terms of the productive impact it potentially has on the vitality of particular interacting cultures.
7. See, for example, James Tully (1995, p. 11). Tully is not concerned with the value or disvalue of diversity *per se*, but with the constitutional issues of the claim of cultures to gain political recognition in multicultural societies.
 8. I follow Finlay's interpretation that, despite appearances, Mill should not be taken as an 'assimilationist' (Finlay 2002).
 9. Philosophers have noted the distinction between the descriptive concept of multiculturalism and the prescriptive. Parekh (2000, p. 6) refers to the former as 'multi-cultural' and to the latter as 'multiculturalist'. Barry (2001, p. 22) warns against the uncritical shift from descriptive assumptions to normative political conclusions. See also Raz (1994, p. 158).
 10. Thus, assimilation may sometimes be 'in the interest of a group of people', most typically when their culture is losing its vitality. Yet it is often difficult to distinguish between such inner decline and the disappearance of a culture as a result of external suppressive pressure (which cannot be in the interest of its members). See Appiah (2005, pp. 130–131).
 11. Mass tourism is a highly complex modern phenomenon. It is, admittedly, often motivated by hedonic consumerism and merely superficial curiosity, but one cannot deny its indirect, though deep, effect on the cultural self-image of the tourists and their ability to recognize and acknowledge other forms of life.
 12. Accordingly, by contributing to diversity, particular species that currently do not have a direct utility value to humans must be considered as indirectly beneficial to humans in the future (Norton 1986, p. 117).
 13. Mill also suggests a naturalistic approach to human development. He compares human nature to a tree, which must be allowed 'to grow and develop itself on all sides' rather than a 'machine to be built after a model' (1968b, p. 117).
 14. This line is similar to liberal justifications of respect for minority cultures in multi-ethnic societies (most notably, Kymlicka's). It is difficult to justify the effort to save cultures whose members have lost interest in the future of those cultures.

Notes on contributor

David Heyd is Chaim Perelman Professor of Philosophy at the Hebrew University of Jerusalem. He is the author of *Supererogation* (Cambridge University Press, 1982) and *Genethics* (University of California Press, 1992), editor of *Toleration* (Princeton University Press, 1996) and the author of many articles on ethics, political philosophy and bioethics.

References

- Appiah, A., 2005. *The ethics of identity*. Princeton, NJ: Princeton University Press.
- Barry, B.M., 2001. *Culture and equality*. Cambridge, MA: Harvard University Press.
- The Convention on Biological Diversity (Rio de Janeiro), 1992. See <http://www.ciesin.org/TG/PI/TREATY/bio.html>
- Dworkin, R. 1993. *Life's dominion*. London: HarperCollins.

- Finlay, G., 2002. John Stuart Mill on the uses of diversity. *Utilitas*, 14 (2), 189–218.
- Herder, J.G., 1969. Yet another philosophy of history. In: F.M. Barnard, ed., *J. G. Herder and political culture*. Cambridge: Cambridge University Press.
- Heyd, D., 1992. *Genethics: moral issues in the creation of people*. Berkeley, CA: University of California Press.
- Heyd, D., 2008. The intractability of the nonidentity problem. In: M.A. Roberts and D.T. Wasserman, eds. *Harming future persons: ethics, genetics and the non-identity problem*. Dordrecht: Springer.
- Ingram, D., 2000. *Group rights: reconciling equality and difference*. Lawrence, KA: University of Kansas Press.
- Mill, J.S., 1968a. *Considerations on representative government*, ed. Geraint Williams. London: Dent.
- Mill, J.S. 1968b. *On liberty*, ed. Geraint Williams. London: Dent.
- Musschenga, A., 1998. Intrinsic value as a reason for the preservation of minority cultures. *Ethical theory and moral practice*, 1 (2), 201–225.
- Norton, B., 1986. The inherent danger of undervaluing species. In: B.G. Norton, ed. *The preservation of species: the value of biological diversity*. Princeton, NJ: Princeton University Press.
- Parekh, B., 2000. *Rethinking multiculturalism: cultural diversity and political theory*. London: Macmillan.
- Philosopher's index*, <http://webspirs.ziur.co.il/webspirs/start.ws?customer=hujiph>.
- Raz, J., 1994. Multiculturalism: a liberal perspective. In: J. Raz, *Ethics in the public domain*. Oxford: Clarendon Press.
- Sarkar, S., 2002. Defining 'biodiversity'; assessing biodiversity. *The Monist*, 85 (1), 131–155.
- Sher, G., 1999. Diversity. *Philosophy & public affairs*, 28 (2), 85–104.
- Sober, E., 1986. Philosophical problems of environmentalism. In: B.G. Norton, ed. *The preservation of species: the value of diversity*. Princeton, NJ: Princeton University Press.
- Tully, J., 1995. *Strange multiplicity: constitutionalism in the age of diversity*. Cambridge: Cambridge University Press.
- The Universal Declaration on Cultural Diversity, 2001. See <http://unesdoc.unesco.org/images/0012/001271/127160m.pdf>
- Weinstock, D., 1997. The graying of Berlin. *Critical review*, 11 (4), 481–501.
- Wertz, S. K., 2005. Maize: the Native North American's legacy of cultural diversity and biodiversity. *Journal of agricultural and environmental ethics*, 18 (2), 131–156.
- Wood, P., 2003. *Diversity: the invention of a concept*. San Francisco: Encounter Books.
- World Commission on Environment and Development (The Bruntland Commission), 1988. See <http://www.un-documents.net/wced-ofc.htm>