Environmental education has increasingly become part of the EFL (English as a Foreign Language) curriculum worldwide. This article analyses 26 EFL textbooks used in Japan, to discover what kind of environmental education they offer, and what this says about intercultural communication in the teaching/learning process. The results show how textbooks, by concentrating mainly on technical solutions to environmental problems, fail to open to criticism the cultural values at the heart of the environmental crisis, and direct attention away from important alternatives rooted in the deep ecological insights of traditional Japanese culture. The conclusion discusses ways to move away from unidirectional transfer of technical knowledge, towards a productive intercultural dialogue on ecological issues.

Keywords: deep ecology, environmentalism, discourse, intercultural communication, Japan

Introduction

Around 250 years ago, Kagano Chiyo left her house one autumn morning to draw water, but on arriving at her well found a morning-glory wrapped around the well bucket. Showing a deep respect for the flower she refrained from disturbing it, borrowing water from a neighbour's well. Her seventeen syllable poem composed on the occasion became one of the most widely known haiku of all time:

asagao ni / tsurube torarete / moraimizu
morning glory! the well-bucket entangled, I ask for water (in Bowers 1996:44)

The sentiments expressed in this haiku resonate with the deep ecology movement in the west, which holds that 'all things in the biosphere have an equal right to live and blossom', that all have intrinsic value (Devall and Sessions 1985:68). This is far removed from ecologically destructive discourses which label unplanned plants 'weeds', condemning them to obliteration by weed-killer. It is also far removed from some forms of environmentalism, which define nature in terms of natural resources to be conserved for on-going exploitation by humanity.

In present day Japan, English language education is part of the curriculum for all students from middle school through university. At university, the majority of textbooks are written by western authors, and many of the teachers are native English speakers, providing the majority of students with their first substantial experience of intercultural communication. As Dendrinos (1992) points out, however, English language textbooks are ideologically laden, and the process of intercultural communication involved in English education has been associated with cultural imperialism (see Phillipson 1992). Recently, textbooks covering environmental issues have become extremely popular in EFL teaching, and the vital importance of the topic makes it even more necessary to analyse the ideologies the books are based on with respect to cultural imperialism and intercultural communication.
Jacobs and Goatly (2000) welcome the incorporation of environmental education into English language education, but criticise the teaching materials for not explicitly encouraging participation in environmental protection. There is, however, a more profound level on which ecological education in Japan can be criticised, for what many students are learning in their English classes is not the ecological sensitivity of Chiyo, nor the deep ecology of the west, but shallow environmentalism.

Shallow environmentalism reacts to ecological destruction by addressing immediate physical symptoms (such as acid rain or depletion of the ozone layer), but refuses to address the underlying cultural, political and psychological causes. The major assumption behind shallow environmentalism is that it is possible to continue 'increasing...human populations, technologies, and economies' if we are more careful towards nature (Henning 2002:78). If the answer to the environmental crisis is as simple as making technical changes such as more fuel-efficient vehicles, then 'we will not have to question ourselves, our values, or our world views...' (Henning 2002:78). In the intercultural setting of the English language classroom, shallow environmentalism suggests that there is no problem in the ideological values being propagated in English education materials, so long as the ecological destruction they are associated with is ameliorated.

In contrast, the deep ecology movement calls for cultural and political change at the most fundamental levels of society, in order to address the root causes of ecological destruction (Naess 1990; Devall and Sessions 1985). The movement is pluralistic, consisting of a range of philosophical systems which draw inspiration from the nature-centred wisdom of traditional cultures around the world, and have in common a recognition of the intrinsic worth of all natural phenomena (Manes 1990:148). If deep ecology were taught in English classes, then intercultural communication would be two-way, with the values behind ecological destruction challenged, and alternatives from traditional sources considered. In fact, ecological thought from traditional Japanese culture is a major source of inspiration behind the deep ecology movement. This article starts with a detailed analysis of shallow environmentalism in EFL textbooks in Japan, and moves on to contrast this with the deep ecological sensitivity found at the heart of traditional Japanese culture.

Shallow environmentalism in EFL textbooks in Japan

In total, twenty-six EFL textbooks which address environmental issues were analysed (textbook A to textbook Z, see appendix), within a Critical Discourse Analysis framework (Fairclough 2003; 1992; van Dijk 1993; Dendrinos 1992). The textbooks are all authored (or co-authored) by native speakers of English, marketed in Japan, and all but two (S and O) are specifically designed or edited for Japanese EFL students.

Overview of the genre of shallow environmentalism

Although there is considerable variation in layout and approach across the 26 textbooks, instances of a particular genre, the genre of shallow environmentalism, can be found across a wide range of the books. The 'Acid Rain' chapter from Textbook B provides a prototypical illustration of this genre. Some key sentences extracted from this chapter are reproduced below, with numbers added in order to facilitate discussion:

(1) As early as 1852, in England, rain with abnormally high acidity was recorded...
(2) One of the main causes of acid rain is the increase in sulphur dioxide and nitrogen dioxide emissions, the former from coal-fired power plants, the latter from car exhaust.
(3) In the world as a whole, it is estimated that 60% of the sulphur dioxide in the air is released naturally; the remaining 40% is added by humans and amounts to perhaps 100,000,000 tons a year...
(4) Although many lakes may have alkaline constituents which protect the water from excessive acidity, in those that do not...many types of marine life may be killed.
(5) While it is clear that we should cut nitrogen oxide emissions from cars and sulphur dioxide emissions from industry, it is also time to carry out more research to understand the complex reactions caused by increased acidity in rain. (Textbook B, pp22-24)

The genre consists of 4 main elements: an unnatural phenomenon (in sentence 1), the cause (in sentences 2 and 3), the damage (in sentence 4) and the solution (in sentence 5). However, the logic is, to use Fairclough's terms, a 'logic of appearances' rather than 'explanatory logic' (Fairclough 2003:95). For a start, the causes mentioned consist of only the most immediate physical factors (in this case, sulphur dioxide and nitrogen dioxide), rather than underlying cultural factors such as consumerism. Secondly, the agents responsible for ecological destruction are elided by the use of nominations such as 'emissions' (sentence 5), or by ascribing the source of pollutants to 'car exhaust' and 'power plants' (sentence 2), rather than to drivers of cars or users of electricity. When agents are mentioned, they are often identified only in the vaguest and least specific of terms, e.g., 'humans' in sentence 3.

Since the causes given are physical ones, the responsibility for providing solutions is allocated only to those with direct control of polluting processes. This is reflected in sentence 5, which encourages us to 'cut nitrogen oxide emissions from cars and sulphur dioxide emissions from industry' rather than reduce the use of cars or reduce consumption of industrial products. This 'mystification and obfuscation...of agency and responsibility' (Fairclough 2003:13) obscures the economic, political and cultural causes of ecological destruction, thus protecting cultural values from challenge.

The 'logic of appearances' is manifest in the semantic relations within the genre, which consist mostly of additive and elaborate relations, rather than causal relations, thus providing an abundance of facts, but a dearth of explanation. The grammar also reflects this, in its lack of the kind of hypotactic (embedded) clauses necessary for explaining causality at a deep level.

The modalization in the chapter consists of a mixture of categorical assertions of fact, and typical modalization patterns of scientific circumspection ('it is estimated that', 'perhaps', 'may be'). The categorical assertions lend authority, the circumspection adds scientific credibility, and the conclusion (sentence 5) is expressed at the highest level of Potter's (1996:112) hierarchy of modalization, i.e., as an authoritative expression of fact. The authority of the texts is reinforced further by the fact that they are written in English, a language often considered to be the lingua-franca of the world and the language of science (Phillipson 1992).

The authoritative nature of the genre, combined with its lack of intertextuality (the weaving of other voices into the text), closes down the space for dialogue between competing representations. This tendency is further reinforced through a series of assumptions (described below) which assume common ground rather than opening up space for difference (Fairclough 2003:41). This establishes a one-way channel of communication where environmental science from the west is disseminated outwards towards the rest of the world in a monologue rather than dialogue. One of the roles of a critical analyst is to 'dialogize' accounts such as this, that is, to point out their contingent nature, de-privilege them, and place them in a dialogue with alternative, competing accounts. A first step towards this is to analyse
the assumptions on which the texts are based, and reveal them for what they are, i.e. assumptions, rather than inevitable certainties.

The assumptions behind shallow environmentalism

Assumptions generally appear in texts in the form of 'presuppositions, logical implications or entailments, and implicatures' (Fairclough 2003:40). They are particularly important because they can render 'contentious, positioned and interested representations a matter of general “common sense”' (Fairclough 2003:82). The environmental education textbooks not only fail to challenge the political and cultural assumptions which lie behind ecological destruction, but also, in many cases, seem to propagate exactly those same assumptions by uncritically incorporating them in their texts. For example, Textbook T claims that:

Much of what humans do with their biological resources - including...species harvested from natural populations - depends on our having an accurate inventory of life on Earth (T:13)

This contains the assumption that other species, and even 'life on Earth' are 'biological resources', and presupposes that these resources belong to humans ('their biological resources'). The assumption that all other life forms are a human possession metaphorically entails (Johnson's 1983 terminology), that humans have the right to treat nature in whatever way they please. This is, according to Devall and Sessions (1985), one of the root causes of ecological destruction, yet it finds its way into environmental educational materials in Japan. Textbook T, therefore, seems not only to be ignoring the political and cultural causes of ecological destruction, but also entrenching them. It is possible to identify similar ecologically destructive assumptions across many of the textbooks, four of which are detailed below.

Assumption 1: Excess consumption of resources improves quality of life

The idea that 'the more we consume, the happier we become' is, perhaps, one of the most deeply entrenched and ecologically destructive 'common sense' assumptions of late modernity (see Monbiot 2000). It is highly persistent because it is, in Fairclough's (1989:84) terms, a common sense assumption 'in the service of sustaining unequal relations of power', being tied to narrow commercial and political interests. Many of the environmental education textbooks not only fail to challenge this assumption, but also incorporate it within their discourse, thereby perpetuating it. For example, while discussing the problems of pollution that cars cause, Textbook K states that:

Simply stated, cars offer fun and freedom. When we get behind the wheel and get on the road, we can flee the monotony of daily life...even if we are forced to spend most of our time sitting in traffic jams, the allure of the automobile is its promise of escape (K:11)

This contains the presupposition that 'daily life is monotonous' and just sitting in a car is enough to escape. The implication of positively charged words like 'allure' is that the escape is to a better, rather than worse condition. Textbook I, while also mentioning the problem of car pollution, gives a similarly positive view of cars in general:
Cars...are expressions of a person's individuality...An office worker may go to work in sombre clothes, but on weekends he or she drives a dashing sports car...: the car has released that person's inner self, which is obviously hidden during the week! (I:7)

This passage presupposes that people have 'inner selves', metaphorically hidden by 'sombre clothes' at work, but which can somehow be 'released' through motor vehicles. Release necessarily implies going from confinement to freedom, and in this extract the confinement is associated with work and the negative adjective 'sombre', while freedom is associated with weekends and the positive 'dashing'. This represents overconsumption as the solution to long hours of monotonous work, rather than the cause. Furthermore, in a discussion of the benefits achieved in the Netherlands through the promotion of cycling, Textbook (I) insinuates that the love of material objects is more important, even, than health or clean air:

The Dutch say that now their air is getting purer and that their health is better. But motorists could ask the Dutch one simple question: "Can you put your hand on your heart and honestly say that you love your bicycle as much as you love your car?" (I:7)

These examples blatantly promote consumerism, but there are other, more subtle, ways by which consumerism is encouraged. Textbook R states that:

It is true that we'll be able to enjoy more and more benefits of technological achievements in our daily lives, but at the same time the extraordinary advances in technology will create...a lot of undesirable problems on a global scale...(R:49)

The words 'enjoy' and 'benefits' evaluate 'technological achievements' positively, taking it as an unproblematic assumption that our daily lives will be improved by more and more technology. This shuts out the voices of those who question whether, for example, the moves towards genetically-modified food, labour-saving devices which remove the necessity for bodily movement, and electronic stimulation by visual devices, really do improve the quality of life. The locus of undesirable problems associated with technological improvements is, instead, placed firmly outside of 'our daily lives', somewhere in the 'globe' ('on a global scale'). Textbook B provides a similar example:

Our problems come from...the current consumer lifestyle. This way of life is enjoyed by about 1 billion rich people' (B:1, emphasis added)

In this case, the use of the word 'enjoyed', rather than a neutral alternative such as 'led', treats the assumption that 'consumption is enjoyable' as unquestionable common sense. A related assumption is that reducing consumption is a sacrifice, which appears in Textbook X. Rather than describing the benefits of a materially simpler lifestyle, the textbook insists that 'We have to learn to tighten our belts, make sacrifices.' (X: 15).

The assumption that excess consumption leads to happiness, whereas frugality leads to hardship, is not, of course, inevitable, and it would have been quite possible for the textbooks to challenge it in the way that Monbiot (2000) does:

According to the Worldwatch Institute, we have used more goods and services since 1950 than in all the rest of human history. But we still don't seem to be happy. Indeed, over the same period, 25-year-olds in Britain have become ten times more likely to be afflicted by depression...The World Health Organisation predicts that by 2010 depression will become the second commonest disease in the developed world.
Assumption 2. Non-human life has no intrinsic worth

The harmony with nature achieved by many indigenous peoples around the world is, according to McIntosh (2001:39), based on 'respect for other life and by taboos against disrespect.' However, a common thread running through the textbooks is the often subtle, but sometimes obvious, devaluing of life and living beings (see Stibbe 2003, 2001).

This devaluation is most clearly seen in the metaphoric treatment of animals and plants as resources (O'Neill 1993:3). To give some examples: animals and plants are referred to as 'food- and fibre-producing organisms' (T:1), gorillas are 'vulnerable assets' (Y:29), coral reefs are 'underwater supermarkets' (X:80), trees are 'timber resources' (A:45) and fish are 'marine resources' (P:97).

Textbook T employs the metaphor of an 'inventory of life on Earth' (T:13), thereby construing human activity as a business, with all other forms of life relegated to raw materials. To construct the inventory, specimens of species are collected and 'deposited in museums' (T:9). The same textbook mentions only 'museums and zoos' as places where non-human life can be encountered:

The concept of ecosystem is a highly instructional tool with which humans may easily learn a great deal about their planet and significantly enrich their trips to museums and zoos. (T:42)

This is clearly contradictory, as an ecosystem is a living system of interaction, but animals in zoos and museums are either isolated in cages or dead.

Another way that non-human life is devalued is by expressing ecological destruction not as a tragic of loss of life or the suffering of huge numbers of individuals, but in terms of human economic loss. For example:

The oil polluted thousands of kilometres of coast…and killed countless sea plants and animals in important fishing areas. Thousands of people whose jobs depended on clean seas and tourism lost money. (C:69)

If this extract had stopped after 'killed countless sea plants and animals' it would give the message that the lives of the plants and animals, in themselves, are valuable. But it continues, delivering the message that the disaster matters only in its effects on human livelihoods. In the following two extracts, the same effect is created by employing the word 'valuable':

[because of acid rain] In Quebec, 100,000 square kilometres of valuable maple forests have been damaged (Y:56, emphasis added)

Millions of tons of commercially valuable "by-catch" [dolphins, fish etc] are thrown overboard each year. (K:26, emphasis added)

In many of the textbooks, species are recognised only as a whole, rather than by the individual plants or animals of which they consist. By condemning only the destruction of species, the texts tacitly condone any destructive activity targeted at individuals or populations whose demise does not directly impact the survival of the species. The following examples refer only to species or types, thus overlooking the effects of ecological destruction on individuals who belong to species which are not (yet) endangered:
As we clear away the natural habitats of animals...we may be destroying various species forever (I:27 emphasis added)

[because of acid rain] many types of marine life may be killed. (B:23 emphasis added)

Extinction is defined in terms of a commercial tragedy in the following examples:

Every day about fifty species of plants and animals that could be sources of medicine become extinct (C:13)

When we lose a species we lose its unique genes as well as its products (B:79)

Another way of focusing attention away from protecting plants and animals as individuals is through the use of superordinate mass nouns such as by-catch, fauna, wildlife, and marine life. Textbook C measures the 'amount' of marine life in tons, rather than in numbers of individual animals:

Fishing fleets dispose of 27 million tons of dead marine life each year. (C:33)

In postmodern terms we could say that the animals are (mentally) erased through being named in collective terms (Olson 2000), a practice which may well be a precursor to their physical erasure.

Assumption 3: Humans are at the centre of the world

The deep ecology movement recognises that one of the root causes of ecological destruction is anthropocentrism, a form of human-centredness that subordinates everything in nature to human concerns. Manes (1990:142) writes that 'The paradox of anthropocentrism is that a world conceived of only with human ends in mind seems destined to become inhospitable to any human ends in the long run.' Some forms of environmentalism, and certainly the environmental education textbooks examined, rest upon an anthropocentric foundation through their use of terminology: the term environment is used in ways which imply a separation between humans on one hand, and everything that surrounds them on the other (Cooper 2000:1017).

Anthropocentric assumptions manifest themselves in many ways in the textbooks, particularly in descriptions of ecological damage which, although it impacts all life, is expressed only in terms of the impact on humans:

desertification...has had...a devastating effect on regional economies and social conditions (Y:20)

as a result [of global warming] many coastal areas will be underwater and tens of millions of people will be made homeless (V:17, emphasis added)

In discussing pesticides and other agricultural chemicals, textbook A shows extreme human centredness by considering the impact of the chemicals only on human health:
Protecting the environment is often a difficult thing to do. That is why it is important to work out scientifically which chemicals are really dangerous to humans (A:21, emphasis added)

The implication of this sentence is that any chemical which does not harm humans is acceptable, no matter how much harm it may cause to other animals, plants and the ecosystems on which human and all other life depends. A similar way of describing the effect of toxins is used in Textbook B:

As these pollutants pass through the marine food chain, they are concentrated in larger species, such as fish, which, when eaten, can poison humans. (B:32, emphasis added)

No mention is made here of the possibility that the fish themselves may suffer from being poisoned. In fact, the idea that fish (or any other non-human animal) can feel pain because of environmental pollution is almost completely absent from the textbooks examined. As the example below from Textbook C illustrates, pain is associated only with humans:

Thousands of people ate contaminated fish from Minata Bay and died or became ill. They all suffered in great pain. (C:33)

The order in which victims of ecological destruction are mentioned often reveals a hierarchy of their relative worth. For example, textbook Y states that:

If the necessary steps are not taken within the next 20 years, the North Sea fishing industry will probably be wiped out, along with many species of mammal. (Y:9)

Here industry takes the direct position of affected in the passive construction, but the death of mammals appears only afterwards, as a circumstantial adjunct. Furthermore, the death of mammals and the decline of industry are set up as equivalents (Fairclough 2003:88), since both are co-hyponyms of 'wiped out entities'. Fish, we might note, the primary victims of over-fishing, are not mentioned at all.

Textbook R gives a list of the 'serious effects' of air pollution, starting with human health, mentioning forests at the end of the list, and completely failing to mention non-human animals:

Air pollution has serious effects on human health, historical structures, masonry, brickwork, metal, sculptures and forests. (R:27)

While the textbooks vary somewhat in the order they present victims, human welfare is always first, followed by human commercial interests, with animals, plants and buildings all lower down in the list.

Often, the lives of other animals and plants are entirely overlooked. For example, textbook I states that:

The sea is vital in determining weather patterns of our world. The sea is an enormous source of food for mankind. The sea is also a source of minerals and especially oil that scientists can only dream of. Finally and not least, the sea is a great recreational resource for mankind (I:16)
Missing from this list is the fact that the sea is home for countless non-human animals; instead it is constructed as the equivalent of a human supermarket or playground. This leads to environmentalism which protects only places which have 'wonderful wildlife' to entertain humans:

Australia wants to keep the glorious colours and wonderful wildlife of its coral reef so that it can be enjoyed by its own citizens and the increasing numbers of visitors to Australia (I:17)

In the end, the aim of the environmental movement is reduced to that of preserving human pleasure, as expressed directly in the following example from textbook C:

We must protect the world for ourselves and for future generations. Shouldn't our children be allowed the pleasures of clean air, natural forests, healthy food, and wild animals? (C:3)

Assumption 4: Only local people are to blame for ecological destruction

As mentioned before, the genre of shallow environmentalism tends to focus on immediate physical causes of ecological destruction, thereby placing responsibility only upon agents who are directly involved. The following examples illustrate this:

The main factors contributing to the process of desertification are the expansion of agricultural land, overgrazing, over-cultivation of poor soils and reckless deforestation. (R:33)

Famine is caused by the following factors: 1) long spells of drought 2) population explosion 3) overtilling of cropland 4) poverty 5) deforestation and 6) civil war. (V:69)

The expressions 'overgrazing', 'over-cultivation', 'reckless deforestation', and 'overtilling' are highly accusatory, yet the agents who are being accused have been diplomatically elided through nominalisation. There are, however, a limited range of agents who graze and till and cultivate: local farmers are clear candidates, but the larger organisations which legitimise, encourage or force their actions are not. The World Bank, the IMF, multinational corporations, or the international demand for cheap burger meat, for example, cannot take the position of the agent of 'overtilling'. Yet, as Stedman-Edwards (2000) points out, the explanation for destructive activities 'is often found in socioeconomic forces that arise not at the local level but far from the sites of biodiversity loss.'

Some textbooks are less diplomatic, explicitly identifying local people as the agents of material processes of destruction, while ignoring other, more powerful actors:

The tropical rainforest in the Amazon Basin is being destroyed at a frightening pace, mainly because local people carry out slash-and-burn farming and partly because they fell trees for commercial purposes. (V:5)

Another textbook, W, contains the patronising presupposition that local people do not value their surroundings:
If local people can see people [ecotourists] coming from all corners of Earth to meet these animals and experience this forest, perhaps they will also find a new value in their surroundings (W:48)

Textbook N makes the point that learning should be the other way round, with people from over-developed countries learning from indigenous people around the world about how to live sustainably. However, the textbook still manages to patronise indigenous peoples:

They may be primitive according to our standards, but we have a great deal to learn from them. (N:34)

As Smith and Williams (1999:4) point out 'One of the central problems with the culture associated with industrial growth societies is its lack of relationship to particular places and the way it is being imposed on the rest of the world…' Rather than challenging this cultural imperialism, Textbook I seems to be encouraging it. In a chapter entitled 'Creating a global culture', the textbook states:

Some people are worried about the spread of a global culture; they fear that nations and peoples are losing their individuality. But the global culture is here to stay, so everyone might just as well relax, watch an American movie on television and eat a slice of pizza! (I:77)

By setting up a dialogue with an imaginary interlocutor, this passage does show intertextuality, though the interlocutor is allocated only vaguely to 'some people'. This allows the authors to frame arguments against globalisation in the way of their choosing, in this case as emotional reactions ('worried', 'fear'). On the other hand, the categorical assertion 'global culture is here to stay' is attributed to no-one, thereby presenting it as an indisputable certainty.

**Deeper ecology within the textbooks**

Although the discourse of the textbooks is overwhelmingly based on shallow environmentalism, there were occasional examples of deeper ecology, the most notable being Textbook U. This textbook gets to the root of ecological problems with examples like the following:

The crash of the Exxon Valdez...was one of the worst oil spills in America's history...and the Exxon corporation spent an incredible $2.2 billion trying to clean up the mess...all of this money was duly recorded as contributing to the GNP of the United States...Now imagine for a moment that the number of people who do volunteer work in the United States doubled...All of these [volunteer] activities are productive and contribute to the quality of our life...Yet none of them would be officially recorded as contributing to our nation since they are not calculated into our GNP. (U: 11)

The assumption that high GNP equals high quality of life is part of a hegemonic discourse which perpetuates a 'misperception of its arbitrariness...so that it comes to be seen as transparently reflecting economic realities rather than constructing them in certain ways' (Chouliaraki and Fairclough 1999:5). Examples like the one above challenge mainstream
discourse by showing that 'high GNP = high quality of life' is not a common sense assumption, but is, in fact, one of the myths at the root of the ecological crisis.

A very different example of deep ecology is the following from Textbook E, which uses the Gaia metaphor (the Earth is an organism) to set up an alternative discourse:

...in order to heal our own bodies we need to heal the Earth's body as well (E:2)

Unless we come to understand that the "body" of our earth - Gaia - is directly connected to our own body, we will not be serious about changing our habits to healthy ones. (E:97)

These examples do not fully instantiate the Gaia metaphor, however, because saying that human bodies are 'connected to' the Earth's body, rather than part of it, assumes that humans are separate from the Earth. This is similar to environmentalist assumptions that humans are separate from their surroundings (the environment).

The following examples also represent somewhat deeper ecological ideas, by encouraging empathy with non-human life:

Thousands of trees and animals have died, and forest people have lost their homes, so that today North Americans can eat cheap meat. (S:15)

Even with safety measures, approximately 155,000 sea turtles drown in shrimp nets each year. (G:13)

The first quote puts the non-human individuals who suffer from ecological destruction first, using the word 'die' for both animals and trees, rather than euphemisms such as 'wiped out' (Y:9). The second example encourages empathy by mentioning the type of animals who suffer by name (sea turtles), highlighting their individuality by enumerating them (155,000 sea turtles), and explicitly mentioning their cause of death (drown). This is in stark contrast to Textbook K's rendition of the same situation: 'Millions of tons of..."by-catch"...are thrown overboard' (K:26).

Overall, however, there are very few examples of deep ecology within the textbooks. With the exception of Textbook U, the cultural practices which lie at the root of ecological destruction remain virtually unchallenged, and no alternative vision is proposed.

**Ecological insight within Japanese culture**

At the heart of traditional Japanese culture is a form of ecology far deeper than the shallow environmentalism of the EFL textbooks. This ecological awareness is based on Buddhist ideals of compassion and Taoist ideals of flowing with nature, as they converge in Zen and become manifest in poetry, calligraphy, pottery, and other cultural practices.

That is not to say that all strands of traditional Japanese culture are compatible with ecological harmony. The rigid hierarchy of Confucianism places humans above all other animals (Stone 1999), and some forms of Buddhism display 'what westerners would see as quite cruel behaviour to animals...based on the available notion of reincarnation in an animal, female, or deformed body as punishment for past imperfections' (Haraway 1989:247). Some ways of expressing compassion, too, do not necessarily imply the 'biocentric equality' of deep ecology, but rather construe 'relationships to animals, women or other suffering beings in
ways similar to masculinist human stewardship...[which] insist on dominance and subordination within a social and ontological unity' (Haraway 1989:247).

These hierarchical tendencies may have contributed to Japan’s becoming one of the most ecologically destructive countries on Earth. Other factors include consumerist ideologies imported from the west, the headlong rush towards economic supremacy, the deeply rooted Japanese desire to be in control, and the inability to appraise and stop a course of action once it has been started (Kerr 2001). The deep ecological sensitivity of Zen, therefore, must not be seen as a representation of all Japanese culture, but rather a reaction against the more hierarchical and destructive elements which coexist within it.

Deep ecology in Japanese culture

Each time Japanese people sit down to eat, they perform a ritual with ecological implications: the recitation of the word itadakimasu. Literally the polite form of the word ‘receive’, itadakimasu expresses thanks for the lives of the animals and plants who died for the food, and those who worked to prepare the food. Itadakimasu is just one aspect of naikan (Krech 2002): consciousness of, and regret for, disturbing others, whether those others happen to be people, other animals, plants, rivers or mountains. Naikan as a cultural value, in contrast to consumerism, encourages the use of the minimum necessary resources with gratitude and appreciation.

Material simplicity is not considered a sacrifice, but instead appreciated as a realisation of the cultural ideal of Wabi: ‘to be poor, that is, not to be dependant on things worldly - wealth, power, and reputation - and yet to feel inwardly the presence of something of the highest value’ (Suzuki 1970:23). The aesthetic of wabi permeates traditional Japanese arts, for example in the design of rooms used for the tea ceremony:

The tea room...does not pretend to be other than a mere cottage - a straw hut as we call it...the materials used in its construction are intended to give the suggestion of refined poverty. Yet we must remember that all this is the result of profound artistic forethought (Okakura 1956: 54).

Wabi is also vividly expressed in haiku, for example, in the following poem by Yamaguchi Sodo:

yado no haru / nani mo naki koso / nani mo are
In my hut this spring / There is nothing / There is everything (in Bowers 1996:12)

This haiku suggests that deep satisfaction can be found through interaction with nature, nature being considered as a ‘constant friend and companion’ (Suzuki 1970:334), rather than a force to be conquered. In line with naikan, haiku show respect towards others, as reflected in the following poem by Uejima Onitsura:

gyozeui no / sutedokoro naki / mushi no koe
No place / to throw out the bathwater / sound of insects (in Bowers 1996:38)

Understanding the meaning of this haiku requires two bridging assumptions: (a) that the insects are in the place that Onitsura usually throws his bathwater, and (b) that it would be unthinkable to harm them by pouring bathwater on them. Bridging assumptions which place a
high value on all life are central to the genre of haiku, and counter any tendency toward human-centredness.

In haiku, rather than valuing others for their rarity or usefulness, appreciation is expressed for the ordinary plants, birds, insects and other animals that people interact with everyday. This encourages a form of direct ecological consciousness which is not mediated by museums, zoos or abstractions such as the totalising term 'environment'. For example, Suzuki (1970:263) describes how Basho wrote haiku on the nazuna herb, a plant which is 'humble...not at all pretty and charming...':

Yoku mireba / Nazuna hana saku / kakine kana
When closely inspected / The nazuna is flowering / By the hedge (in Suzuki 1970:263)

Basho's sense of appreciation for the nazuna is not explicit in this haiku, but can be inferred because 'everything in nature is to be treated with high regard' is an assumption built into the genre of haiku itself. Haiku poets often show a great deal of empathy, imagining themselves in the place of animals and plants and trying to understand the world from their perspective. For example, Basho empathises with a monkey:

Hatsu shigure / Saru mo komino wo / Hoshige nari
First winter rain / The monkey also seems to wish / For a little straw cloak (Suzuki 1970:232)

Within Japanese culture, even modern Japanese culture, there is a great fondness for the seasons and the natural cycles they represent. All haiku contain a word connoting the season, and many festivals revolve around the viewing of seasonal phenomena: the cherry blossoms, seasonal flowers, autumn leaves, and fireflies. Seasonal food is highly prized, and Japanese people have traditionally looked forward to matsutake mushrooms in autumn, mikan (mandarin oranges) in winter, watermelon in summer, and bamboo shoots in spring. This leads to the ecological practice of eating locally grown fresh fruits and vegetables in season. With naikan ensuring that animal products are kept to a minimum, and wabi ensuring that portions are small and unrefined, the result is one of the healthiest and most ecologically beneficial diets in the world.

In traditional Japanese art and crafts, it is simplicity and closeness to nature which are prized: teabowls are rough, irregular-shaped and show off the natural texture of the clay; whisks are cut from a single piece of bamboo; houses are built and decorated with local, natural materials. Perfect geometric shapes, monochrome colours and symmetry are disdained as unnecessarily repetitive and unnatural (Okakura 1956: 54). Respect for nature is manifest not only in haiku, but in the objects which surround people in their everyday lives. A practical ecological benefit of this is that crafts are made by hand using the minimum necessary materials gathered locally, and the localisation of craft is still important in Japan, each region having its own highly prized specialities (meibutsu).

Naikan, wabi, the love of nature, and traditional craftsmanship are all manifestations of Zen, Buddhist and Taoist traditions which lie at the heart of Japanese culture. These traditions address the deep psychological split which has occurred between human thinking and nature, the split that ecopsychologists claim is at the heart of ecological destruction (see Kanner et al 1995). For example, in discussing intellectual abstraction and the separation of subject and object, Suzuki (1970:359) writes:
there has never been any separation between subject and object, and all the
discrimination and separation we have or, rather, make is a later creation...The aim of
Zen is thus to restore the experience of original inseparability...

Zen arts and meditative practices offer a range of ways to put artificial intellectual
discriminations into perspective (Harada 1993) and pay attention to the 'multiple levels of
connection' (Conn 1995: 159) which are at the heart of all ecological systems.

Consideration of Japanese ecological ideas shows, at the very least, that ecologically
destructive 'common-sense' assumptions in the west are contingent, and that alternatives are
available. At best, the alternative constructions of Japanese ecology have the potential to
address some of the deep cultural causes of ecological destruction which are ignored, or even
entrenched, by shallow environmentalism.

Conclusion

James Allen’s expression ‘fighting against circumstances’ seems particularly applicable to
shallow environmentalism:

...what, then, is the meaning of ‘fighting against circumstances’? It means that a man is
continuously revolting against an effect without, while all the time he is nourishing and
preserving its cause in his heart (Allen 1951:19)

Smith and Williams (1999:3) argue that in the USA ‘classes in environmental education focus
on scientific analysis and social policy’, and ‘missing in most of these efforts is a recognition
of the deeper cultural transformations that must accompany the shift to more ecologically
sustainable ways of life’ (ibid:33). This article has shown how EFL textbooks spread this
form of shallow environmental education abroad, in this case, to Japan.

It is important to question why the textbooks fail to challenge those western cultural
values implicated in ecological destruction. One explanation may be that spreading
consumerist ideology, along with flattering portraits of the west, is a standard way of opening
up overseas markets, and ELT has been, and remains, deeply implicated in this process

However, despite the influence of cultural imperialism, traditional values in Japan
have not been lost entirely, and EFL students still have access to many aspects of their
culture. Nearly all students have visited Japanese style houses, have eaten traditional Japanese
food, have gone on hanami picnics to view cherry blossoms, have heard lyrics about seasons
and nature in enka music, have said *itadakimasu* before eating, and many have taken part in
tea ceremonies, ikebana flower arranging classes, and calligraphy classes.

Traditional culture may not be a top priority for young people in Japan, but it only
takes a small stimulus for them to remember traditional values and consider their application
to the ecological problems of the modern world. For example, 60 students in a university EFL
class in Fukuoka were asked to consult with elders and write an essay entitled ‘Why do
Japanese people say *itadakimasu*?’ (Stibbe 2004). The students responded with great
enthusiasm, and their answers showed not only a clear understanding of, but also pride in,
traditional Japanese values. The following extracts were typical:

a) My grandmother said [*itadakimasu*] expresses gratitude to the plants and animals that
were enjoying life before being killed by humans. My mother says we say *itadakimasu*
to thank the people who prepare and grow the food. Finally my friend says she thinks nothing when she says itadakimasu.
b) Itadakimasu means I’ll receive your life as my life...we think of all living things, all plants and animals, as having precious lives.
c) Many animals become our victims. They probably wanted to be alive for a long time enjoying the world, but we took everything they had from them. Saying itadakimasu is a way of expressing gratitude to the animals.
d) ...plants and animals don’t exist for people to eat them...
e) Through itadakimasu we learn about the connection of life...
f) ...[saying itadakimasu] is a wonderful part of Japanese culture

Some students also connected itadakimasu to the ecological principle of not wasting or over-consuming:

d) I work in a food store. There is always a lot of left over wasted food. This is very impolite to the animals and plants who have died for our dinner
e) It is impolite to living things to be fussy [about what we eat]. We must not waste left over food.

Similarly, when students wrote about the architecture and decoration of Japanese style houses, the tea ceremony, and traditional Japanese food, they showed a deep appreciation of traditional Japanese values, and could see their relevance to the modern ecological crisis.

A possible way forward for ELT is for foreign teachers to work interactively with students, facilitating students' rediscovery and critical appreciation of the wisdom of their own culture, and working with teachers to apply it to modern problems of ecological destruction. This is not to suggest that current textbooks and western environmental knowledge be abandoned, but that they be dealt with critically, within a framework of student participation in reconstructing the information they contain, in dialogue with their traditional culture.

Such a framework could be based on revealing assumptions, since assumptions are central to the hegemonic spread of ecologically destructive ideology. This article discussed only four of the shallow environmentalist assumptions contained in textbooks, but there are many more for students to discover for themselves. These assumptions could then be considered alongside the very different assumptions which lie within Zen texts, haiku, and the physical discourses of architecture and gardens. And once learned, this critical awareness may be turned by students upon ecologically destructive assumptions within other aspects of their own culture.

Overall, if students develop critical awareness of the textbooks they use in English classes, the English language becomes less a medium for the propagation of ecologically destructive values, and more a medium for intercultural dialogue in the common quest for ecological harmony.

References

Allen, James (1951) As a Man Thinketh. New York: Peter Pauper Press


Monbiot, George (2000) ‘The more we spend, the happier we become. Probably’ The Guardian 28th December


Appendix: Environmental education textbooks analysed

| Textbook L | 1995 Paul Allum, Save our Planet. Tokyo: Seibido |