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The study of the future in anthropology in relation to the sustainability debate

Gerard A. Persoon and Diny M.E. van Est

Introduction

In anthropological literature the future is remarkably absent as an explicit object of research. Anthropologists are more interested in the present and its genesis. They try to explain the present by reconstructing the past and stand with their backs to the future. Questions about present-day life are explained using causal reasoning and argumentation drawing heavily on events in bygone times. Even in works dealing specifically with time, the focus is far more on the past and present than on the future (Gell 1992, Munn 1992). In addition, the future or future events are paid virtually no attention in books dealing with field methods and research techniques. In anthropological education programs the future is seldom addressed. In the Netherlands at least we know of no course within anthropology departments that is devoted to this topic. This does not imply, of course, that the future is totally absent from anthropological writings and ethnographies. It is often hidden or presented under different headings.

The neglect of the future as a research topic limits the contribution of anthropology to thinking and writing about the future of society. Discussions about 'the good society', the 'city of the future' or 'the future of the land', either in a utopian sense or as a realistic exercise, are dominated by other disciplines. This also holds for the global sustainability debate, which explicitly addresses the future and even

the long-term future. The environmental concepts of sustainability and regeneration and associated policies (including conservation and ecological restoration, often combined with issues of social justice) are outcome- and future-oriented (Nagpal and Foltz 1995). Unlike many anthropologists, environmental scientists and planners in various disciplines are obsessed with the future: scenarios and models based on visions of coming times are their primary analytical instruments.

This difference in future orientation between anthropologists and environmental scientists and planners has led us to take a closer look at the future as a topic of anthropological inquiry. In this introduction we explore the extent to which anthropology has dealt with the future as a particular aspect of dealing with the concept of time in general. Our first aim is to reveal the often implicit aspects of the future in anthropological writings. Against this background we then discuss the relevance of various time perspectives in the 'real world' of environmental planning in which the concept of sustainability plays a crucial role. Finally, we make a number of suggestions regarding the study of the future in anthropology.

About time

Before reflecting on the future we need to discuss certain aspects of the phenomenon of

time. Every society has ways of conceiving time. Among anthropologists, Evans Pritchard initiated the study of the conceptions of time in his famous *Nuer time reckoning* (1939). He argued that time was a cultural construction: every culture has its own way of conceptualizing time. The Nuer did not have special instruments for measuring time, neither did their language have a word for 'time', but Evans-Pritchard demonstrated that a range of 'temporal structures' influenced their daily, seasonal and ecological activities. The 'daily clock' was related to their cattle. The routine herding activities were referred to as markers of daytime: "I'll be back after milking, I'll go when the calves come home". The alternation between wet and dry seasons further influenced the temporal organization of their lives. Months and seasons were described according to their ecological characteristics and the attendant social activities.

The strength of Evans-Pritchard's study was that it opened minds to the diversity of possible time orientations. He contributed to "the insight that concepts of time were to be seen as products of culture and environment, rather than as products of intellectual capacities" (Dijk 1997: 4). In subsequent anthropological work (e.g. Levi-Strauss 1962, 1966, Bohannon 1953, Leach 1962, Bourdieu 1963) more exotic understandings of time emerged (see Gell 1992 for a critical review).

Most studies of time perspectives contain generalizations (popular as well as scientific) about Western and non-Western time perspectives. Until recently, linear time perspectives, associated with the Western world, and cyclical time perspectives, associated with the non-Western world, were the most common models. These were used to account for the presence or absence of futuristic orientations (Wallman 1992: 11). The linear time model is based on a clear distinction between past and present as well as between present and future. The concept of linear time is often used to explain 'future-oriented notions'. In contrast, cyclical notions of time are governed by the

natural duration of specific events: any point within this sequence of events is potentially also its beginning or its end. Cyclical time perceptions are often thought of as oscillating, static or in other ways different from the linear, Western perception (Shankar 1992). The cyclical model is also associated with the absence of future perceptions. The argument goes that "the future is supposed to be virtually absent because events which lie in it have not taken place, (...) and therefore cannot constitute time" (Mbiti 1969: 11).

These generalizations about time perspectives have spawned some debate, however. A number of authors criticize the fact that this linear-versus-cyclical distinction is too general and absolute. Among them, Fabian states that these time models have been used as an instrument in the 'othering' or 'exotization' of non-Western people (Fabian 1983, 1991). Others have suggested alternative models that move beyond the cyclical-versus-linear dichotomy. Leach has proposed zigzag alternations, predicated upon a division between sacred (ritual) and profane (mundane) activities (Leach 1961, in Howell 1992). Multiple forms of time are a salient feature of the most elaborate forms of time reckoning among the Maya people, who developed 17 different, precise calendars to organize social life. One of these organized ceremonial life around a holy year consisting of 260 days, while a 365-day calendar was used to organize everyday activities (Toonen 1999). Others argue against seeing the linear and cyclical time models in an either-or way. Wallman (1992) maintains that various time orientations coincide in every culture. There is much to say for the view that cultures do not have one single temporal orientation but various degrees of emphasis and variance. In agriculture, in family life and in life cycles, by definition cyclical models prevail. In other spheres of life, linear models may dominate. In political affairs, different time perspectives are operative. In times of ecological stress or abundance, time orientations *vis-à-vis* resource management may change.

It is very important to recognize these differences. There are no simple generalizations to be made with respect to time orientations.

Several authors question the assumed characteristics of cyclical notions of time. Here we wish to focus on authors who have questioned the presumed absence of progress or future within this time model. Christin Kocher Schmid, in this volume, writes in her article on the Kilimeri (Papua New Guinea): "The construction of the future in the Kilimeri is restorative and innovative at the same time. On the one hand cyclical views of time are restored, on the other hand innovations are attempted, whereby the innovations are embedded in the cyclical view itself". Van Dijk (1997: 6) argues that the assumed absence of future orientations and perspectives must be regarded as "(...) a specific cultural, spatio-temporal construction. In specific times, at specific places and in specific social, political and economic circumstances, prognostic orientations appear to be absent, while in others (here he refers to Worsley's work on the Melanesian cargo cults) they are forcefully present" (see also Kocher Schmid 1999). Wallman states that absence of prognostic thought in non-Western time orientations is related to the fact that the future as an issue is lacking in anthropological research. She writes rhetorically: "Does the rarity of the future in anthropological reference demonstrate the absence of the concept in non-industrial cultures, or does it only reflect the fact that, for whatever reason, we tend not to ask our informants about non-specified future time?" (1992: 2).

The domination of the Western system of time reckoning

Goudsblom (1997) states that one of the most remarkable aspects of globalization is the spread of the uniform way of measuring time. In trying to explain this phenomenon he sketches the historical development of timing by means of special-purpose instruments. Over the centuries such instruments gained ever

greater precision (Boorstin 1987), but progress was by no means smooth. The introduction of the sun-dial in Rome (in the third century), for example, provoked widespread protest among populations. The phrase 'tyranny of time' was heard for the first time. The invention of the mechanical clock (in the late thirteenth century) was an important step forward: it became technically feasible to measure time in a standardized fashion, independent of events. With the further refinement of timing instruments, Goudsblom remarks, the general concept of time developed (Goudsblom 1997: 24-32). For about 300 years the mechanical clock was a European monopoly. The Chinese had impressive water clocks, but their use was restricted to elites: time and its control were strongly related to power, ordinary folk being excluded from such control (Landes 1998: 67-8). This is not an isolated case. In many societies priests, and later kings, were appointed as specialists to indicate the right time to do the right things. In the West African context, this meant signaling the right moments to cultivate and harvest food, or to open the fishing or hunting season. Timekeeping was thus related to power over resources (Mumford 1967).

In Zuiderwijk's article (this volume) the 'embeddedness' of time is the central theme. The clock, as the material expression of embedded time, made it possible for people to become aware of time, to be 'on time', to be 'too late'. At the same time, it introduced new moral values like punctuality (Boorstin 1987: 88) and efficiency. Timing instruments have not only shaped our temporal structures but systematized and disciplined our activities as well. Zuiderwijk considers another, less obvious example of embedded time: the time perspective hidden in nature or in agricultural work that shapes the temporal views of farmers. He uses the concept of embedded time to analyze the effects of agricultural industrialization on time perspectives in farming in general and for the Mafa people of Cameroon in particular.

In relation to the global temporal structure,

two important aspects need consideration. First, there is the standardization of time. The more complicated a society, the greater is the perceived need to standardize time. Spurred by the development of modern rail transport in the nineteenth century, temporal standardization was stimulated (first nationwide, later worldwide) in order to avoid chaos and accidents. Today, modern atomic clocks are so precise that all measured time is internationally uniform. International organizations (profit and non-profit), international air transport, satellite connections, e-mail and Internet, all go to consolidate a uniform temporal system worldwide. This diffusion of the Western time concept is, in itself, a good example of a particular form of globalization, that is the flow of Western ideas over the globe, which Appadurai (1990) has termed 'ideoscapes'. As Aveni states, we are moving "toward reckoning change and activity by a single clock. We are united by time zone, an international dateline, and a universal second. Modern secular time transcends both nation and religion, both environment and demography. Time becomes more objective, less spiritual and unemotional" (Aveni 1995: 338). People seem to accept this without objection. In a sense, time has become a natural, historic and unproblematic fact. Elias (1985: 105-6) relates this apparent self-evidence to the ways in which children are educated in Western society: a child in the (post-)industrial society needs seven to nine years to learn about 'time' (watches, clocks, calendars) and to translate this knowledge into time-consciousness and time-disciplined behavior. By adulthood, the Western time regime has become self-evident. People have difficulty understanding that there are other cultures with a different time perspective. In contrast to the generally positive reception of the standardization of time, however, the role of global temporality has often been evaluated as a negative aspect of modern life: terms such as 'stress', 'time pressure', and reference to people as 'slaves of the clock' illustrate the clashes of temporal regimes, in

what has been described by Coupland (1991) as an 'accelerated culture'. In these critiques of our time and culture, non-Western time reckoning is sometimes promoted as a viable alternative to the dominant temporal regime.

The second aspect of the global temporal structure is that, although Western time reckoning is dominant, it is also obvious that in a globalizing world with greater contact among people from different backgrounds, people are increasingly confronted with mutually discrepant - context-specific - temporal frames. In his book *Time wars: the primary conflict in human history* (1987), Rifkin suggests that many historical inter-group conflicts may have been over competing notions of time. A more profound comprehension of the variety of time orientations is therefore essential, because ideas about time are central to understandings of what exactly is meant by 'sustainable development' in specific places.

The past as a resource

Traditionally, anthropology has usually been more concerned with the past than with the future. Early evolutionist anthropologists like Taylor and Morgan set out to study 'primitive' peoples because it was assumed they were living 'remnants' of earlier evolutionary phases of humanity. Later, many anthropologists continued to study 'primitive' peoples and assemble their artifacts in museums, based on the assumption that they were being 'swallowed up' by modernity and global Westernization.

Today, of course, this old-style evolutionism has disappeared from anthropological discourse, but in anthropology in general, and in the anthropology of time in particular, the past and the present are emphasized while the future is neglected as a topic of research. Today, however, the past is studied for different reasons from those of the aforementioned anthropologists. Many anthropologists study the past to understand the dynamics of the present. Some of them even argue that by knowing the

past we can better understand the present and 'forecast' the future. In this sense they echo claims made by many historians (see e.g. Hobsbawm 1998). De Bruijn and Van Dijk (1995: 509), for example, write on the last page of their thesis on *Cultural understandings of insecurity in Fulbe society, Central Mali* (comprising the parts: The Past, The Past in the Present and the Present I, II and III), that more comparative and historical knowledge is needed about how people deal with the dynamics of calamities "in order to do better in the future". There is no doubt that there is a great deal of truth in this assertion, but there is more to it. Anthropologists' views about people who construct or even invent their past, manipulate historical records to define current resource use (Sharpe 1998) and regard the past as a scarce resource (Appadurai 1981) are also abundant in the anthropology of time.

It may be true that some cultures have a kind of dominant worldview that is more oriented towards the past. Some anthropological case studies of highly religious societies with strict rules of behavior indicate that they might have an orientation towards the past or, as it is often framed, towards a 'lifestyle of the ancestors', the ancestors being considered the living dead in the present. Examples that might be given include communities like the Amish in the US, the Bagyeli of Cameroon (Biesbrouck 1997) and the Baduy (Iskander 1998) and Kodi (Hoskins 1997) in Indonesia. Writing about the Trobriand gardeners, Aveni concludes that: "Pattern is the source of truth in this culture. Linear connections, causality, and sequentiality are no concerns of theirs. They place no value on the future as we do when we use the word progress to describe which way we shall go to it. For them, the present is not the road to the future, and the future is neither good nor bad, better nor worse than the past" (Aveni 1995: 332-3).

Our point here is to stress that these analyses neglect possible futuristic features of these societies. Within the standard anthropologi-

cal understanding of the past, Van Dijk (1997) points to two neglected features of what might be termed 'nostalgia' in anthropology. Within a given society, such yearning for the past may be present in the context of a culturally specific image of the future. Ancestor worship indicates primarily an orientation towards the past, but we should not lose sight of the role it plays in (perceptions of) the present and the future. It is common in the discourse on indigenous peoples' rights to use the past, in many cases even the distant or mythical past, to make claims for the future. A clear example is the book *Consulting the spirits*, about resource use by indigenous peoples in the Philippines (Bennagen et al. 1996). Furthermore, some groups or cultures may have a prognostic orientation, neglecting an orientation towards the past. The Born-again movement in Malawi is one such group (Van Dijk 1997). They are highly future-oriented and do not wish to remember the past.

The hidden future in anthropology

As stated, the future is rarely explicitly dealt with in anthropological writings. It is not a key concept in the presentation of research findings, nor a central theme in anthropological theory. However, a closer reading of the anthropological literature reveals a variety of implicit future-related elements. In this section we present several themes covering particular aspects of this 'hidden future': exploration and manipulation of the future; the future in relation to the maintenance of material culture; anthropological reflections on the future; and the future of cultures and cultures of the future.

Exploration and manipulation of the future

In some societies the future belongs to a god or the gods and in others it is defined in terms of the past, in terms of the lifestyle and rules of the ancestors. In the Western world the fu-

ture is used as a resource: it is calculated, insured, predicted, colonized and discounted. It is, according to Adam (1998), dealt with and eliminated in the present. This is reflected in billboard messages like 'The future is now' or 'Don't dream about it, drive it now'. With these cultural differences, it is also given who the guardians of the future are: the gods, priests and shamans. In the West, the guardians of the future are the future-making institutions: markets, politics, agricultural and food science, trend-watchers and the news media. One could ask, along with Adam (1998): how safe is the future in their hands?

Methods of exploring the future through divination represent efforts to try to know the unknown, to enter the realm of the supernatural powers. It can thus be said that explorations of the future tend to be closely linked to religion (Howels 1986: 67). Numerous ways have been developed to explore or manipulate the future, often by religiously inspired means. Among these are practices such as divination, forecasting, sacrificing, the ordeal, oath-taking and magic. A common feature is that they endeavor to foresee or influence future events in a specific way.

Divination is a means of forecasting as well as providing guidance for future actions. Divination methods reported in the literature include crystal-gazing, chiromony, card-reading, divination by means of dice, explanation of dreams, oracles, ordeals and omens. There is also, of course, the 'science of astrology'. Within every culture there are ways of predicting the future, whether long or short term. There are various approaches, but in many cultures natural phenomena such as animal behavior are interpreted as signs of future events. The Dayak of Kalimantan (Indonesia), for instance, pay great attention to the appearance of particular birds, on the basis of which they decide whether or not to engage in particular hunting and gathering activities (King 1993).

Sacrifice has been a topic of anthropological study for a very long time. It is a crucial

element of the explanation of the origin and evolution of religion. Despite the enormous variety of forms, a common characteristic is that it is a kind of gift to the spirits aimed at a reciprocal gift in the form of a good harvest or a good catch of fish in the future. In a volume on sacrificing in Eastern Indonesia entitled *For the sake of our future*, Signe Howell (1996) states that "Through sacrificing, the meaning of individual and social existence is transmitted as the mainstay of existential truth and values, the affirmation of which becomes the premise for future well-being. (...) Through sacrificing societies, including ancestors and other spirits, affirm the qualities of their relationship" (1996: 23-4).

Even in societies which now adhere to world religions, divination is still popular both for individual fortune-telling and for reading future developments in society. Closely linked with divination are methods influencing future events by magical means, or by uttering spells, by performing particular rituals or by refraining from certain actions because 'it is not the right time', judged on supernatural considerations (Schefold 1972 and 1999).

In the study of oral traditions, and in particular in the study of myths, legends, and folk tales there is a vast literature on the origin of time, on the creation of the world and of human beings as well as of plants and animals. There are also mythical stories of the sun, moon and the stars and other natural elements like fire and water. Creation is a major theme in the myths and folk literature of almost every culture (see e.g. Eugenio 1996). These myths often recount human misconduct, which caused changes in the natural world. It is because of these changes that men and women now have to work harder, that food is not readily available, and that animals have to be hunted rather than presenting themselves voluntarily (Ruddle, Johnson, Townsend & Rees 1978). In these myths and folk tales far less attention is paid to the future, or even to the end of time. As a theme it is virtually absent from studies of mythology. Even though this

is generally the case, Walter van Beek (this volume) convincingly argues that a close reading of original sources reveals the fact that in a number of cases these traditions do deal with the future, or the end of time or apocalypse. As is common in Christianity, as well as numerous sects that have sprung from Christianity (Gasper and Valentin 1997), in some societies there is an apocalyptic time spirit according to which humans will be transformed into other beings or spirits at the end of time. Ordinary life will come to an end and be replaced by a kind of supernatural order. What is striking is that these phenomena are usually only discussed under the headings of ritual or religion and rarely related to issues of choices of human behavior in relation to the future.

The future in relation to the maintenance of material culture

Differences in perceptions of time are also of interest in relation to material culture, maintenance of means of production, and ideas and practices about saving, investment and storage. These ideas and practices are, of course, related to perceptions of future abundance of resources and other aspects of (in)security. People from different cultures show considerable variation with respect to the time span for which they create and maintain their material culture. Time spans are expressed in the attention devoted to the maintenance of material culture or the attachment people feel to material elements of their cultural heritage. As stated by Galjart (1987 and 1996), this aspect of culture or society has hitherto received insufficient attention from anthropologists and sociologists.

Maintenance of material culture is an expression of people's unwillingness to accept the natural duration of their physical creations like houses, temples, places of worship, rice terraces or ships. Such an attitude may be reflected in any preventative action against processes of decay. People may take great pains to extend the life span of their creations. Faced with

the fact of their earthly mortality, kings, emperors and elites have left temples, pyramids, churches and other physical structures to the world, to keep alive their memory (see e.g. Hawkes 1990). The western world shows two very different orientations towards maintenance. On the one hand, it is highly oriented towards conserving or restoring its past in the materialized forms of churches, paintings, books, farms, windmills, houses, ships, furniture and castles. Today, even such entities as industrial complexes and bridges from another age are cherished as relics of the past, at great economic cost to the tax-payer. In the west, cultural heritage is closely tied up with national identity and is therefore to be preserved for the future. On the other hand, with regard to contemporary consumer goods there is a high degree of wastage, based on economic principles. If repair or maintenance become too laborious or expensive, products are simply discarded. Environmental costs are not generally included in this calculus and people's attachment to these kinds of material products is seen as sentimental and irrational.

There is a similar dual attitude towards animals. Certain animals such as cows, pigs, chickens and sheep are kept as a means of production, whose economic life span is determined by prevailing market prices and the cost of food, housing and veterinary care. Other animals are treated as pets whose natural life span is artificially prolonged.

Not every culture goes to these lengths to preserve their material culture; nor are attitudes towards livestock everywhere similar; nor are excessive amounts of waste produced. It is interesting in this respect to evaluate the encounter between cultures holding different attitudes towards maintenance of cultural artifacts and towards modes of animal exploitation.

The first aspect can be illustrated with reference to the Ifugao rice terraces in Northwest Luzon (Philippines). These now eroding 'stairways to heaven', as the terraces are known, were recently placed on the UNESCO world

cultural heritage list (Mayor 1996). Although they have served to meet the need for rice for over 2,000 years, these days it is becoming increasingly difficult to find the necessary labor. People are migrating to other areas and off-farm employment like wood-carving, and the tourist industry generates more money, with work that is physically less demanding. Rice can be produced more easily at lower altitudes, with an average yield per hectare rice that much as in the mountains. Ifugao people appear to accept changes in land use, just as they are changing their traditional architecture, with no perceived need for preservation. However, the outside world is endeavoring to maintain the rice terraces, not for agricultural purposes, nor for ecological or economic reasons, but for cultural and touristic reasons. In other words, outsiders wish to preserve a material expression of the past, while the Ifugao have little apparent problem with the demise of the terraces. At the local level, there are no tangible efforts to invest in restoration. Neither is there a collective movement among the Ifugao, as an indigenous people, to maintain the terraces as part of their cultural identity. This purpose can be served by other cultural expressions. The perspective and money of outsiders are necessary to turn this part of the Ifugao agricultural system into the valued heritage of the global population (Gonzalez 1999).

An example of the second kind of encounter is the attitude of India with respect to West European policy regarding mad cow disease. The destruction of thousands of animals because of the potential danger to human health received no sympathy or understanding from people with an entirely different attitude towards the status and role of cows. The strong prevalence of economic motives and potential threats to human health over animal welfare, met with sincere disapproval among Indians (BBC: Cow Trade 1997). Similar conflicts are of course commonly encountered in the protection of globally endangered species of animals considered locally as agricultural or other pests.

Anthropological reflections on the future

It is not unusual for anthropologists to return from the field, turn field notes into a monograph, and complete this with a final chapter entitled 'The future'. Such a final chapter is not based directly on field notes and does not reflect how the people studied in the field think about the future, the kind of actions they will undertake or the kind of outcomes they try to avoid by behaving in a particular way. These final chapters are usually based on a kind of projection of what the anthropologist thinks might happen. In other cases, the conclusions and recommendations are addressed indirectly to bureaucrats, agents of change or missionaries, and refer to things that they should do or refrain from doing. In these cases, anthropologists often argue from an unspecified projected image of the society they have studied. Particularly rich in this respect are the monographs dealing with small-scale or marginal societies such as hunters and gatherers. These are of great importance, because in many cases anthropologists have maintained interests in 'their' people for extended periods of time. The next section presents a retrospective overview of the reflections on the future of a particular forest-dwelling people, the Kubu of Central Sumatra, Indonesia.

The future of the Kubu in retrospect

The Kubu (also called Anak Dalam or Orang Rimba) are a hunting and gathering tribe in Central Sumatra. Ever since more extensive publications on the Kubu started to appear, they have been depicted as being on their way to total assimilation or extinction. The German ethnographer Hagen, writing at the beginning of the twentieth century, predicted that they would soon be totally absorbed into the surrounding Malay people through processes of assimilation and Islamization. 'Wild Kubu' would be transformed into 'tame Kubu', and they in turn would gradually become like their Malay neighbors (Hagen 1908). As another

author wrote: "Soon these unfortunate children of God will be swallowed by the rapidly expanding process of civilization, and they will be an easy prey for the rapidly expanding Islam" (Adam 1928: 291).

It is important to remember that this was at a time when there were no powerful bulldozers and chain saws. There was no large-scale transmigration, nor big plantations for industrial crops or highway construction, or any of the other causes now held responsible for forest destruction in the area. In the ensuing years, missionaries from various countries tried to 'save' the Kubu from conversion to Islam. They wanted to turn them into Christians, settle them and develop them. In doing so, they tried to create Christian enclaves amidst a Malay Muslim world. It was as if assimilation was the only possible future, and the Kubu would soon give up their arduous forest life. In a book on Sumatra, written some years later, it is stated that:

"The Kubu will gradually be relieved of the hardships of the forest, where their living standard is not much higher than that of the animals. Within the very near future these wild forest people will disappear, whether by extinction or by assimilation and a new way of life based on sedentary agriculture and permanent settlement. (...) In a country where cars are now appearing, the Kubu are too obvious an anachronism. Maybe a few can be saved by persuading them to partly give up their forest life and start a simple form of agriculture" (Zendgraaf and Goudoever 1947: 80-83, our translation).

From the mid-fifties onwards, the Indonesian government started 'civilization' programs for the Kubu in order to resettle them, lead them into sedentary agriculture and guide them towards mainstream Indonesian culture. This aim was to be achieved within a 5-year period. Despite the almost utter failure of such programs, government policy still continues along these lines.

A number of years ago, the Indonesian magazine *Tempo*, which was banned a little later, devoted an article to the Kubu entitled 'Death in the forest', which portrayed the Kubu on their way to extinction due to transmigration, logging, mining and ill-conceived development plans. They had been turned into highway beggars (*Tempo* 1992). In 1997 and 1998, moreover, Sumatra was badly affected by intense forest fires in the logged-over areas where many of the Kubu have still tried to survive.

Yet in spite of heavy logging with powerful equipment, all kinds of development plans, missionary activities, transmigration, plantations, forest fires, encroaching farmers and migrants, the Kubu have succeeded in surviving as a forest-dwelling hunting and gathering group, partly practicing agriculture. They have not been engulfed by the Malay world and they still adhere to a lifestyle that is not considered part of mainstream Indonesian culture. In many ways they have been forced to adjust to changing circumstances. Fortunately, some of them have been able to do so within the context of a protected area, which provides at least some protection against powerful outside forces. As a result of these processes the Kubu now exhibit highly varied lifestyles (Persoon 1994).

The Kubu is not an isolated example. Similar cases have been documented with regard to the projected futures of other forest-dwelling peoples, including amongst others the Bagely from Cameroon, the Semai in Malaysia (Denton, Endicott, Gomes and Hooker 1997) and the Agta in Northeast Luzon, Philippines (Headland 1986). In most of these cases the present does not coincide with what was projected at an earlier date.

What does the history of projected futures of the Kubu teach us about reflective methods of predicting the future of a particular people? There are at least three issues to be raised: assessing the present situation with respect to the future; whom and what to study if we want to know more about the future; and anthropo-

logical methods and research questions.

Anthropologists have long followed the classical method of forecasting, which can be characterized as follows: the variables are ascertained, the past and present are held to explain the future, there is a single and certain future, it is almost deterministic, and there is a passive and adaptive attitude (futures 'come about') (Godet 1994).

With respect to the issue of what and whom to study, anthropologists have focused too much on local people themselves, paying insufficient attention to the non-local people and institutions, missionaries, traders and companies that greatly affect the lives and thus also the future of forest-dwelling people. These agencies and institutions are usually defined as external to the local situation and not made an explicit part of the research.

Finally, anthropological methods and research questions are geared mainly towards describing and understanding present-day behavior as caused by causal and historical processes. The future is consequently often absent as a topic for discussion with informants. Wallman, too, ponders the extent to which this is due to the absence of the concept of the future in non-industrial cultures (Wallman 1992). Anthropologists, moreover, have not been trained in this kind of reflection. We know of no main textbook or course in which this topic is seriously dealt with (compare e.g. Wescott 1978). In our own experience, discussions about the future as a research topic often meet with cynicism. On the other hand, once they have returned from the field anthropologists often feel pressed to make statements about the future of the people they have studied. That is why these reflections often reveal highly personal opinions and lack empirical evidence and depth compared with the other elements of their monographs. These projections in turn prove to be a poor reflection of reality, as many anthropologists have been forced to admit (see e.g. Boissevain 1992). We shall return to this issue at the end of this introduction.

Future of cultures and cultures of the future

At a rather different level, and not yet well developed, are studies that do not deal specifically with the future of individual communities or groups of people, but that take a more holistic approach. They deal with the survival and disappearance of cultures. In the recent literature on globalization one frequently encounters such discussions. We have here a specific kind of study that goes back to such classical studies as Pitt-Rivers' *The clash of culture* (1927) and continues to the present day (see e.g. Huntington's *The clash of civilisations* (1996) and Wee 1996). They differ from the old, evolutionary type of studies that deal with sequences of cultural forms, in that they underline the political processes that shape cultures as they undergo processes of rapid change or even disappear through assimilation and integration. They also deal more explicitly with issues like genocide and repressive forms of government (Maruyama and Harkins 1978, Masini 1994).

There is one particularly strong focus within the literature on relatively weak and vulnerable cultures, on numerically small indigenous or tribal peoples. All of these have been threatened by processes of political domination, cultural imperialism, environmental degradation or displacement due to the creation of major new infrastructure projects like dams for hydroelectric energy and highways (see e.g. Byron and Arnold 1999). The interest in these processes and the fate of the people affected gave rise to the feeling that anthropology had an urgent mission to save these people: it is the background of the rise of urgent anthropology as a special field within the discipline. In general, relatively powerless people were considered to be victims of processes of exogenous change. The titles of the books by Davis (*Victims of the miracle*, 1977) and Bodley (*Victims of progress*, 1982) are indicative of this line of reasoning. These processes, as mentioned earlier, threaten global cultural diversity (see e.g. the World Commission on

Culture and Development report *Our creative diversity*, 1995). Numerous organizations are working to combat the negative impact of these processes by providing assistance to tribal and indigenous people in their struggle against external powers. The right to land and natural resources is particularly crucial in this struggle. Since the UN Year of Indigenous Peoples this kind of support has gained global recognition. The 'issue' of indigenous peoples is now high on the international and diplomatic agenda. Representatives of other disciplines, such as political and economic sciences, are now also engaged in the debate, moreover. Many anthropologists are personally involved in the struggle for a better future for 'their' people or community.

As stated above, in contrast to the attention given to the relatively weak, disappearing and 'endangered' cultures, anthropologists have shown less detailed interest in expanding cultures, in cultures that are becoming increasingly dominant over others. These expanding cultures are found at various levels. At the global level there is much debate about the spread of western domination through market forces, through the media, causing the disappearance of diverse cultures, languages and many material manifestations of cultural expression. The same is happening at the regional level and sometimes even within individual countries. The sphere of influence of dominant cultures is expanding at the expense of cultures weak in terms of demography, economics, and political status. To give just a few examples: in India one speaks of 'hinduization' in relation to the tribal communities, in Indonesia there is a strong trend towards 'Javanization' of the outer islands inhabited by other ethnic groups, in Cameroon 'Fulbeization' (Schultz 1984) has been a dominant influence. Similar tendencies have been noted in Malaysia, China and Latin America. In all cases, the mainstream culture of the dominant population is imposed upon weaker groups. In many cases this extension of the dominant influence is part of a conscious cultural policy,

but a kind of *laissez faire* may sometimes have the same outcome because societal forces are heading in the same direction. In the main, anthropologists have studied these phenomena from the viewpoint of the newly dominated, the weak or the victims. As a result, there is only partial insight into the common characteristics of these expanding cultures at the regional level, the conditions under which they expand and how these cultures themselves are affected by such expansion. In this sense it would be of great interest to have a rather profounder understanding of the cultures that appear to have a more prosperous future.

Anthropology in sustainability discourse

In discourses of sustainability and resource management by local and indigenous peoples, anthropologists are challenged to speak out on the effects of resource use by the people they have studied. Surveying the large number of publications, it soon becomes clear that there is little coherence in the conclusions drawn. Accounts vary, from depicting local people as the natural allies of nature conservationists and guardians of the environment to 'primitive polluters' (Rambo 1985), a far cry from 'noble savages' (Alvard 1993). The prospect of sustainable resource use and management by local peoples presents a range of facts, ambiguities and hopes (Gibson and Koontz 1998: 624). The facts include a large body of knowledge on indigenous environmental knowledge and management practices (Berkes 1989, Ostrom 1990, Bromley 1992, Est 1999). It is often argued that this knowledge and these practices should form the basis of whatever type of interventions or conservation efforts are to be undertaken in a specific area.

The ambiguities stem, firstly, from the fact that in some cases environmental wisdom is being 'read' into practices. It is not always clear what the empirical or authentic ideologi-

cal evidence is on which that 'wisdom' is based. To give just one example: "... these traditional adaptations have attempted so far as is possible to harmonize with and conserve the environment. A basic concern has been ensuring the sustainability of the economic activities so pursued. In other words, the traditional view of Borneo natives is that natural resources are held in trust for future generations" (King 1993: 167). Other accounts, however, are less positive about the value of local environmental knowledge as used in economic activities. Eder, for instance, arrives at very different conclusions. With reference to the forest-dwelling Batak of Palawan (Philippines), he explicitly states the weakness of the traditional Batak system of resource use that: "It does not explicitly address possible future resource depletion, either by the Batak or by others". He adds that the Batak do not worry about the future because resources "couldn't be used up, whatever the extent of utilization by Batak or by others, because they are regenerated naturally" (Eder 1997: 27-8). Other ambiguities may be mentioned here: ideological statements are often confused with environmental effects; there is a frequent lack of historical awareness and ecological insight; and ecological wisdom and awareness is often read into other practices. In almost all societies, myths, folk tales, epics, rituals, and songs express statements about the importance of a lifestyle in relative harmony with the natural environment. Through communication with the spirits, ancestors create an image of respect for nature, of user limitations, emphasizing the need to limit resource exploitation. A nice example of this type is the publication on resource use in the Philippines by indigenous peoples called 'Consulting the spirits'. These statements or interpretations are ideological and idealistic, however, and should not be misconstrued as being statements about actual resource use, in the past, in the present or in the future. For a variety of reasons, these statements may have lost their power as a source of inspiration for people in their ev-

eryday activities.

In general, anthropologists lack a sound ecological background, yet pronounce the practices of local people being in harmony with nature (Rappaport 1968). Some assert that modes and levels of exploitation do not threaten the regenerative capacities of natural resources or specific species of plants and animals. Together with a shallow historical awareness, especially with respect to rainforest environments, this limited ecological insight may lead to erroneous conclusions. To some extent, such anthropologists have adopted the ideology of present-day environmental discourse and applied it to the groups they study within their ecosystems. It is clear, however, that forest-dwelling people, for instance, have modified or domesticated the forest to a substantial degree. Virgin forests are highly exceptional. In many cases the balance, harmony or sustainability of management practices is not well-operationalized. It is not based on background information on the ecology of the ecosystem (see e.g. Alvard 1993, Fresco et al. 1992).

Terms like 'sustainability' and 'future generations', commonly used in environmental discourse, are uncommon in local usage. Emic conceptions of sustainability, if at all present, may refer to entirely different ideas (see e.g. Dove 1998). The same holds for perceptions of future generations. As employed in discussions on sustainability and intergenerational equity, this notion refers to unspecified generations in unspecified times and places (Rawls 1972 and Brundlandt 1987). In general, the level of needs to be satisfied under the banner of sustainable development are equally unclear, but it seems to imply a kind of status quo, including the present unequal distribution of goods and services. Those who are now asked to develop in a sustainable manner are not supposed to increase their level of consumption, with notions of global solidarity or equity lacking. Implicitly, the call for sustainability appears to refer to the prevailing situation.

Images of the future as 'timescapes'

Let us now discuss the variation in time perspectives generally prevailing in environmental projects. These perspectives are held by the various different actors and may sometimes represent a particular disciplinary view. We introduce the discussion by presenting an example of the pluriformity of perspectives.

Outside the National Park Headquarters on the island of Siberut (West Sumatra, Indonesia), a sign in three languages calls for the protection of nature because 'we have borrowed it from our children and grandchildren.' The buildings are the most obvious manifestation of a multi-million dollar project funded by the Asian Development Bank. Through the Indonesian Forestry Department, the bank is implementing its 5-year *Indonesia Biodiversity Project*.

In a nearby village, rituals are performed almost daily by local people. Sacrificing of animals and reading bloodlines on the heart for divination purposes are part of the ceremony. The rituals are aimed at restoring the balance with the environment, which is perceived as a spiritual world. For those present, the environment is not a wilderness full of endemic species, it is a 'world beyond', the domain of the ancestors, which requires certain modes of conduct (Scheffold, in press). Failure to restore this balance, after felling trees or hunting primates, for instance, will bring illness and misfortune to the local community in the near future.

Apparently there is an ideological difference between conceptions of nature: do we 'conserve' nature because we care for unspecified future generations in a global perspective, or because, by exploiting nature, we protect the world of our ancestors. Alternatively, should we see ourselves as the ancestors of the future?"

The sign described is a symbol of the multiple time perspectives that co-exist within a single nature conservation project. The perspectives are used by a variety of people representing different institutions from various spatial contexts. The people are operating from different normative viewpoints and different time-order or time-value systems. These perspectives permit an exploration of conceptions of time and future in relation to the notion of sustainability and the critical role that anthropology has played or might play in the sustainability debate.

One of the tenets of conservationists is that 'extinction is forever'. Protection of threatened species or ecosystems should consequently be a continuous effort. Preservation of nature is now urgent, and is bound to remain crucial in the future. There is no time limit to these efforts until paradise is regained.

Conservation-minded ecologists are, by definition, very much future-oriented. They want to conserve species, plants and animals or even entire ecosystems and landscapes. They base their plans of action on lessons learned from the past. In their writings, two very different kinds of images of the future prevail. Trends over the past few decades indicate that areas covered with natural habitats are rapidly decreasing, that the number of species that have become extinct is rising, and that factors contributing to environmental degradation (such as population growth and resource consumption) are likewise increasing. These trends lead to pessimistic, calamitous or even apocalyptic projections for the future (see e.g. CIFOR 1995, McNeeley 1996, IUCN 1998). Such images, often bolstered up by powerful symbols or metaphors, serve as negative points of reference, to be avoided at all costs. Plans of action are based on an alternative vision of the future, a world in which things can change for the better. This vision of a better world is seen in terms of the maintenance of biodiversity and protected areas and the sustainable use of available natural resources. The benefits are intended for unspecified 'future

generations'. In order to generate sufficient support for these alternative visions, a variety of policy instruments (varying from economic incentives to environmental master plans) are being developed to turn these alternatives into reality.

In recent times, conservationists seem to have found natural allies in local or 'indigenous' people. Increasingly, these people's 'traditional' management and tenure systems are being seen as building blocks for new approaches to conservation in general and protected areas in particular. This is often referred to as community-based resource management, and over the last decade it has become far more than an abstract idea. Community boundaries are being mapped and experiments in local resource management are in progress in many parts of the world. Financially, these worldwide initiatives receive strong support from international financial institutions. The cooperation between conservationists (advocates and planners of community-based resource management) and, preferably, indigenous communities is a fragile one. It provides scope for linking concerns about security, justice and environmental destruction and has stimulated debate about rights to self-determination. Rights of access to resources (and habitat) are based on historical arguments: local people were always the rightful owners of the resources in the past, before being deprived of them by external forces. The claims to such rights (to forests, land, wildlife) are often permeated with contemporary rhetoric of sustainability. At the same time, there are problematic legal, political and cultural complexities embedded in these conservation programs, as some (indigenous) groups are embraced while others (amongst others: migrants, agriculturists, nomads) are virtually ignored (Von Benda-Beckmann 1997).

Development bureaucracies, both national and international agencies, with their multiple aims and internal contradictions, have different time perspectives. These perspectives are organized predominantly around a two to five

year project cycle, repeated again and again, while reflecting changes in development discourse. The lack of institutional memory has often been noted. The time perspectives of development bureaucracies are in many ways closely related to the rise and fall of politicians or political parties. This is also the case for the bureaucratic institutions engaged in nature conservation, which generally adopt the style of development agencies in general.

Economists may also be said to have a dominant conception of time and the future. The most important conceptual instrument they have at their disposal to express the present and future value of goods, including natural resources and services, is that of 'discount rates', whereby the satisfaction of needs in the present is ascribed a higher value than satisfaction of needs in the future. Natural resources are generally assigned a market value, which is largely equivalent to their present-day market value. This raises problems of market imperfections and difficulties in the pricing of ecological functions. A result of these market imperfections and pricing problems is that the future in all its dimensions (satisfaction of needs, rights of future generations and future value of biodiversity) is given a lower priority than the present. As a consequence of this powerful discounting logic, investments in long-term forest productivity or nature conservation are automatically regarded as a 'heroic sacrifice' (Passmore 1980), as uneconomic, irrational ventures. Although it may be possible to resolve this problem, at least in part, by appropriately pricing the environmental functions of natural resources, this is not yet the case. Economists do not generally adopt a long-term horizon in relation to the exploitation of natural resources: the further removed in time the benefits and problems, the less they are taken into account. The economic view leads to a kind of free-market environmentalism, to use Eckersley's term, which is characterized by an attitude of skepticism towards limitations to growth and non-economic uses, and an emphasis on quantifi-

able material values and maximized economic output. All these characteristics are based on a strongly anthropocentric worldview (Eckersley as cited in Stephens 1999: 16-17).

In the 'real world' of natural resource management, these various time perspectives, these visions of environmental futures, coalesce and interact in a dynamic but chaotic manner. Adam has labeled these perspectives 'timescapes', a term that emphasizes the rhythmicities, timings and tempos of past and present activities and the interactions of organisms and matter, including their changes and contingencies (Adam 1998: 11). Placed within the context of a concrete nature conservation project, it is clear that economists, nature conservationists, representatives of local people, donor agencies and bureaucracies think and act from highly divergent timescapes. They must, however, decide on a kind of middle ground in the design of projects, of which power-play is an inherent part. All projects tend to be future-oriented and incorporate future interests. During the implementation phase, in the flow of everyday life, the divergent timescapes become evident once more, though often in a hidden way. The outcome of this process of interaction often gives rise to a variety of interpretations. These interpretations constitute present-day realities, which are a combination of the planned and unintended outcomes of past actions and the result of activities intended to bring about another kind of reality.

Environmental futures and futuristics

Models and scenarios play an important role in international negotiations aiming at resolving environmental problems like deforestation, desertification, biodiversity decline and reduction of pollution. Bart van Steenberg (this volume) states that futurology in general has gone through phases of rise (seventies), fall (eighties) and resurrection (nineties). Environ-

mental scenarios seem to have a logic of their own, however. In his article 'Van doom tot daad' (From doom to action) Opschoor (1999) reviews the various phases through which environmental scenarios and models have gone over the last thirty years. Phase one is characterized by the modeling and analysis of future interaction between the environment and the development of societies worldwide. The best known publication of this first phase is *Limits to growth* (Meadows 1972). Its basic message is that the global environment is doomed to decline unless action is taken. In phase two this apocalyptic vision of the future was used to develop and justify specific environmental policies. New ideas and policies were developed on various levels: the environment in general and environmental care in particular have become hot political issues. In 1987 the UN World Commission on Environment and Development published its report *Our common future*, in preparation for the UN Conference on Environment and Development in Rio in 1992. The environmental movement, comprising NGOs, developed new environmental policies largely riddled with idealized images (often inspired by non-Western cultures) of a better and greener world. The third phase is characterized by the refinement of models for specific problems and by policy evaluation of contributions. Although faith in the 'malleability' of society has generally declined, among environmental scientists and in the environmental movement this belief is still very strong (Achterhuis 1998). Opschoor concludes that, today, scenarios and models form the backbone of environmental policies.

It is now conventional, following the definition of sustainability in the UNCED report, to argue that sustainable development involves issues of futurity and equity. Despite the popularity of this concept, there are clear problems with the unqualified nature of assumptions about future generations (e.g. how far into the future, whose future?) and the equal distribution of resources. These problems differ for western and non-industrial societies.

Jan Boersema (this volume) seeks to demonstrate the vagueness and imprecision of this concept as a tool for planning. Marius de Geus (also this volume) argues that the debate on sustainability in policy-making circles is rather superficial and technocratic and does not touch on fundamental issues. He proposes nurturing the sustainability debate with the issues raised in the many ecotopias: ecotopias as navigational compasses.

The emphasis on 'long-term' sustainability of resources in non-industrial societies obviously raises yet other issues relating to the social construction and discursive practices of time, besides the aforementioned. In the real, empirical world of natural resource management, including pure nature conservation, various time perspectives come together and interact dynamically. In order to understand this interaction, greater attention should be devoted to the different time perspectives involved, rendering them more explicit in the sustainability debate. We therefore need to deconstruct easily and loosely used temporal categories. We need to look at how various conceptions of the past and the present, and also of the future, actually come together in the empirical world. With their long-term aims, conservation organizations would do well to take steps to understand the relation between the future of resources and people's projected futures.

Conservation explicitly addresses the long-term future, although most 'development' projects and their constituent activities are narrowly instrumental and planned in short-term tranches governed by the project cycle of donor agencies. As Sharpe (1998) states, however, conservationists forget that the environmental future, as envisioned in conservation, is only one of many possible futures to which people direct their practical activities.

The study of the future

The final part of the introduction raises some

methodological issues pertaining to the study of the future within environmental anthropology. This discussion is intended as a step towards treating the future as a more serious subject within this field of anthropology. This aim leads us to the following considerations:

Contemporary future and backcasting

Although interesting in itself (and there is certainly also a more prominent role to be played in prediction by anthropologists), we are, at this point, not primarily interested in futuristics, skills or methods of predicting the future in a better way, or in studying utopian worldviews as such. What is of interest, and what is more urgently needed, is an understanding of how conceptions of the future or utopian worldviews function in present-day life, how they influence and direct human behavior one way or the other. Wallman has labeled these "contemporary futures, causes and consequences of images of the future in specific contexts of time and place. How do we picture the future now and what are the consequences of our picturing it as we/they do?" (1992: 2). This is therefore not a plea for forecasting or predicting the future but for backcasting: examining the effects of an image of the future on present-day behavior. For the future does not simply come about, but is created as the outcome of the things we collectively undertake today (cf. Godet 1991).

To improve our understanding of the present, more explicit attention should be given to the relevance of visions or images of the future for present-day behavior. People act for a variety of reasons: some may be explicit, others rather more implicit. However, people do things because they want to achieve an end or ends: they cut down trees because they want to sell timber, to buy food, and pay school fees. In other cases, they do things by force of habit or by lack of an alternative. These are the kind of relations that need to be studied.

Relevance of the temporal context

The concept of temporal context is relevant in relation to the study of the future, and in this respect several methodological ideas developed by A.P. Vayda are very useful. Vayda argues that when studying and explaining events and their consequences, the latter should be viewed in their proper historical context. He does so by tracing events back in time using causal reasoning, as far as deemed fruitful and relevant (Vayda 1996). As in historical reasoning, the past is reconstructed from the present via threads of causal reasoning. From here, the line of reasoning can be reversed with respect to the future: present-day events are (at least) partly to be explained by images of the future, with people anticipating future developments by taking certain action today (insurance, prevention, pro-active behavior).

In this way, the relevant future context becomes a crucial concept in understanding the present situation. Referring back to the sign outside the National Park headquarters on Siberut, the relevant temporal context of the present situation is formed by the time horizons and images of the future held by the various parties involved. In this case, that context is determined primarily by how the Asian Development Bank (ADB), in cooperation with the Indonesian Ministry of Forestry, stands *vis-à-vis* continuing a project that has suffered a lot of problems including misuse of funds, lack of political support and so on. Apart from historical considerations, however, the bank representative will also consider what is to be expected in the near future and what steps are to be taken. Considerations at stake include the reputation of ADB and, with respect to biodiversity conservation, the need for successes in this field, future developments within Indonesia and the need to uphold some infrastructure for nature conservation. At the same time, the nature conservation officials of the Ministry of Forestry have to fight with colleagues in the same department over the

maintenance of the National Park to prevent the establishment of oil palm plantations on the island.

Local people again take a different view: they situate project activities in the domains of agriculture, agroforestry and tourism, and not so much within a long-term context. They see these activities from a shorter-term perspective, situating them within the flow of their lives, which are always a combination of various domains. Local people, and particularly the younger and educated generation, are organizing themselves in various NGOs. They are not doing so for historical reasons (this might only explain why they have not done so in the past) but because they want to get involved in the future; they want to be (come) part of the process of managing the island's resources. Individuals may want to join because of personal commitment, sometimes in combination with private interests.

Who to study and what?

Anthropologists working in the field of environmental studies still have a strong tendency to focus on local people. It is obvious, however, that the future of local people or local environments is determined only partly by the local people themselves. Outside agencies, institutions, traders, missionaries and neighboring people determine to a large extent the kinds of future that are ahead for particular people. In some cases, and this is particularly true of small tribal communities, the future is almost totally planned and programmed, leaving little scope for the future views of these people (see e.g. Sardar 1994). In the case of the future of forest-dwelling peoples like the Mentawaians of Siberut, that future is largely planned by relevant departments, ADB policies and the private sector, as interested in ecotourism, trade, coconuts and oil palm plantations. Of interest, too, are the changing perspectives on the future: over the past few decades, visions of the future have varied from a kind of *laissez faire* attitude towards a top-

down resettlement planning, through maintaining a high proportion of wilderness, to the establishment of oil palm plantations and transmigration. At some stage, initiatives to implement these visions were taken, but for too long they were superseded by contradictory initiatives: commercial logging was followed by National Park Planning, resettlement policies by a tourist boom promoting a kind of 'back to tradition' movement. To understand what is actually going on, one also needs to study these outside agencies, their visions and plans of action to turn these visions into reality. A further crucial element is how people respond to the activities of other groups.

Methods of studying the projected future

People have always tried forecasting possible futures. In times of rapidly changing circumstance, particularly, neither the past nor even the present can tell us all we need to know about the future. The present can only be properly understood once we have appreciated the image or perception of the future held by the people concerned. People may opt for radically different alternatives that cannot fully be explained in terms of the present. Sometimes real transitions are being made: major steps forward or sideways, as well as induced innovations can be undertaken of a different nature from those taken in the past (see e.g. Henkemans et al. 1999). By focusing too much on the present and the past, researchers overlook possibilities and options for change, including innovative ideas. A field where this is particularly clear is in the study of agricultural transition. People make changes, organize their lives differently, revalue available means of production and familiar ways of behaving from a new perspective and may consequently set out in new directions because of changing circumstance. What for some first seemed an unrealistic, distant future may be rendered more accessible by innovative and risk-taking individuals (see e.g. Conelly 1992).

A knowledge of how people take these de-

isions, under what kind of circumstances and based on what kind of considerations, is essential to gain a better understanding of the present. It is also essential if anthropology is to be of greater value in all manners of development planning. The sort of questions to be asked and how they are to be formulated, if they are to yield valuable information, require new research methods and techniques. Among these may be listed: historical matrices, trend and time lines, sequential mapping, projective methods and hypothetical case studies, whereby crucial aspects or elements are changed or manipulated in order to provide a different situational context for valuing future-related action (Wit & Est 1999, Booijink 2000). Familiar research methods continue to be useful, but changes can be introduced with respect to the time frame they cover. Instead of referring only to the past and present, present-day activities need to be studied more from a forward-looking perspective. It would be interesting to review some of the familiar anthropological research methods from this angle. One lead might be the study of the local language. The words a language has (or lacks) for specific time concepts may tell us something about how time is valued. Likewise, proverbs may be indicative of time perspectives and other more abstract ideas about how the surrounding world is conceived. At the same time, the research methods of other social sciences like economics, extension and social psychology might be inspiring (see e.g. Röling and Wagemakers 1998).

Conclusion

In this issue our aim is to bring together some perspectives on the future as a subject which until now has received relatively little explicit attention in anthropology. In our view the future in the sense of Wallman's 'contemporary future' merits greater attention from this discipline, not only in a limited series of studies or as a separate subject but, we believe, also

as a standard element of anthropological courses and training in field methods. In this introduction we have explored some of the ways in which anthropologists have dealt with the future as a topic in their research efforts. The various contributions to this volume aim at unraveling the often hidden or embedded future in anthropological reference.

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