threat-reducing strategies in constructing survey items. The synthesis is useful and clear. It will make beginning researchers conscious of the importance of the topic.

In Chapter 10, Foddy reviews the advantages and disadvantages of open vs. closed questions and evaluates the assumptions that underlie the use of each type of question. Research shows, for example, that open questions as much as closed ones can suggest answers to respondents and that the answers to open questions do not necessarily indicate respondents’ level of knowledge about a topic. Research also shows that, just because respondents answer a closed questions in the same way, this does not automatically mean that the answers can be meaningfully compared. (The evidence for this is reviewed in Chapters 3 and 4.) Foddy also reviews the evidence showing that there are many problems in coding the answers to closed questions, not just to open ones.

Chapter 11 is a review of attitude rating scales and the response effects of common errors in the construction of those scales. Foddy describes direct magnitude scaling as a possible alternative to summated scales. Several recent books are devoted to the construction and evaluation of summated scales, and for an introduction to the possibilities of magnitude scaling, M. Lodge’s 1981 book on the subject (from Sage Publications) is a better resource. It’s also the basis for Foddy’s description of magnitude scaling.

In Chapter 12, “Checks to Endure that Questions Work as Intended,” Foddy summarizes the lessons on producing, pretesting (so-called piloting), and post-testing questions. This useful summary comes from Foddy’s close reading of a vast literature. I recommend starting with this chapter and then reading the book from front to back.

There is little to complain about and a lot to praise in this book. Foddy misses a lot of the literature on respondent accuracy, particularly the work of Linton Freeman and his colleagues at the University of California-Irvine on how inaccurate reports are patterned. The chapter on attitude scales is perfunctory in comparison with the rest of the book. Overall, though, this is a thorough review of the literature on a topic of vital importance to every student in the social sciences.

H. Russell Bernard
University of Florida


The eleven contributors to this volume try to portray East African pastoral societies from the perspectives of various anthropological subdisciplines. All the papers are based on extensive fieldwork and rely on experience in more than one pastoral society. The overall approach to pastoral societies adopted here is called “integrated” and society is represented as a “system or structure within which are nested subsystems” (p.3). Each author looks at a different subsystem, at demographics, labour allocation, household development cycles, etc. The second goal is to contribute to the dissolution of the negative stereotypes pastoral societies are still labelled with. As such the stigma of being ecologically insensitive and destructive, and the prejudice that pastoral societies are isolated and egalitarian are singled out (p.6). The articles either adopt a general East African perspective (on archeology, on precolonial history), contain comparisons
of two societies (e.g., regarding labour allocation, nutrition, or demographics) or are based on data for a single society (e.g., on the development of land tenure systems, on dairy marketing).

Marshall's summary of recent developments in the archeology of East African pastoralists offers a valuable and systematic representation of facts about pastoral prehistory. Like most other contributors Marshall sets her findings in a wider African perspective. The emergence of specialized pastoral societies is followed up from North Africa to the Cape. Then the factors facilitating specialization and diversification in early African pastoralism are elaborated upon. Ecological parameters like the emergence of a bimodal rainfall pattern (around 3500 BP), the short dry season, the existence of very different ecological subsystems in close proximity, and the integration of the hardy Bos indicus into pastoral herds (around 1500 BP) are identified as key factors to explain specialization in pastoral systems. Diversification of pastoral cultures as documented in the comparison of the Savanna Pastoral Neolithic, the Elmenteitan and the pastoral-foragers of Eburran 5a is connected with various degrees of interaction with remaining groups of foragers and the exploitation of different ecological habitats.

Waller and Sobania focus on economic exchange, identity formation, and reactions to stress in an historical perspective. They are able to show that pastoral societies were never bounded and isolated societies, but were rather at the centre of wide ranging precolonial exchange networks. It was only during the colonial period that "subsistence pastoralism was progressively decentered" (p. 54). Identity-formation of pastoral groups was rather multifaceted and research into the emergence and development of pastoral societies shows that they are far from being bounded entities. In the precolonial past ethnic shifting was a strategy to counter changing ecological conditions or political developments. Disasters have frequently been catalysts for ethnic redefinition. Again it was the colonial transformation that fixed previously fluid community boundaries. Sobania and Waller take on a difficult task. It is hard to compare the various historical developments of pastoral societies in East Africa, as very different factors impinged on them. Ecological conditions differ a lot between southern and northern Kenya alone; early influences of wide ranging trade systems were felt among pastoralists living near the coast (Somali, Orma) but had no or little impact on societies further inland. Then colonial policy towards pastoralists differed enormously within Kenya (the policy towards the Maasai was different from that for the Turkana and different again from that towards the Somali), and even more so within East Africa. In my opinion, considering the lack of method for controlled historical comparison, well documented single-group histories can tell us more about history at the moment then broad comparisons, which almost by necessity end up with very broad generalizations.

McCabe, and Fratkin and Smith deal in two separate articles with aspects of pastoral labour. Whereas McCabe is more interested in factors that determine mobility within a pastoral system, Fratkin and Smith analyse labour allocation. McCabe shows how individual nomads from southern Turkana arrange their spatial strategies according to ecological and security considerations. The fear of raiding pastoral neighbours has been at least as important during the past two decades as the availability of water and pasture. However, shifting livestock from place to place is only one of many pastoral duties. Different livestock species require a number of different inputs on the part of the herder. Fratkin and Smith's analysis on time allocation gives an interesting insight into pastoral society and it offers data to be used for comparative purposes.

Galvin, Coppock and Leslie review nutritional strategies among the highly specialized Turkana livestock-breeders and the agro-pastoral Borana of southern Ethiopia. It is certainly
not astonishing that the Turkana diet relies to a large extent on milk and that Borana acquire more grain through frequent livestock sales. However, what is definitely interesting in the article is the convincing layout of the comparative approach. Key variables for comparison are well defined and documented. In this sense the differences in nutrition between both societies are not only well documented but also well explained.

Roth's comparison of Rendille and Toposa reproductive strategies, I feel, does not have the same analytical impetus. Rather two different reproductive strategies in two societies are presented. The question “why are they different” is not central to the approach. Whereas in Toposa society the rate of polygyny is rather high, Rendille marriages are usually monogamous.

Two institutions – the Toposa prohibition of widow remarriage and the Rendille sepaade (p. 137) – obviously have damping effects on fertility, although in both societies actors give a different meaning to these institutions. Roth succeeds in documenting how a number of emic concepts have a decisive influence on reproductive decision-making (e.g. ideas about security in a conflict-ridden environment or on heirship).

Shell-Duncan focusses on a much neglected subject of pastoral studies: child-fosterage. It seems to be a common custom among pastoralists to overcome shortages of herders by fostering children. Furthermore social exchange between individual pastoralists frequently develops from fosterage. Taking data from Turkana society she shows the various aspects of this institution. The second question she follows up, on differences in the health of fostered and non-fostered children, in my view suffers from a lack of data. To a certain degree the question seems to be artificial. To look at health differences within a society is definitely a very worthwhile task but why start with fostered/non-fostered children when you do not know anything yet about differences in health between the poor and the rich, between men and women, or between different age groups of children?

The last three articles fall rather outside the frame set out by the previous articles. Little's contribution on milk marketing between rural producers and urban consumers in southern Somalia leaves the geographical frame, which for all other contributions is rather Kenyan. The marketing of dairy products in Somalia's Lower Juba Valley is marked by strong seasonality, competitiveness and the lack of large-scale traders. Urban distributors rely on rural intermediaries to transport the milk from the camps of camel herders to the urban consumers. The article, outstanding for the density of data presented on the subject, shows that milk marketing, a business dominated by women, is rather a strategy of survival than a business for capital accumulation. However, as pastoralists are part and parcel of a global food exchange network, this type of trade has been severely damaged by the import of milk powder through food-aid donations. Milk powder is sold illegally at low prices, undercutting the established rural-urban trade with diary products.

Galaty gives a detailed chronological review of the development of Maasai group ranches. From their establishment in the early seventies to their dissolution in the late eighties group ranches have been doomed through internal conflict and a high degree of politisation. The idea of a semi-private pattern of landownership in pastoral areas failed – that is one lesson we can learn from the history of these ill fated ranches. Instead of promoting economic development and ecologically sustainable exploitation of ranges, the new ownership pattern promoted the individuation of land titles and facilitated the influx of absentee herd-owners, many of them non-Maasai. It increased intra-societal differentiation, established a class of landless small-scale pastoralists and opened up a whole range of new risks to pastoral producers, whereas it brought new options only to the richest of them.
Borgerhoff Mulder and Sellen's contribution is rather programmatic and theoretical. They delineate the application of a theory on optimality in pastoral decision making (p. 205). Optimality models consist of three components: currency, decision rules, and constraints. Currency can be any desired outcome, minimization of risk or maximization of assets. Constraints are all those conditions that restrict the outcome of a given decision and can consist of any combination of physiological, ecological and social factors. Decision rules are the behaviour linking constraints and currency. As a herder's main objectives the authors define (1) minimizing the risk that production will drop below subsistence levels, (2) minimizing the risk of total loss of the herd, (3) maximizing herd growth and/or milk production and (4) minimizing the costs of output forgone because of understocking (p. 210). Wealth differentials definitely have an effect on decision making in such a context. However, available data on different pastoral societies do not yet show the predicted effects on reproduction, time allocation and herd survival. This may be due to the effect of stochastic loss rates which blur differences in long term strategies, or else to a lack of adequate data on individual actors.

The volume is valuable for the wealth of data presented and for the methodology it offers. It gives an excellent overview of current research on East African pastoral societies, represents various anthropological approaches and sets perspectives for future research. However, some critical comments should be added – not so much for the purpose of criticising the present volume but rather to contribute to its aim of setting an agenda for future research.

It is evident that the book is rather Kenya-centered, eight contributions dealing more or less exclusively with Kenya. There is no doubt that political circumstances make research in Somalia, Sudan and Ethiopia almost impossible, and very little has been done in the field of anthropology with pastoral societies in these countries over the last decades. However, we should remember that during the colonial period British policy towards herders differed quite a lot in these East African countries. Whereas pastoralists were seen as potential competitors for white settlers in Kenya they were not confronted with such perceptions in Somalia or the Sudan. And nowadays the weakening or complete dissolution of the state is felt most intensively in the pastoral areas of the Sudan, Ethiopia or Somalia, whereas Kenya's drylands seem still to be under government control. We could even add to that: the book is not only Kenya-centered but rather Turkana/Rendille/Ariaal-centered (six contributions). There is no doubt that the Southern Turkana Ecosystem Project (STEP) has set new perspectives for pastoral studies; it virtually propelled interdisciplinary studies on pastoralism to a new level of discussion. Just as the Harvard !Kung San project of the sixties and seventies defined the debate on forager groups for white settlers in Kenya they were not confronted with such perceptions in Somalia or the Sudan. And nowadays the weakening or complete dissolution of the state is felt most intensively in the pastoral areas of the Sudan, Ethiopia or Somalia, whereas Kenya's drylands seem still to be under government control. We could even add to that: the book is not only Kenya-centered but rather Turkana/Rendille/Ariaal-centered (six contributions). There is no doubt that the Southern Turkana Ecosystem Project (STEP) has set new perspectives for pastoral studies; it virtually propelled interdisciplinary studies on pastoralism to a new level of discussion. Just as the Harvard !Kung San project of the sixties and seventies defined the debate on forager groups for some time, the STEP project seems to define certain fields for discussion within pastoral research for the nineties. However, we have to bear in mind that the extreme specialization of Turkana pastoralists is not truly typical for Eastern Africa. The Turkana have comparatively little contact with agriculturalists and the area is characterised by its remoteness from urban centers, inhibiting easy market access.

Furthermore certain topics are missing from the agenda of the volume. Issues like violent conflict, ideology and religion are rarely touched upon in recent studies on pastoral societies and they are not represented here, either. Ecological parameters and political economy perspectives clearly dominate the field. There is only one recent study on the development of privatization and commodity production amongst the Kenyan Orma pastoralists (Jean Ensminger, Making a Market. The institutional transformation of an African Society. New York: Cambridge University Press, 1992) that systematically explores the interrelations between
economic developments, ideological redefinitions and institutional development. The theoretical outline given by Borgerhoff Mulder and Sellen does not only ask for more actor specific data but also for more information on individual decision-making which, by necessity, links economics and ideology.

The last point I would like to touch upon is the comparative method as applied in the present volume. The systems approach offered here, while it allows for a systematic representation of various societal spheres, does not in itself bring about an advance in comparative analysis. To study demographics among the Rendille, mobility among the Turkana and labour allocation among the Ariaal does not necessarily offer us more insight into the working of pastoral societies. Rather the two society comparisons by Roth (Toposa, Rendille) and Galvin, Coppock, Leslie (Turkana, Borana) offer new methodological insights. In my opinion pastoral studies will profit immensely from such comparisons as long as the comparative approach is theoretically guided and not a mere juxtaposition of facts from two different societies. As yet unsolved is the problem of how to compare individual strategies within different societies, and the interrelation of individual behavior and societal institutions in cross-cultural perspective. Will a rich pastoralist in Turkana strive for the same goals as his Maasai counterpart? What kind of individual strategies inhibit intra-societal differentiation amongst the Turkana when they give way to ever-increasing wealth differences in other pastoral groups? Borgerhoff Mulder and Sellen delineate a fascinating programme how these issues could be resolved in further theory-guided fieldwork.

Michael Bollig
Institut für Völkerkunde, Universität zu Köln

