Among such Fur too, one finds joint households, but with a slightly different pattern of allocation (Figure 3). Here the conjugal pair make up **a** unit both for production and consumption, jointly cultivating the orchard and sharing the returns. To maintain the force of the acculturation explanation of the form **of** the nomad households, one would have to look for similar factors in the case of the orchard cultivators and hypothesize a change in values and acculturation to modern life among them. But it is difficult to see the sources of influence for such acculturation; more importantly, a restatement of the nature of the continuity provides opportunities for other kinds of hypotheses. If we

مخطط

agree that behavior in households is determined by several kinds of constraints, that all behavior is “new” in that it constitutes allocations of time and resources made or renewed in the moment of action, and that households persist because their forms are recreated by behavior each day, then we need to ask what the other determinants of these allocations are. To explain a changing pattern of activities, we need not hypothesize changed categorizations and values: we can also look at the changed circumstances that may well make other allocations optimal when evaluated by the ***same*** standards. Indeed, the traditional range ***of*** behavior and allocations in a Fur village indicates that the

Fur do not subscribe to any kind of prohibition in joint conjugal households-such arrangements are just not very convenient. **A** fair autonomy of husband and wife is regarded as a good thing, and joint economic pursuits are a potential field for conflict. Moreover, the techniques of millet cultivation are such that persons work individually in any case; and where a person desires help during peak seasons, he or she can mobilize labor in bulk through a beer work party. In the case of irrigated cash crops, on the other hand, the horticultural techniques are such that it may be convenient to cooperate. Persons with neighboring plots often do so; occasionally, a husband and wife will also decide to cultivate a joint field-because they "like" to work together and because they can partly take turns at irrigation, etc., partly cooperate.

The advantages of this jointness in cultivation are rather limited, only slightly reducing the labor input required for the same result,

and few spouses choose to work jointly. But in a situation where one of the spouses can specialize in herding, the other in cultivation and dairying, cooperation offers great advantages. Similarly, where a pooling of labor in specialized arboriculture and fruit-picking gives far greater returns than millet cultivation, it is also clearly to the advantage of both spouses to go together over production and share the product jointly.

One may hypothesize a persistence of values in all these different situations: (a) a preference for husband–wife autonomy, and (b) a preference for the minimization of effort in production. How can spouses further these interests in different situations where environmental constraints change? Where effective production can be pursued individually, persons will be able simultaneously to maximize both interests. Where pooling of labor in orchards gives great returns with limited effort, this allocation on the balance gives the greatest advantage to both spouses. Where they thus have a joint share in the product, it is difficult and meaningless to divide it up when the mutual obligations of cooking and clothing tie the spouses together anyway for certain aspects of consumptionso joint households are generated. Finally, where complementarity and cooperation are not only advantageous but necessary, as in a nomadic setting, the necessary allocations will similarly create a joint household, organized **dn** a slightly different pattern from that of the orchard owners. It is by considering ***all*** the factors of continuity in the situation of change–in this case both valuational and technicaleconomic– that we are in a position to formulate, and choose among, the full range of relevant hypotheses.

In this example, then, we find that change in household form is generated by changes in one variable: the relative advantage of joint production over separate production. This is hardly a surprising conclusion. But if we attack the problem in terms of a typology of

householdforms, we might be led to classify household type I (individual households for each person) and household type I1 (joint conjugal households) as very different forms and to worry about how type I changes into type 11, which is like worrying about how the fish changes into the crab. Yet the situation is clearly not **one** where one household body changes into another household body: it is one where husband-wife sets, under different circumstances, choose to arrange their life differently. By being forced to specify the nature of the continuity we are forced to specify the processes that generate a household form. We see the same two people making allocations and judging results in two different situations, or we see a population of spouses performing allocations in a pattern that generates predominantly individual households in one opportunity situation, joint households in another. We are led to seek the explanations for change in the determinants of form, and the mechanisms of change in the processes that generate form.

In our efforts to understand social change, this general viewpoint shifts our attention from ***innovation*** to ***instit&ma~izatim*** as the critical phase of change. People make allocations in terms of the pay-offs that they hope to obtain, and their most adequate bases for predicting these pay-offs are found in their previous experience or in that of others in their community. The kinds **of** new ideas that occur can no more determine the direction of social change than mutation rates can determine the direction of physical change. Whatever ideas people

may have, only those that constitute a practicable allocation in a concrete situation will be effected. And if you have a system of allocations going—as you always must where you can speak‘ **of** change—it will be the rates and kinds of pay-offs of alternative allocations ***within that system*** that determine whether they will be adopted, that is, institutionalized. The main constraints on change will thus be found in the system, not in the range of ideas for innovation, and these constraints are effective in the phase **of** institutionalization. The comparative rates of pay-off of alternative allocations, which determine the course of institutionalization, must be seen from the point of view of actors **or** of other concrete units of management that dispose over resources and make allocations. Individual actors will naturally make frequent misjudgments of what the pay-offs of their allocations will be; but as the outcomes become apparent through experience, they can be realistically evaluated. If the pay-offs are great, one can expect the behavior to be emulated by **others;** if, on the other hand, the results are not desirable for the actor, he will not be emulated, and he will also himself attempt to revert to older allocations.

But the process of institutionalization is not simply one of duplication; the allocations of one unit can also have direct implications for other units. They may find their opportunity situation changed, not only through the possibility of emulation, but also through a new need for countermeasures or through new opportunities for activity. The

aggregate patterns that can emerge in the population will thus be shaped by the fact **of** competition and the constraints of strategy. To depict these constraints on actors and the way they will determine the aggregate pattern of choices in a population, we need models in the tradition of game theory. I do not wish to minimize the complexity of the dynamics **of** such change and adjustment. My main point is that most of the salient constraints on the course of change will be found to be social and interactional, and not simply cognitive. They will derive from the existing social and ecological system within which change is taking place. And finally, they can most usefully be analyzed with reference to the opportunity situation of social persons or other units of management capable of decision- making and action: the mechanisms of change must be found in the world of efficient causes. It should follow from this that though it may be a convenient and illuminating shorthand of culture history to differentiate between "emergent" and "recurrent" change, the mechanisms involved seem to be essentially the same: we must use the same tools to understand the continuities that constitute society in each case.

In summary, I should like to submit that this general line of analysis- which is being pursued in various ways by numerous colleagues in the United States and elsewheremakes it possible for us to improve our analytic and predictive understanding of **social**change. I have had to harness it in this presentation to specific, incomplete, and doubtless in many ways inadequate exemplifications.

But its essentials are a concentration on the observation **of** ***evefits*** of change and **a** specification of the nature of ***cofitinzlity:*** the constraints of the whole system that is changing. Conversely, **I** would suggest that approaches that rely on typologies **of** overt social forms, or seek to characterize and compare different courses of change, will not provide as ready insights into the nature of social change.

NOTES

* This material derives from Gunnar Haland (1967) as well **as** my **own** field material.

REFERENCES CITED

BMTE, F.

1963 The role of the entrepreneur in social change in Northern Norway. Bergen-Oslo, Norwegian Universities **Press**. **1966** Models of Social organization. Royal Anthropological Institute Occasional Paper No. **23, London**.

1967 Economic spheres in Darfur. **In** Themes in economic anthropology. R. Firth, ed. London, Tavietock Publications.

Haland Gunnar

1967 **Ervervsform** og **etnisk** tilh6righet. **En** studie avnomadiseringsprosesser blant fasttmende hakkebrukere I det vestlige Darfur. University of Bergen. Unpublished thesis.

H h , **GUNNM Sam, LAWSTON**

1952 Steel axes for stone-age Australians. **In** Human problems in technological change. E. H. Spicer, ed. New **York,** Russell Sage Foundation.