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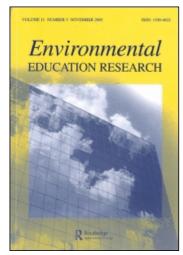
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Significant Life Experiences Revisited Once Again: response to Vol. 5(4) 'Five Critical Commentaries on Significant Life Experience Research in Environmental Education'

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SUMMARY This article is a commentary on commentaries: a personal response to a set of critical commentaries on significant life experience research which formed a special issue of Environmental Education Research, Vol. 5(4), November 1999, and a symposium on the same subject at the Annual Meeting 2000 of the American Educational Research Association. The journal issue and the symposium session were prepared in response to research reports and reviews of the topic of significant life experiences that were carried in Vols 4(4) and 5(2) of the journal. The article begins with a brief history of this debate. With a focus on the 'meta-commentary' to Vol. 5(4) by Stephen Gough, it then responds to a series of major and recurring points of criticism against research on this topic.

A Topic of Controversy

During the Annual Meeting 2000 of the American Educational Research Association in New Orleans, the Environmental and Ecological Education Special Interest Group hosted a symposium on 'Critical Issues in Significant Life Experiences Research and Environmental Education Curriculum'. The symposium was based on a special issue of *Environmental Education Research* on this topic, Vol. 5(4), November 1999, which was composed in reaction to preceding articles in Vols 4(4) and 5(2). The editor and four of the issue's seven authors were present: Annette Gough, Stephen Gough, Noel Gough, Justin Dillon, and William Scott. As an author of two articles in Vol. 4(4), the original issue on significant life experience research that touched off the debate, I was present and spoke from the audience. This commentary summarizes some of the points made at this session, with an emphasis on my responses to the issues covered at the symposium and the journal articles on which they are based.

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As the only contributor to Vol. 4(4) who was able to attend the symposium, I write only for myself and not for the other authors of this volume, or for authors of three subsequent articles on significant life experiences in Vol. 5(2). We have not consulted each other as I compose these words. They represent my own personal view—except where I note the comments of other members of the audience at the AERA symposium. What follows should be read as my partial representation of the discussion at this session and the articles on which it was based, from my individual perspective.

My basic response underlying all of the remarks that follow is that I think that the challenge and debate surrounding research on significant life experiences is healthy, and I commend Environmental Education Research for inviting the initial collection of research in this area in Vols 4(4) and 5(2), the critical commentaries in Vol. 5(4), and this reply. My own contributions to Vol. 4(4) were two: articles on 'Significant Life Experiences Revisited: a review of research on sources of environmental sensitivity' and 'Research Methods to Investigate Significant Life Experiences: review and recommendations' (Chawla, 1998a,b). (The first piece was abridged from Vol. 29(3) of the Journal of Environmental Education.) In this work, I raised my own methodological concerns about existing research; and some of the criticisms made in Vol. 5(4) underscore these points of concern. The AERA symposium and the articles in Vol. 5(4) go much further, however, with extensive and radical criticisms of all previous articles on the topic of significant life experiences in *Environmental Education Research* and, by implication, all work in this field. These objections will make me, for one, place any future work that I might undertake in this area within a wider universe of considerations and cautions. For this I am grateful. I am also grateful for the introductions to new and related literatures, such as Noel Gough's discussion of autobiographical curriculum inquiries. Nevertheless, some of the criticisms, I believe, have gone to an extreme.

For readers who have not been following this debate in the journal or who were not able to attend the AERA symposium, some background will be needed. In 1980, Tom Tanner published an article on 'Significant Life Experiences: ' in the Journal of Environmental Education. In this work he argued that the goal of environmental education should be 'the maintenance of a varied, beautiful, and resource-rich planet for future generations', and that environmental educators should therefore seek to create 'an informed citizenry which will work actively toward this ultimate goal' (p. 20). Toward this end, he noted that educators must therefore seek to understand the kinds of learning experiences which produce people of this kind, and that 'an obvious technique is to examine retrospectively the lives of citizens who have demonstrated amply their informed and responsible activism' (p. 20). He introduced this new area for research with his own open-ended survey of staff and directors of conservation organizations. Subsequent studies have focused on formative experiences in the lives of environmental educators more often than in the lives of activists—a point of contention within this field (Tanner, 1998). Volume 4(4) of Environmental Education Research, which was guest edited by Tanner, carried reviews of past work in this field as well as two reports of new studies. A subsequent issue, Vol. 5(2), carried three new reports.

In my own research in this area, I interviewed people who represented a broad range of environmental concerns beyond just education and wilderness preservation, and who operated in the two cultures of Kentucky and Norway. I also asked respondents to place significant experiences within the chronology of their lives. Because my article based on this work, 'Life Paths into Effective Environmental Activism', was published in the fall 1999 issue of the *Journal of Environmental Education*, it has not been referenced in the critical commentaries in Vol. 5(4) or in the AERA symposium. I would anticipate, however, that most of the following criticisms would be leveled against it as well.

William Scott, co-editor of *Environmental Education Research*, noted that his journal published the special issue on significant life experience research with full knowledge that it was an area of controversy, and with a commitment to publishing critical perspectives as well: perspectives which formed the substance of Vol. 5(4). This volume contained four articles that pointed out limitations in existing work, or dismissed research of this kind as inappropriate in general. In an introductory article, Stephen Gough provided an overview of the debate, prefaced by a series of questions regarding what research into significant experiences actually explores and the research approaches that are most appropriate. Figure 1 in his article, which summarizes these questions, represents to me an extremely helpful analysis of present and potential work in this area, which I hope will be used as a framework for the development of new dimensions of this field in the future.

Before going into specific criticisms, I want to say in general that I believe that a number of these criticisms raise important points that future research on significant experiences will benefit from heeding. I hope, however, that the force of the criticisms as a whole will not discourage people from any future exploration of this topic because it now appears to be a politically incorrect subject to pursue.

In a similar vein, Bob Jickling, editor of the Canadian Journal of Environmental Education and a member of the audience at the AERA symposium, said that he agreed with much written in Vol. 5(4) and presented during the session; but that he nevertheless felt uncomfortable about the direction that the discussion was taking. He compared it to a B.C. cartoon strip that he had seen in which a Stone Age woman comes out of a cave, finds a snake in front of the cave, and beats it with her club until there is not a breath of life left in it. He also said that he felt that to some degree research on significant life experiences was being used as a hook on which to hang polemics about larger epistemological and methodological choices (a point likewise made by Stephen Gough in his Vol. 5(4) overview). Jickling cautioned that there is a great power in the stories which we tell ourselves and the stories we tell others. In the Yukon where he lives, for example, storytelling is a central thread in cultural transmission. In the field of environmental philosophy, one reason for the enduring quality of Aldo Leopold's work is the power of the autobiographical episodes that he narrates: anyone who has read his account of watching the 'green fire' go out in the eyes of a dying wolf is likely to understand the impact of significant moments. By directing attention to stories about sources of environmental interests and motivations, in his view, studies of significant life experiences have in fact opened up an important field for study.

Similarly, Stephen Gough concluded his symposium presentation by noting that, all criticisms having been made, he nevertheless believed that there is a baby in the bath water whom it is important to save. Other people in the audience echoed these sentiments.

My own response to many of the points made by the articles in Vol. 5(4) and the AERA symposium is that the authors have often stated their criticisms in an extreme form that has an ideological ring that, 'Thou shalt not ... ever!' Whereas challenges and criticisms of existing research are healthy, rules to the effect that one should never study certain topics or use certain methods are not. I can only welcome the criticisms that have been made as an introduction to a wider universe of considerations and cautions if I qualify them. Following are my qualifications of a number of the criticisms, and in one case, my strong disagreement. I hope that this response strikes a middle ground that honors the serious and thoughtful reading of Vols 4(4) and 5(2) that Vol. 5(4) and the AERA presentation reflect, while encouraging ongoing work on this topic. In the comments that follow, I will take up Stephen Gough's points as he summarizes them in his 'meta-commentary' based on his review of the five critical commentaries in Vol. 5(4).

The Value of Activism

It is questionable that environmental activists invariably, or even frequently, produce desirable results. It is also unsafe to assume that the 'activists' who make a difference are those whom Tanner has in mind. Environmental activists may, in fact, be poor role models whose motivations include escapism, individualism, and elitism. The most effective change agents, rather, may be 'old, middle class citizens' with centrist political views and a quite different set of significant experiences. (S. Gough, 1999, pp. 356–357, with reference to Payne, 1999)

This summary by Gough forces Payne's finely nuanced discussion of environmentalism into a polemical form. In this form, the statement that 'it is questionable that environmental activists invariably, or even frequently, produce desirable results' implies that they frequently do not. A further implication is that environmental education should discourage activism because of its frequent undesirable consequences. Tanner defines an activist 'as one who engages directly in pro-environmental political activism and/or provides it financial support, as through contributions to selected activist organizations' (1998, p. 400). He notes that, 'The history of environmental issues is incontrovertible on this point; ecological integrity is maintained *only* by politically active citizens. Those who wait passively for public agencies, private corporations, or legislative bodies ... to do the right thing are of no help at all; those institutions must *always* be pushed, and often opposed, by active citizens' (Tanner, 1998).

I associate the position that activism of this kind frequently produces undesirable results with the government and industry representatives whom activists confront. This position is certainly widespread in the environmental education literature of my own country, the United States. It has become standard for industry representatives to accuse environmental educators of being impractical and uninformed tree huggers who 'greenwash' the young, and to accuse activists of elitism and escapism—even though sociological surveys repeatedly show that environmental concerns cross a broad socio-economic and ethnic spectrum (Dunlap *et al.*, 1993; Kempton *et al.*, 1995). The customary defense in

my country is for environmental educators to assert that they seek to teach only unbiased facts, not to advocate any position. In the United States, such a statement has become equivalent to a 'loyalty oath' for the profession in order for people to maintain their jobs or secure funding. Tanner has indeed boldly challenged this neutrality. I admire his forthrightness in doing so.

In my own interviews with environmentalists in Kentucky and Norway, the people I talked with secured the preservation of wilderness and natural areas, prevented the storage of radioactive wastes in national parks, blocked strip mining that was done without landowners' permission, required oil refineries and incinerators to clean up their emissions, secured bicycle paths and pedestrian streets for their cities, and did other actions of this kind. I confess that I find these results desirable. All of these efforts sometimes involved pushing or opposing public agencies, private corporations or legislative bodies. When these people failed, it was not for want of trying. Even if we do not agree with activists' positions, they animate the environmental debate. To propose that activists do not always produce desirable results, with the implication that therefore educators should not encourage activism, sounds uncomfortably to me like one that industry representatives and their legislative allies would warm to. I am not sure that this is the direction in which Stephen Gough wants to lead us, but it is the direction in which his review in Vol. 5(4) appears to point. Certainly teachers should not proselytize in the classroom and require that students think and act just as they do: but proselytizing is a different matter than encouraging independent activism.

My own position—which, according to my reading, is actually close to that of Payne (1999)—is that the environmental movement needs dedicated activists, dedicated teachers, and a large population of citizens who support the protection of the environment in other ways as well: through their voting records on state and local referenda, through holding politicians accountable for their environmental positions, through recycling, reducing consumption and other day-to-day behaviors. Therefore I believe that it is important for environmental education research to understand what motivates all of these groups—recognizing, as well, that people may belong to different groups in different spheres of their lives or at different stages of their lives. This dynamism and complexity of human beings, which was noted by Justin Dillon during the AERA symposium, makes all social research messy. It is not, in my mind, a reason to avoid seeking to understand why people belong to a particular group at a particular time.

It is possible that some of this debate reflects a misunderstanding as to just what Tanner meant by activists. I cannot speak for him, but I believe that he has made it clear in his own research that he does not intend the term to apply only to staff and officers of wilderness and wildlife preservation societies like those whom he himself surveyed. His own recommendation at the conclusion of his study is that research about formative experiences should include people who are active in diverse issues, 'such as urban environmental problems or alternative energy sources' (1980, p. 23). He encouraged my own study, in which I sought out 'nontraditional' as well as 'traditional' activists, such as a newspaper editor who fought for urban bikeways or an Eastern Kentucky farmer who fought for ordinary citizens' right to enjoy their property in peace, undisturbed by strip mining. Payne (1999, p. 372) gives the example of 'local, normally sedate, residents in a coastal "surf" town' in Australia who rallied against the

construction of a local McDonald's restaurant. In my experience, it takes a great deal of dogged effort to keep a mega-franchise out of one's neighborhood, and there are inevitably a few people who shoulder the main burden of this work. I would call these people activists. In my own view, we need to understand what motivates these people who shoulder the main burden of action, those who follow them, and those who oppose them. Only in this way can we know what is common and what distinguishes these groups who together determine the dynamics of the environmental movement.

The Meaning of Nature

'Nature' is a more difficult concept than research about significant life experiences would seem to suppose, and might rather be seen as an 'object of knowledge' which is socially and culturally constructed. (S. Gough, 1999, p. 356, with reference to N. Gough, 1999)

To me, the view that nature can be reduced to a social and cultural construction is a replay of the recurring western dualism that the mind is separate from the material world and superior to it. In my own view, mind and matter commune; and one of the most exciting aspects of environmental research is that nature has, one might say, 'a mind of its own' that sometimes resists or confounds our constructions. Whether or not he believes that nature is nothing but a social and cultural construction, or partially such a construction, Noel Gough does not say. If partially, then we are in agreement on this issue. The difference is that Gough faults me and others in Vol. 5(4) for conducting post-positivist research that extracts simple categories from autobiographical accounts. In contrast, I have been eclectic in my work, believing that sometimes it is useful to uncover multiple layers of social and cultural meaning in case studies, sometimes to analyze patterns in larger samples. In a book-length work, In the First Country of Places, I have done the first, with particular attention to how men and women, African American and European American, have constructed the meaning of 'nature', 'childhood' and what happens when the two come together. In my articles in Vol. 5(4) and in the Journal of Environmental Education, I have taken the second approach.

I am confessedly an 'accommodator' in the words of Firestone (1990), believing that different research paradigms provide different forms of insight, as long as we follow the rules for careful work within each. Noel Gough (1999, p. 415) wrote of his 'personal antipathy to the approaches to research exemplified in the special issue of EER'. Similarly, in the AERA symposium Justin Dillon argued forcefully that we can never categorize the complex relations of human lives. To hold strongly to this position, it seems to me, would allow no form of social research beyond case studies. (Even case studies are in doubt, as I cannot think of any that do not begin to categorize their observations.) Not only would a rule against ever categorizing human experience be too prescriptive, but we can anticipate that it would be ignored. The appropriate response, it seems to me, is not that environmental education researchers should never categorize people's statements or behaviors, but that they should do so carefully and collaboratively.

In his AERA presentation, Stephen Gough posed the question as to whether significant life experience research explores the experiences which are likely to produce environmental activists, or rather the sorts of past experiences which are particularly likely to be recalled as significant by those who, in one way or another, have become activists. My own answer to this question would be that, clearly, we are dealing with memory, which is always reconstructive. For me, this admission does not discredit this line of research. Although we probably do not have complete self-understanding of our actions, neither, I believe, are the reasons for our actions usually completely opaque to us. Therefore people's own constructions of their past point us to forms of experience that we should take seriously, that merit closer attention through multiple methods of inquiry. If all material based on memory were rejected out of hand as a fallible personal construction, then I see only two alternatives: a return to behaviorism and the positivist trust in an objective outside observer (and I am sure that Stephen and Noel Gough and Dillon do not intend to push us in this direction), or no social research at all.

The Limits of Replication

Replication of formative experiences, particularly negative ones, may not always be educationally and morally defensible. (S. Gough, 1999, p. 356, with reference to N. Gough, 1999)

Regarding the point that we should not seek to replicate negative experiences, I have nothing but agreement. Again, I cannot speak for Tanner, but I suspect that when he advocated the replication of experiences that foster environmental activism, he only intended positive kinds. Knowing his own profound respect for wild places, I cannot imagine that he would advocate bulldozing down a child's favorite grove of trees, for example, for didactic purposes.

Accommodating Diversity

Life experiences happen to people, but 'people' is not a homogeneous category. Similar experiences may be mediated quite differently depending on, for example, the age, gender, race, culture and social class of learners. (S. Gough, 1999, p. 356, with reference to A. Gough, 1999)

I agree, and I have also urged attention to these differences in my Vol. 4(4) reviews. I enthusiastically support Annette Gough's argument that we need to understand the environmental experiences that young people themselves consider significant. I differ in not believing that research of this kind should be restricted to work with children and youth only. Environmental education and environmental activism are both intergenerational affairs. I believe that we need to understand not only what motivates young people, but also their teachers and other older people with whom they will need to work, for two reasons. First, if there are generational differences, we need to understand the different sides. Secondly, I believe that it is important to understand what may be lost as well as what may be gained as conditions of experience change. If research indicates that memories of play in natural areas or family role models, for example, hold strong personal significance for people of older generations, but that contemporary young people rarely speak of these experiences, then rather than dismissing older people's memories as irrelevant, I think that these changes point to further questions. Do these differences correspond with increasing age segregation in society, or with declining free access to natural areas? If so, another approach would be to try to recreate opportunities for these experiences, and then see if young people find that they have value.

Research with young people directly suggests that the categories of experience that older people repeatedly recall are most likely not irrelevant from young people's own perspectives. Interviews, observation and other methods for assessing young people's local landscape values (reviewed in Chawla, 1992) repeatedly indicate that natural areas, when safe and accessible, hold special meaning to children and adolescents themselves. In current international research, lowincome urban adolescents repeatedly describe the importance of green spaces for play, as well as multigenerational places where they are accepted by adults (Chawla, 2001a,b). Although this research has focused on young adolescents' own evaluations of their local areas rather than the sources of their environmental attitudes, it does suggest that green areas, as well as congenial relationships with adults, remain important to them. There have not yet, however, been any investigations of the precise question of whether young people's motivations for seeking to protect the environment are the same as those of older generations. I believe that this needs to be treated as an open empirical question: rather than predetermining that young people's reasons will be entirely different.

Before beginning to explore the sources of children's environmental concern, we will need to understand the nature of this concern. How do they themselves define environmental problems and the actions that need to be taken? As a beginning to build upon, we have the work of the anthropologist Donna Lee King (1995) in her book *Doing Their Share to Save the Planet: children and environmental crisis*. Another important contribution is the book by the environmental educator Arjen Wals (1994), *Pollution Stinks! Young adolescents' perceptions of nature and environmental issues with implications for education in urban settings*.

I agree with Annette Gough, as well, about the importance of understanding women's experiences of the environment. In case studies of people's interpretations of 'nature', 'childhood', and childhood experiences of nature, I found a profound gender divide (Chawla, 1994). Therefore I made a special effort to include women in interviews with Kentucky and Norwegian environmentalists. In this case, when 21 women and 35 men talked about the sources of their commitment to their environmental work, I found no appreciable differences. This result in one study, however, should not be interpreted as a reason not to continue to look for gender differences.

Extending the Domain of Environmental Education

Results from significant life experience research suggest that the influence of formal education on environmental sensitivity and behavior may be weak. As a consequence it is far from clear how these findings might be operationalized in terms of the curriculum. (S. Gough, 1999, pp. 356–357, with reference to Dillon *et al.*, 1999 and Payne, 1999)

On this point, I want to close with a plea that researchers think of environmental education as more than just formal school curricula. For people within privileged industrialized nations, it is easy to confuse environmental education with formal education. Definitions of environmental education within international arena, however, are much broader. Agenda 21 from the United Nations Conference on Environment and Development (1992) makes clear that education for sustainable development includes both formal and non-formal methods and means of communication. A concurrent paper on environmental education in

developing countries defines it as 'any process, in which individuals gain awareness of their environment and acquire the knowledge, values, experiences and the determination which will enable them to act—individually and collectively—to solve present and future environmental problems' (Vinke, 1992). These definitions are broad enough to include informal experiences with local adults and places, such as people often speak of in research on significant life experiences. Not only do more than 260 million children at the current time fail to attend primary or secondary school (UNDP, 1999, p. 22), but many more attend starkly underresourced schools with large classes, hard-pressed teachers, and a rigid national curriculum that leaves little or no scope for environmental topics. Under these conditions, everyday places and people may be the main channels for environmental learning. Correspondingly, an understanding of significant experiences—particularly gained through direct work with young people as Annette Gough recommends—may be critical for determining effective priorities for sustainable community development.

Acting on these observations, some creative and determined non-governmental organizations in both the developed and developing world have been seeking to extend environmental education into the non-formal and even informal sector (Adams & Ingham, 1998; Hart, 1997). (By 'nonformal' I refer to structured out-of-school programs, whereas 'informal' refers to spontaneous learning in the course of everyday life.) These realities have inspired my own revival and coordination of Growing Up in Cities, an international project sponsored by the MOST Programme of UNESCO and numerous other agencies, which involves low-income children and adolescents in the evaluation and improvement of their urban environments (Chawla, 2001a,b). For work of this kind, the results of significant life experience research are extremely relevant. They suggest that it is important to engage with young people and their families to identify and protect local natural areas, to create community-based programs where children see adults and peers give the environment attention and care, and to use experiences of environmental destruction as 'teachable moments' to engage young people in an understanding of what has happened, why, and how constructive action can prevent it from happening again.

In Vol. 5(4), Payne (p. 371) eloquently noted the importance of 'the mundaneness of everyday life experiences'—arguing that it is here where much environmental sensitivity arises and becomes expressed. Similarly, a woman in the audience at the AERA symposium recommended attention to 'trivial life experiences' such as feeling the flow of water or the warmth of the sun. The term 'significant' may appear too grand for events of this kind, but I assume that many references to places in interviews and surveys about significant experiences serve in fact as a shorthand for accumulated impressions of this kind over time. As Linton (1982) observed in her analysis of autobiographical memory, routine experiences over a period of time tend to condense into one representative memory. In the same way, innumerable experiences in a childhood place or with adult role models may condense into a few images in our memory and a few words in an interview or survey.

For me, the most important reason not to dismiss significant life experience research is that it suggests the significance of this realm of the mundane, of the everyday world beyond the schoolroom. Admittedly, there are many inadequacies in existing work that need to be addressed through better and more

comparative studies and multiple forms of inquiry. Yet as it stands, this work pushes educators and researchers to extend their conception of environmental education beyond the school, whether they work in the developed or developing world. If people do not like this message, they should nevertheless not dismiss the message bearer. The salience of special places and special people outside of school, in people's memories of what motivates them to be environmental activists or educators, may be an uncomfortable challenge to environmental educators' sense of their own significance. I would hold, however, that just as challenges to past research are salutory for researchers, so challenges to conventional notions of education are salutory for educators.

Meanwhile, access to natural areas in the local environment, friendly urban environments, and positive experiences in the environment with parents and other adults appear to be eroding for more and more children—as parents work longer hours, electronic media entertain us indoors, traffic rates increase, neighborhoods become more dangerous, and asphalt and buildings cover more and more open spaces. Observing these trends, environmental groups such as the Audubon Society, the Natural Resources Defense Fund, and the Orion Society have recently drawn attention to these trends and encouraged members to work against this 'extinction of experience'—sometimes citing research on significant life experiences as they do (Mitchell, 1997; Nixon, 1998; Talbott, 1998). The Brookfield Zoo of Chicago, one of the world's largest zoos, has considered the implications of this research important enough to deliberately design opportunities for children to become absorbed in play with earth, water, tall grass and trees, and to program activities that engage parents and children together in positive experiences with animals and the outdoors (Southeast Section/MIG Team, 1999). The organizations Learning Through Landscapes in Great Britain (www.ltl.org.uk/home.html) and Natural Learning in the United States (www.naturalearning.org) have sought to turn schoolyards into natural areas in the service of their communities as well as classrooms. It will take a strong coalition of people, however, to work against existing trends and to protect and improve the quality of children's local environments, and correspondingly, the quality of their environmental experiences. In this effort, I hope that environmental educators and researchers will not consider this sphere of children's lives irrelevant to them, and stand aside.

Notes on Contributor

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