What is the significance of investigating migration? The physical process of geographical movements of people has provided the basis of a framework to which various paradigms and heuristics have been applied in attempts to explain human behavior. Analyses of migration have been offered that are based on the economic and political resources available to different sectors of populations, and other forces external to the individual. Analyses oriented toward forces operating within individuals—for example, a simulation of value systems and studies of natural decision-making (including concepts such as risk reduction, strategies, and plays)—have been attempted in an effort to integrate external forces with individual adaptations. Yet what do we know about what makes an individual become a migrant? That is, what distinguishes the individual who becomes a migrant from one who, in a similar set of circumstances, does not? If there are differences between those who migrate and those who do not, and it seems that at some level there must be, the question remains as to what those differences are. If we assume that there are differences between those who decide to migrate and those who decide not to, and further, that those differences are more than a difference in locality, can we explain the differences solely in terms of constraints and resources external to the individual? It is reasonable to assume that constraints provided by the general socioeconomic system and by the individual's social characteristics condition decisions whether to migrate. We must consider that an individual's perception of his or her world would also be a significant factor in decision-making, and that unless we have a way of assessing those cognitive factors, we will have little hope of anticipating who will and will not migrate. The aim of the approach I am presenting is to be able to distinguish those likely to migrate from those not likely to, on the basis of their hierarchical ordering of individually held belief sets. Such an approach may give studies of migration a significance more general than their particular subject by extending their analyses and explanations to include processes involved in all human behavior.

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It is possible to create a paradigm that integrates approaches concerned with whole systems (such as social, political, and economic constraints) with an investigation of individual belief systems. While such an integrative paradigm would incorporate social, economic, and political constraints and resources as elements external to individuals, much of its focus would be on the analysis of elements specific to individuals. These elements would be the hierarchical ordering and weighting of the informant’s beliefs, and the reconstruction of belief systems. An individual’s belief system is seen as the context, in conjunction with external constraints, which comprises the base upon which the decision to migrate is made. In this paper, I conceptualize “context” at three levels. At the most concrete level, I think of context as the symbol strings, or groups of sentences, recorded from an informant’s spontaneous linguistic interactions. Because verbal interaction is a primary source of data which provides direct evidence for representing cognitive reality, it is used as the basis for reconstructing beliefs. At the second level, I use the term context to represent the reconstructed overall belief system of an individual informant. At the most abstract level, I use context to refer to general similarities of belief systems of a set of people, as for instance, migrants.

Through the enculturation process, a group of people comes to share some of the same values. Do people who migrate maintain those shared values, or do they change them? To understand life-choices migrants make, it is important to know whether or not they change their values and, because of that change, then migrate; or migrate and then change their values to fit their new lives. Research on this question is difficult, because individuals do not visibly become migrants until after the decision to move, thereby forcing an ex post facto analysis of the individual’s belief system. If we want to understand how people become migrants, we need to investigate the processes of symbol manipulation and belief change. We cannot begin to do so until we are able first to isolate what an individual’s beliefs are. I suggest that a cognitive approach will provide us with a means of specifying a segment of an individual’s belief system at a given moment. We may find that migration is an overt demonstration that cognitive change has occurred, that the decision to migrate is a conclusion logically derived from a symbol chain. I propose that to understand why people migrate we need to understand how they manipulate the symbols that comprise their cognitive world, and to understand the construction and ordering of their belief systems.

For the last five years, a group of anthropologists and linguists has been working with Dr. Marvin Loflin on conceptualizing the processes involved in symbol manipulation. In this paper I am presenting an aspect of that still experimental approach. For the sake of convenience, rather than explain the background, I will present as primitives the following two concepts. The first primitive is an operational definition of belief. Beliefs are statements
made by an individual upon which he is willing to act (Loflin, 1975:5). The second primitive is that human logical processes are universal (Loflin, 1975:2).

If we define beliefs as symbol strings that are acted upon, we can, then, infer them from daily interactions. Apparent contradictions between what a person states as his beliefs, and what are observed as his actions, can be explained only through knowledge of the overall ordering of his beliefs. For example, an individual may state that if he could find a job in another area he would migrate to take the job, but when a job is offered to him in another location, he is unwilling to go. When seen in the context of his belief system, such a contradiction might be explained by the presence of an overarching belief in staying near his family, in their home. He may think that he wants and would take a job anywhere, but until he has an opportunity to act on that choice, he may not be aware of the intensity of his over-arching belief, which supersedes his need for a better job.

Statements can be tested for their “beliefness” by determining whether or not someone is willing to act in accordance with what he says. “Willingness-to-act-on” is similar to the “testable-in-principle” criterion for an empirical statement discussed by Hempel in Aspects of Scientific Explanation (Loflin, 1975:4). That is, one of the criteria used to determine whether a statement could be empirical is to see if the statement is, at least in principle, one that could be tested. In the same way, a criterion used to determine whether a statement could be a belief is to see if it could be acted upon, at least in principle.

Central to our analytical schema is the notion that there are “pan-human” logical processes. Saying that logical processes are pan-human means that no society possesses a unique logic; all societies possess a set of logical processes that are universally shared. The logical processes by which conclusions are reached are assumed to be the same for all people. The data used in the logical processes will vary, as will their selective uses for particular purposes, but we assume that the way in which conclusions are derived does not vary. Positing the existence of universal logical processes allows us to reconstruct beliefs from natural language interactions. Natural language is the language people use in everyday conversation; it is the spontaneous, non-elicited expression of an individual’s beliefs and thoughts. “Reconstructed symbol strings represent meanings postulated by the investigator as implicit in the communicative interaction being studied and warranted by some evidential base such as the immediate socio-physical context, the grammar, the extended cultural context, or any combination of these” (Loflin, 1975:2). Any non-elicited linguistic exchange will serve as a data base for reconstruction. Because the data must be of a non-elicited type, the natural language interaction chosen for recording and analysis should be one in which the subject of interest to the investigator is being discussed.
This selection process is crucial to limiting the amount of data recorded to that which will be useful for analysis.

The need, inherent in this approach, for accuracy and specificity of data for reconstructing beliefs requires that the linguistic exchanges used as data be tape-recorded. A further constraint on the approach is the length of time required for an individual researcher to gather sufficient data on an informant. Because the reconstructions are based on non-elicited information, such an interaction may consume many hours before enough information to allow analysis is gathered. Reconstruction is, essentially, the procedure of making explicit and mutually consistent those elements that are only implied in each speaker’s portion of the linguistic interaction.

Reconstructing beliefs and ordering them into hierarchies necessitates a natural language data base. Natural language interactions, as opposed to elicited language interactions, provide an empirical base that is an independent framework for taxonomy and belief reconstruction because the framework is that of the speaker, not of the observer. By using the informant’s framework, we limit the observer’s ability to superimpose his or her analytical structure over the informant’s. This is significant for comparative purposes, as it allows a more accurate representation than is allowed by a situation in which the observer’s schema dominates that of the informant. If we assume that there are pan-human logical processes, and that one rule of such processes is a principle of non-contradiction, then we can further assume that when an individual presents apparently contradictory statements one of the following conditions exists: (1) there is a linguistic misunderstanding; (2) the individual is purposely misleading us; or (3) there are other beliefs, not immediately known to us, that allow the contradictory statements to share the same cognitive framework. A simple example might be an individual who states that he does not believe in drinking alcoholic beverages, but that he does drink them. The apparent contradiction can be explained by knowing that the individual also believes that social acceptance requires that he drink, and that he desires social acceptance. With this new knowledge, the conclusion that he drinks makes sense. What I am suggesting is the formalization of a process that all people engage in, particularly anthropologists in the field. That process is gathering contextual information (it may also be drinking). By gathering the contextual linguistic information and formally reconstructing it into beliefs and hierarchical belief systems, we may be able to make general observations about the configurations of belief systems held by migrants and those held by non-migrants.

This is not a new idea. Cognitive anthropologists in particular, and ethnographers in general, have tried to understand how different people perceive the world around them, including the informant’s perception of options in that world. Using natural language interactions to provide the
context, or framework, to explicate people's behavior will not explain why migration occurs. It may, however, demonstrate why people with a certain belief system will migrate, while others in similar circumstances but with a different belief system will not. It may even prove possible to distinguish a set of cognitive factors that condition the beliefs shared by all migrants, and only migrants, regardless of their points of origin.

The first step in isolating an individual's belief set is the use of the individual's own words as a data base for the construction of term taxonomies. If beliefs are shaped and expanded through verbal interactions, then it is requisite that we investigate that form of interaction. It may be that any new knowledge is categorized as to its degree of similarity or dissimilarity to information already held by an individual. That is, when an individual is presented with new information, it may be incorporated into his or her present knowledge by way of analogy. If this is the case (and it is yet to be proven), then by understanding how people organize and categorize information, we will gain important data concerning their perception of their worlds and their beliefs about those worlds. By creating a taxonomy of terms used by that individual in the course of every-day conversational speech, we make explicit the relationships between terms and the underlying conceptual organization used. These features can then be compared with those of other individuals.

It is assumed that individuals organize terms into taxonomies (not, however, always explicitly) and that those taxonomies may be schematically represented in a tree-diagram. As has already been suggested, people may incorporate new information into belief sets by comparison of the similarities and differences between the new information and the information they already have. This comparison is based on principles of category inclusion-exclusion. Constructing taxonomies of an individual's terms and/or beliefs is useful in two ways. First, the exercise of constructing the taxonomy acts as a heuristic for the analyst by forcing the explication of relationships that frequently are only implicit in an individual's speech. Second, the taxonomy functions as a device for validating the rules reconstructed by the analyst.

If we can discover the rules individuals use for ordering their beliefs, then we will understand the processes by which their beliefs are hierarchically arranged, as well as how the structure is maintained and changed. In trying to understand what cognitive factors are operating for migrants, we need to know whether the migrants have beliefs that are distinct from those held by non-migrants (we know of at least one belief difference: the migrants have already migrated). It is equally important to know whether there are types of hierarchical arrangements of beliefs that are shared among migrants, but that are not found among non-migrants. It is unlikely that a clear dichotomy between beliefs of migrants
and non-migrants would exist apart from the environmental influences shared by migrants that are not found among non-migrants. We may find, however, that certain arrangements of belief sets cross-cut the migrant/non-migrant division, suggesting that the migrant/non-migrant division may not yet be fully comprehended, and even that such a division may be fallacious.

If we want to understand how people reach the conclusion to migrate, we must know how they manipulate symbols in their decision-making. Terms and sentences are the symbols used most frequently in linguistic analysis. A serious problem encountered by those using terms and sentences as units of analysis is the relative isolation of the linguistic data from any significant context. That is, most linguistic information is conveyed through the combination of terms and sentences. When either unit is studied apart from its larger context, the resulting amount of knowledge gained is drastically reduced. In an attempt to find a naturally occurring unit of language symbols that could encompass a context greater than a single sentence, we have defined a unit referred to as discursiment. A discursiment is a unit of natural language containing agreement of meaning-features and at least one inference. It must have two or more sentences that share some meaning-features and also an inference and a conclusion. A frequently used example of discursiment is a syllogism such as the following:

\( (1) \) all migrants are transients
\( (2) \) this person is a migrant
\( (3) \) therefore, this person is a transient;

or

\( (1) \) all X’s are Y’s
\( (2) \) this is an X
\( (3) \) therefore, this is a Y.

The above examples show meaning-feature agreement between migrant and transient and X and Y. In both examples, the inference occurs between (1) and (2), and the conclusion is (3).

By using discursiments as the units of analysis, I hope to incorporate a level of context previously unavailable for linguistic analysis. The extended linguistic context can disambiguate sentences that are ambiguous in isolation, provide new information, and, most importantly, present clues to the cognitive principles that people use in organizing and conceptualizing their realities.

The study of migrants should incorporate an investigation not only of how they perceive their worlds, but of the factors they consider in their decision-making. We can analyze decision-making by reconstructing informants’ inference chains, making the chains explicit and replicable. A
"processual" approach to the analysis of both decision-making and the incorporation of new knowledge is to look at how taxonomies are altered. When an individual incorporates new information into an existing framework, the result is a change in the structure of his or her taxonomy. Discoursements provide a formal means of making these processes of change explicit. Since any realignment of terms and beliefs, or addition of new information, will necessarily involve an intersection of inferences and meaning features, discoursements can be used as a unit of analysis. Discoursements, because they provide an expanded linguistic context, demonstrate how an individual manipulates symbols during belief change. Our concern with processes dictates the necessity of avoiding static constructions. By reconstructing taxonomies based on discoursements, we can conceptualize both the underlying beliefs and the perceptual changes experienced by the informant.

I suggest that because theories dealing with factors external to the individual have not been sufficient to explain who will migrate, we would benefit by combining that type of external information with our knowledge of an individual’s configuration of beliefs. I propose that when an individual’s behavior is seen within the context of his belief system, we will be better able to disambiguate why some people become migrants and others do not. Both linguistic context and the context of belief system hold keys to understanding what criteria individuals consider relevant in decision-making. These contexts are crucial to the interpretation of any spontaneous human linguistic exchange, yet are absent from directed interviews, life histories, and other forms of elicitation. The full linguistic context allows for disambiguation of referents, embedding, and apparent contradictions in the speaker’s performance. This clarification is necessary for understanding what speakers consider to be the criteria upon which they base their beliefs and, thus, upon which they act.

By using discoursements as our unit of analysis, we can gather extensive data about beliefs and investigate the process involved in acquiring and changing beliefs. The ability to construct and change beliefs is crucial to all people. Migrants, by changing their locale, must at the very least be able to manipulate their beliefs to fit their new situations. We hope, by investigating their beliefs, (including acquisition and change), to understand better what makes an individual become a migrant, and the cognitive consequences of such a decision. Perhaps by this procedure we can put the migrant back into the study of migration.

NOTE

1. It is recognized that "disambiguate" is an awkward neologism, but because there is no other word that conveys the same meaning, I will continue to follow Dr. Marvin Loflin's
usage. *Disambiguation* is the ability to make explicit one meaning in a situation which potentially has multiple meanings.

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