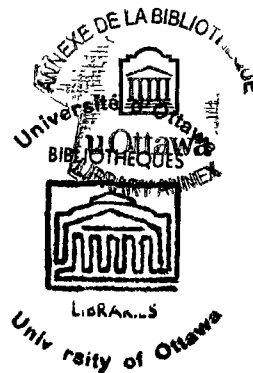


THE REPERTORY GRID TECHNIQUE IN THE MEASUREMENT OF
IMAGES OF POTENTIAL MIGRATION DESTINATIONS: AN
EXPLORATORY APPLICATION IN A RURAL OUTMIGRATION
ZONE OF COLOMBIA

by

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ABSTRACT

The research examined the applicability of the repertory grid technique in the measurement of images of potential migration destinations. It was conducted in a source area of outmigration in Huila, Colombia. Imminent behaviour appeared to formalize the image, and allow explicit evaluation of the places cited. Neither hypothetical movement nor an awareness of general migration targets was compatible with grid usage. The technique would prove more valuable as an interactive device in a study allowing evaluation of images and the decision-making framework over a longer time period.

RESUME

Cette recherche qui a été réalisée dans une région d'émigration à Huila, en Colombie, a examiné l'application de la technique du 'repertory grid' à l'étude de la nature des images des destinations de migrations virtuelles. Le comportement imminent semble mener à une formalisation de l'image et à une évaluation explicite des lieux nommés. La technique du 'grid' ne permet d'apprécier ni les déplacements hypothétiques ni la connaissance des destinations générales des migrants. Cette technique serait plus utile comme méthode interactive, dans des études où l'évaluation d'images et de la prise de décision se déroulerait sur un laps de temps plus important.

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A departmental assistantship made the research possible.

"One must take off again, get new experiences and make new discoveries enlarging and alternating what one knows already."

Everett C. Hughes

INTRODUCTION

The subject of internal migration is one of never-ending fascination (Friedmann and Wulff, 1976) which has precipitated many studies at various spatial and temporal levels (Bálan, Browning & Jelin, 1973; Caldwell, 1969; Harris and Weiner, 1973; Mangin, 1970; Thomas, 1971). That it merits particular attention in third world countries, where population movements are of ever increasing proportions, and are both affected by, and are affecting social, economic and political dimensions of society, is well documented in the literature (Bock and Iutaka, 1969; Butterworth, 1971; Cornelius, 1971; Elizaga, 1972; United Nations, 1961; 1967). Research to date utilizing the scientific method and approach has been essentially descriptive, with little attempt at predictive explanation leading to possible changes in the social reality.

Research can focus in at any number of points in the migration process, from the thoughts of the potential migrant to his integration and acculturation at the point of destination. The latter topic is particularly well covered in the literature, albeit utilizing the deductive methodology (Abu-Lughod, 1961; Feldman, 1975; Mangin, 1967; McGee, 1973; Simmons, 1975). It would now seem more valuable to concentrate on the decision-making pre-behavioural aspect of the move, and upon its conditioning factors and processes. Whilst there is recognition of this idea (Brown and Moore, 1970; McCracken, 1975), few studies have been initiated. (Notable exceptions are Demko, 1974; Hendrix, 1975; Uhlenberg, 1973). One of the main reasons for this is the lack of research techniques in decision-making, whether at the

microlevel of the individual, or at the macrolevel of the power nexus in society (Friedmann and Wulff, 1976; Svart, 1974).

This research was planned with two objectives, one methodological, the other substantive. The former was to evaluate the use of the repertory grid technique in a cross-cultural analysis of perceived worlds, with particular reference to the perceptions of potential migrants in an origin area migration study. Very little is known about migrants' cognition of reality, or of the mental behaviour implicit in the migration decision. The value of the repertory grid technique as a potential tool for measuring and understanding images in cognitive studies has been noted by several authors (Harrison and Sarre, 1971; 1975; Hudson, 1974; Lundeen, 1972; Townsend, 1975; 1976; 1977). Evaluation can proceed in two ways, testing along a given set of hypotheses, or within an exploratory framework. The former is more appropriate in a defined and known environment, a partially controlled laboratory. Forays into a new field, and one in which basic cultural assumptions may differ, are better met by an exploratory approach. This was to be used in conjunction with a short biographical questionnaire for interpretation purposes.

Substantively, the intention was to investigate the range and variety of cognitive dimensions used by individuals in structuring their environmental models, which implicitly provide the base for choosing between various locations in that environment. It was hoped that by placing the study in a source area some insight would be gained into factors leading to decision-making.

Fieldwork was conducted over a three month period in Colombia, where the design was formalized in consultation with several workers in migration (Cruz; Giraldo; Perez, 1976 personal communication). The research area, Altamira, Huila, a small village of heavy out migration, was chosen on the basis of a pretest and advice received (Guhl; Tihay, 1976, personal communication).

The thesis itself is divided into five main sections. Chapters I and II, cover a concise review of the pertinent literature on internal migration and perception, and place the study in a broader context. Chapter III outlines the initial research design, the pretest and the final approach adopted. The results obtained from the repertory grid method and from the questionnaire, and their implications, are compared in Chapter IV. An evaluation of the utility and limitations of the technique, with ideas toward a possible future approach is made in Chapter V. The Conclusion summarises the major findings and shortcomings of the study.

It should be recognized that of necessity the research is limited, and is not directed towards an explanation of the major forces in society such as the spatial flows of controlling decisions, capital resources and innovations, which may condition the perceptions of individuals (Friedmann and Wulff, 1976). Without reference to relations of power one's study is restricted, and one cannot hope to provide a satisfying explanation. Although this does not obviate the necessity for small scale studies it perhaps questions their ability to aid in the process of social reconstruction (Friedmann and Wulff, 1976).

Further limitations emanate from the tacit assumption of the relationship between images, choice and eventual behaviour in a given environment, and of the compatibility of micro and macroscale analyses. Whilst the approach adopted in this study was at the level of the individual, the factual knowledge of actual migration behaviour was derived from statistical data or inference at the aggregate scale. It can be argued that different processes operate at varying spatial scales (or levels of aggregation), or that reality constrains overt action, whereas it may not constrain possibilities.

CHAPTER I - RELEVANT MIGRATION RESEARCH

Migration research has evolved along lines of disciplinary specialization, and only recently has there been any attempt to synthesize and develop a conceptual framework for guiding future research (West, Hamilton and Loomis, 1976). Some authors state that the research is fragmentary, lacking orientation and theoretically sterile (Elizaga, 1972; Butterworth, 1971; Thomas, 1971). The resultant substantive knowledge is furthermore only partially cumulative due to differences in orientation and comparability of data (Mangalam and Schwarzweller, 1968).

Within geography many descriptive studies on the patterns of migration have been produced, lacking analysis of the explanatory factors and conditioning processes; few researchers explicitly state their conceptual and methodological framework. Furthermore much of the research has been confined to the more urbanized industrialized nations, and only recently has attention been directed towards the less developed countries. Theoretical and methodological applications of western research have been made in Latin America with little cognizance of contextual suitability.

This review evaluates the development of thought within the study of internal migration, the major substantive results and the particular research conducted within Colombia. Whilst a brief exposé cannot fully do justice to the wealth of literature, those ideas pertaining to an origin area study are discussed more extensively.

The main conceptual approach within internal migration research is based upon normative modelling, utilizing concepts of homo economicus, and perfect access to information. The push-pull hypothesis, in which economic variables are of overriding importance dominates the mode of thinking about migration (Bogue, 1959; Lee, 1966; Shyrock, 1964; Thompson, 1953). Urban pulls have been examined primarily in terms of higher expected incomes (Harris and Todaro, 1970; Todaro, 1968); poverty and population growth are identified as rural push factors (Kemper, 1970). Migration is then assumed to be a rational response to spatial differences in economic opportunities, which arise in the process of economic development (Beals, Levy and Moses, 1967; Greenwood, 1969; Sahota, 1968). Incorporated within this view is the idea that migration is an investment in human capital (Becker, 1964; Bowles, 1970; Schultz, 1961; Sjaastad, 1960), whereby the migrant incurs costs in order to reap future benefits. Further descriptive models have focused on surrogate variables, such as distance and ecological characteristics of places, exerting push and pull forces (Stouffer, 1940; 1960; Wadycki, 1975). Such an approach excludes a consideration of the behavioural parameters of the migrant.

The majority of these studies are based upon secondary data sources, the availability of which has generally dictated the specification of the problem and the formulation of working hypotheses. The analytic and evaluative power of the models is extremely restricted, essentially limited to an ex post facto description. Spatial patterns have been analysed without appreciation of the underlying structural and social processes. The major

criticism of such an approach was not the normative modelling itself, but the kind of norms built into such models: man was regarded as a 'black-box', an unknown constant in the study of the environment-behaviour relationship.

The behavioural approach represented a fundamental change in the conceptualization of human spatial behaviour. It is characterized by a more realistic view of man, for the 'black-box' was replaced by a 'white-box', in which the variable nature of man was recognized as being of central importance. An inductive methodology oriented to individuals supplanted a deductive technique rooted in the aggregate, an explanatory theory of causes was intended to replace a merely predictive theory of effects (Svart, 1974).

In the attempt at explanation increasing emphasis has been placed on individual decision-making processes and their effect on spatial behaviour. Although much of the work has concentrated on intra-urban moves and remained at the conceptual level, the ideas outlined are of value. Wolpert (1965) develops the concept of 'place-utility', which essentially reflects an individual's level of satisfaction or dissatisfaction with a given location, relative to his perceived needs and aspirations. A value is then placed upon an individual's integration at some point. If the place-utility of the present residential site diverges sufficiently from his immediate needs the individual will consider seeking a new location. Migration results as one form of adaptive behaviour to the disparity of needs and aspirations. The decision to move is time dependent, and everyone may be

considered a potential mover, some postponing the decision for periods up to a lifetime. The limited portion of the environment relevant and applicable for decision-behaviour forms the action-space of the individual. The action-space, furthermore, is conditioned by such differentials as socioeconomic characteristics of the migrant.

Brown and Moore (1970) expand upon these basic behavioural ideas and consider notions of stress. It is suggested that a functional relationship can be established between a household's characteristics (socioeconomic traits, stage in life cycle) and its needs. Stress results where there is disparity between the two. The processes of search and evaluation, resulting from the decision to migrate are also considered. Until this decision is taken the household's requirements with respect to future location are implicit, in that no considered evaluation of them need occur until a move is imminent. The criteria upon which choice depends are then explicitly formulated by the migrants. Employing the results of Miller's (1956) study, Brown and Moore (1970) postulate a restriction of evaluative dimensions upon which choice depends, and a ranking of these dimensions in the respondent's mind.

Demko (1974) in a study of southern Ontario cities operationalizes the concept of place-utility, suggesting that the level of satisfaction with a given location and the migration decision are dependent upon the fulfilment of two composite factors: one is economic, the other noneconomic, related to sociocultural environmental conditions. Although preference rankings of the cities are covariant with noneconomic factors, the economic

variable is critical in actual choice of destination. The satisfaction of some basic economic need often forces people to act in a certain way, not allowing them to actualize their preferences.

Whilst substantiating the economic rationality of the migration decision, Hendrix (1975) assesses the influence of kinship factors. His macrolevel data indicate a rational pattern of migrant dispersion, whereas the microlevel data show a marked tendency to follow the paths of siblings and other kin, mainly due to the information supply on working and living conditions. At the microlevel, the migration pattern also reflects an economic rationale with dependence upon kin in attaining it. Paradoxically few of his respondents explicitly mention kin ties as a reason for migrating.

Uhlenberg (1973) stresses both the importance of noneconomic variables in determining migration, and of nonmigration in the understanding of the process itself, and suggests a framework which examines motivation for, and constraints upon movement. He also argues that if migration is considered within a social structure, dependence upon the local community and the potential for assimilation elsewhere appear as critical determinants of whether motivation is actualized. Perceptions of social and economic conditions in the home community and information (accurate or inaccurate) of conditions elsewhere, are the two major determinants of motivation. The constraints examined could be political, economic, including such investments as ownership of property, or social, reflecting the extent of integration into and dependence upon the local community. Such factors act to retard migration, even though the economic motive may be apparent. Thus those with

deep roots in a community, strong kinship ties or particular investments in the local area, and an inability to assimilate easily in a new social environment, are likely to resist migration. Those who are not constrained, respond more readily to migration opportunities. If one considers migration differentials, such as selectivity by age, sex and education, to reflect the constraints and motivations within a community, then support can be found within the literature for Uhlenberg's (1973) ideas.

Although several survey studies by authors in developing countries have alluded to the social context in which migration takes place (Browning and Feindt, 1969; Little, 1965; Macdonald and Macdonald, 1968), no utilization of the behavioural concepts outlined above has resulted. Further, whilst it is recognized that attitudes, dispositions and preferences towards the environment affect human decisions and merit attention (Cox and Golledge, 1969; Harvey, 1969), research has not focused upon an evaluation of perception processes in the decision-making framework. This partially reflects the lack of research techniques in decision-making and cognitive appraisal.

Counter to this behavioural movement is an 'institutional' approach, which recognizes the dependency of migration on the major structural features of the economy (Friedmann and Wulff, 1976; Leeds, 1976). The behavioural concepts outlined are described as counter-revolutionary, obfuscatory and preventive of an understanding of the processes occurring in the real world, whilst supporting and legitimizing the existing social order. The study of the household unit and its individual members, justified on the assumption that people control and determine their own existence, is severely criticized.

Constraint and competition are regarded as more appropriate analytical terms than preference and choice (Gray, 1975). Although Friedmann and Wulff's (1976) study lacks a consideration of destinations other than urban cores, it does elicit several important recommendations, recognizing that migration flows are the result of such urbanizing forces as the spatial flows of controlling decisions, capital resources and innovation. If, therefore, an explanation of migration is desired it is the behaviour of these other spatial processes and the reasons for them which must be analysed.

Further comment by the authors suggests that progress has been hindered by a misplaced concern for the construction of predictive theory: they argue that as the urban transition is an historical process, involving the transformation of economic, social and cultural space, any theory proposing to predict social behaviour can only enjoy limited validity and is basically reflecting adaptively rational behaviour. Several criticisms of the cognitive-behavioural approach are implicit in Friedmann and Wulff's (1976) work. The case study itself is questioned as providing little use beyond the immediate data produced; the "endlessly repetitive surveys of migrant motivations" are criticized for the implicit assumption that the move was the migrant's autonomous decision.

The institutional ideas serve to identify limitations in the vast array of migration literature and yet have not provided operational research designs. Research needs to focus on the individual and social group decision-making framework, and also on the macromodelling processes within society which contain these decisions.

Whilst the above discussion portrays the conceptual development and consequential research considerations in the developed countries, a similar research thrust is not apparent elsewhere. Acknowledging the systemic influence upon spatial behaviour, much basic descriptive groundwork in the cognitive field remains to be done, for the work to date in Latin America reflects the normative modelling and migration differential approach.

Further limitations can be seen in the substantive contribution of the literature. The majority of studies have examined rural to urban or intraurban migration, and have been oriented towards the destination area. Little attention has focused on the rural moves or on the return migration patterns. Much of the research on internal migration in Latin America has been undertaken in response to United Nations reports outlining the paucity of knowledge in the field in general, despite the critical nature of the problem (United Nations, 1961; 1967). Several factors have been responsible for the lack of studies, principally the nature of census data which are subject to poor sampling techniques, lack of demographic expertise and politically-motivated manipulation of figures (Butterworth, 1971; Elizaga, 1972; Griffin and Williams, 1976). The survey studies whilst descriptively informative have been limited in scope and essentially concerned with migration differentials and the application of the push-pull hypothesis.

Although many general trends can be established within Latin America, each country is a distinct entity and exemplifies a different focus

of attention. The following discussion although pertinent to the literature as a whole is specifically related to Colombia.

Internal migration in Colombia presents two major thrusts, one to the urban centres, the other to the frontier lands. Return migration could be considered a third, but its magnitude and implications are as yet unknown. Colombia's population has increased from 11.5 million in 1951 to over 21 million in 1973, averaging a 2.8 per cent growth-rate per annum. Between 1964 and 1973, the urban population increased from 9.2 million (52% of the total population) to 13 million (61%) of the increase due to immigration. The rural population which increased from 7 million in 1951 to 8.29 million in 1964, had decreased to 8.22 million by 1973 (Griffin and Williams, 1976). Although this decrease was most notable in the densely settled traditional population clusters of Boyacá, Antioquia, Viejo Caldas (Caldas, Risaralda, Quindio). Tolima and Nariño, it was also apparent in parts of the dynamic colonization frontier of the Llanos (See Figure 1). Griffin and Williams (1976) suggest that this may be due to the presence of a hollow core frontier settlement pattern. Adams (1969), however, describes the increasing frontier movement between 1951 and 1964, when almost 400,000 people moved into new colonization areas. Martine (1975) notes that over a third of all movements are to rural destinations. The data base for the latter statement does not allow discrimination according to the origin of these moves. Whilst increasing urban concentration is characteristic of all Latin American countries, rural depopulation on such an areal scale noted by Griffin and Williams (1976) has not been cited previously. One other factor



Figure 1. ADMINISTRATIVE UNITS OF COLOMBIA

unique to Colombia is 'la violencia' (rural violence), which during the late 1940's and 1950's gave rise to specific migratory movements from rural areas, particularly in Tolima (Guzman, Fals Borda and Tuna, 1964).

The motives for, and characteristics of migration appear to vary according to the destination. There is evidence that older, less innovative migrants go to the frontier of settlement rather than to the city (Flinn and Cartano, 1970); and that less educated people of lower economic capacity choose colonization rather than the competitive urban labour market (Ruiz, 1972). Furthermore, the incentives appear to differ, for frontier migrants regard their destination as a place of independent work and an opportunity for self advancement through agricultural pursuits, whereas urban migrants seek higher wages and greater employment opportunities (Aragon n.d.). Rural push factors are described as rural violence, lack of social opportunities, high population growth rates, and monopolization of land by absentee owners (Adams, 1969; Flinn and Cartano, 1970). Within certain departments (the highest order of administrative unit) of Colombia expulsion from the land through aggregation of holdings and mechanization is thought to be operative (Perez, 1976, personal communication).

The distance decay effect and the nature of the migratory move are covered by some authors (Adams, 1969; Flinn, 1968; 1971; Flinn and Cartano, 1970). A greater number of previous steps, and longer distance moves are characteristic of frontier migrants. More attention, however, has been given to migration differentials, which appear to reflect the structure of employment opportunities available in each of the destination

areas. These findings are corroborated by those noted in studies throughout Latin America (Bálan, 1969; Browning, 1971; Elizaga, 1970; Herrick, 1965).

Migration to all areas of Colombia is highly selective towards the younger age group, between 15-34; females predominate in migration streams to urban areas, while migration to rural areas includes a substantial majority of males. Marital status of migrants varies considerably according to source and destination (Flinn, 1966; Flinn and Converse, 1970). A high proportion of urbanward migrants are young and unmarried and this tendency is more pronounced the larger the city of destination. Martine (1975) suggests selectivity in favour of male migration to rural areas. Rural-bound females generally are part of a family group. Most studies indicate that rural-urban migrants are more highly educated than nonmigrants in the origin community, yet less educated than residents in the destination area. Education itself is thought to stimulate outmigration, raising the level of aspiration, and creating an awareness of unsatisfied needs in rural communities.

Whilst the literature is replete with studies of aggregate migrant behaviour (Brigg, 1975, Cardona and Simmons, 1975; Lopez Toro, n.d.) little is known about migrants' cognition of reality. Further, there is a paucity of origin area studies even though future potential for policy formulation would appear to rely on such research. The origin context determines a cognitive behavioural approach since the decision rather than the act is to be studied. Determination of the method is of critical importance.

CHAPTER II - THE REPERTORY GRID TECHNIQUE IN THE
CONTEXT OF PERCEPTION RESEARCH

Within the behavioural school two possible approaches to the study of spatial behaviour can be distinguished: an examination of the mental constructs of individuals or groups of individuals and discovery of their attitudes towards, and their perception of, the space which surrounds them; or, observation of people's behaviour and the gauging of their reactions to the environment. The relative merits of these approaches are still debated: the former because the processes which link attitudes and images to behaviour are extremely intricate, and as yet only partially understood. The latter because the study of overt behaviour precludes research into attitudes responsible for the lack of similar behaviour by others (Svant, 1974), and allows for the rationalization of motives for this behaviour. Furthermore both approaches are criticized for their narrow perspective in ignoring the wider systemic influence upon mental or overt behaviour (Massey, 1975).

The basic assumption behind such research is that the understanding of individual behaviour, and the parameters which influence it, are a worthwhile research goal (Hudson, 1976). Of the two approaches outlined, this discussion is concerned with one which attempts to explain and predict overt behaviour via the mental processes which underlie it. One of the principal underpinnings of the perception approach is that spatial behaviour is a function of the image, where this represents man's link with his environment. The main focus is the individual's mental representation of the

environment, built up on the basis of experience, which serves as a data source when deciding upon action (Harrison and Sarre, 1971). It is assumed that each individual has a mental representation of his surroundings, human or physical, which is a mosaic of significant events through which space becomes meaningful. "The environment is consequently an interpersonal meaning system, the elements of which possess varying degrees of significance for the observer" (Donnelly and Menzies, 1973). Research is then concerned with eliciting the elements which different people consider important in their image, and assessing the meaning which any particular element has for that person. The study of such individual cognitive models of reality, however, presupposes an appropriate method of defining and measuring these, and in the past the problem of measurement has proved a major stumbling block hindering the development of the field.

Horowitz (1970) notes that an image is such a private experience that there is only one primary source of information about it, the introspective report. This, however, is not without difficulties: "people fabricate events that have not occurred in order to please, do not report events that have occurred to escape censure, change their thinking to suit a variety of motives, use terms that do not have shared meanings, forget, contradict themselves, distort experiences, and vary experience with changes in the interpersonal or nonhuman environment" (Horowitz, 1970). Thus one is faced not only with the mensural problems of perception, but reactions to perception of others' perception.

The most exacting problem concerning measurement is the lack of physical definition of an image. Initially, measurement must be concerned with a conceptualization of the image, such that appropriate measures may be defined. As Harrison and Sarre (1971) indicate, this involves linking the image with the kind of behaviour which is the object of study. Few studies have explicitly stated their conceptual base, which has led to a questioning of what exactly has been elicited and its ability to predict behaviour. Obviously the measurement technique must be capable of providing information and at present, with the field in its infancy, one must allow for the possibility that the measurement model is inappropriate.

Harrison and Sarre (1971) further discuss the scaling involved in measurement, that is, the measurement of attributes of various significant parts of the image. Studies so far have concentrated on allocating numbers to represent the amount of each attribute and are thus trying to link a perceptual image with a mathematical representation. Various problems arise at this stage as the strength of the mental image is equated with frequency of occurrence of response throughout a population. Scaling procedures such as rank order, interval or ratio scales have been used, but these have not succeeded in answering the theoretical question concerning the relationship between numerals and the cognitive process.

The requirements of the analytical stage of the measurement process should also be noted: some techniques, such as factor analysis imply a model of the relationship between the variables processed. Multidimensional scaling which generates interval scales from ranked scores is being increasingly

used (Briggs, 1969; Golledge et al., 1969). No assumption about the geometrical model describing the mental representation is incorporated, as multidimensional scaling models are usually applied to judgements on a particular variable.

The model of the mind is clearly of prime importance, and the linking of methodology and technique with this model is also critical. The ultimate aim is for a model which ties hypothesized mental entities into a coherent framework which can be causally linked to behaviour.

The review now turns to the various conceptual and methodological approaches within perception research. Initial studies in any field are exploratory and many of the assumptions can be built in only after failures or limitations have been recognized. One of the first and most important methods, the mental map, had as its principal aim, the procedures of environmental search behaviour and the cognitive strategies used in the conceptualization of the environment. A discussion has emerged, however, over cognitive mapping and word association. It was previously thought that images were gradually replaced by symbols and concepts with less sensory quality, which would then question the viability of graphical mental maps. Humphreys (1951) (cited in Ittelson, 1973) considers a further point: while thinking is permeated with language it is not identical with word usage. Paivio (cited in Ittelson, 1973) suggests that memory may operate on two processes, one based on visual image, the other on words; images are specialized for spatial representation, words for sequential processing. Tvesky (1969) (cited in Ittelson, 1973) added that the form of representation is dependent upon the

anticipation that the subject has of the use to which the information is to be put. It can then be argued that the drawing of maps was applicable in Lynch's (1960) study where the imageability of the city was being studied.

Whilst perceptions are retained for a short time in a form which allows continued emotional response and conceptual appraisal, over time they undergo two kinds of transformation: reduction of sensory vividness and translation into other forms of representation, such as words. Ittelson (1973) also notes that whilst pictures can be useful tools for the communication of internal images, they do not necessarily depict such images accurately; several filtering processes distort or elaborate the experience between image formation and graphic production. Lynch's (1960) method, while limited, has been modified and applied in a number of studies (De Jonge, 1962; Gulick, 1963). It has been postulated that the particular spatial form of cities may facilitate or inhibit the development of individual cognitive maps and consequently may do likewise with behavioural patterns.

Further projective techniques are outlined below, categorized according to the nature of the response evoked from the subject. Association techniques rely on the immediate response of the subject to the stimulus (Saarinen, 1969; Haddon, 1960). Construction tests require the creation of a story or picture. The completion technique involves the completion of sentences, arguments or stories (Barker and Burton, 1969). Choice or ordering techniques involve the choice of an item or arrangement which fits some specified criteria (Cox and Zannaras, 1970; Zannaras, 1968).

The utility of these techniques lies in eliciting some aspect of the subjective world of the individual, but exactly what has been elicited and the significance attached to it, is a matter of interpretation. The lack of theoretical or conceptual formulation has prevented the further understanding of the elicited information. Such techniques need to be framed in the broader context of learning theory, attitude formation and decision making, for thus far their usefulness in prediction is limited.

A more frequently used technique is the semantic differential, a standard psychometric technique, which overcomes some of the difficulties cited earlier. Semantic Differential uses linguistic encoding as an index of meaning. It uses a combination of association scaling procedures in measuring the psychological meaning of concepts. The method is one of pairing a concept to a scale, and thereby indicating its direction of association and intensity. The problem with this technique lies in selecting the sample of descriptive polar terms, for they should be representative of all the possible ways in which the meaningful judgements can vary, and yet be practicable. The connotative meanings of concepts can therefore be thought of as representative points in what Osgood (1957) called 'semantic space', a region of some unknown dimensionality and Euclidean in nature. The difference in meaning between two concepts is then a function of the differences in their respective allocations within the same space. Osgood (1957) hypothesized that the semantic space could be defined by three orthogonal axes, which he referred to as the activity, evaluation and potency dimensions. The method has been used by Golant and Burton (1970) in hazard perception and in other

fields (Downs, 1970; Sonnenfeld, 1969; Winkel et al., 1969).

The major drawbacks of the Semantic Differential are the restriction of meaning to the nature and variety of adjectival scales selected by the researcher, and the linkage of a single meaning to a concept. Further limitations are recognized through an examination of the repertory grid technique (Kelly, 1955), believed by some to provide the missing link in the appropriate conceptualization of image and behaviour.

The repertory grid technique is designed to study the perceived world of an individual with a minimum of interviewer interference. Initially developed for use by clinical psychologists in such cases as the treatment of schizophrenia, the technique has been adapted for use in other fields (Bannister and Mair, 1968), and recently employed by behavioural geographers (Harrison and Sarre, 1971; 1975; Hudson, 1974). There is still much discussion as to whether the technique can be considered generalized and free from theoretical assumptions as maintained by Chetwynd (1974), or whether it must be related to Kelly's Personal Construct Theory (Kelly, 1955). Townsend (1977) suggests that it is useful to consider the latter as a model in which it is assumed that an individual's actions can only be construed according to his own construction of reality. Further, any individual organizes his perceived environment by discrimination on the basis of its attributes. The attributes are considered to be arranged by each person into bipolar scales which express meaningful contrasts. The scales are called personal constructs, the objects scaled, elements. The manner in which an individual relates constructs and elements to each other reveals not only his perceived world

but the personal meaning he attaches to the words he is using. The individual, in effect, generates a personal set of questions and answers.

The grid for an individual comprises a set of elements in a matrix, for cross tabulation against a set of constructs. The elements chosen will define the focus of the grid, and are employed in the elicitation of constructs by Kelly's "triad-sort". The respondent is presented with three of the elements and asked how one differs from the other two. The grounds for distinction become a construct. If these constructs are potentially applicable to all the elements, they can be employed on the grid. When sufficient constructs have been elicited the individual rates the elements on all the constructs. The resultant data is in the form of a matrix $[A_{ij}]$, where any entry A_{ij} refers to the evaluation of stimulus j (elements) on attribute i (construct).

In the clinical setting the grid (both elements and constructs) has usually been elicited from the subject with the intention of entering the individual's construing system. In geographical research more consensual data was found useful, and a mixture of supplied and elicited elements and constructs proved functional, allowing generalization from some of the data. The critical differences between repertory grid and the other techniques mentioned are seen in the evaluation of meaning as contextually based; individually construed; linked to human events; action oriented and only fully realized on a time dimension" (Donnelly and Menzies, 1973). This latter point reflects the variance in usage of the data and technique by psychologists

and geographers. In the former setting the repertory grid has been used as an exploratory interactive device involving feedback; in the latter it has been used in a static descriptive way, inferring the general validity of the results, whereas in effect one has "tapped into the discrimination process of an individual at a point in time, in a particular situation" (Donnelly and Menzies, 1973).

Some further limitations of the repertory grid should be noted together with some of the ways in which they can be minimized. The differentiating factors could be 'situational' or even accidental rather than of critical importance to the respondent (Menzies, 1974), and yet it has to be assumed that the elicited constructs are a representative sample of those relevant (Hudson, 1974). A pretest is critical here, for the sample should be diverse enough to allow the identification of a full range of differentiating factors. The test as to whether something relevant has been extracted comes in the completion of the grid, when it is seen whether the respondent differentiates along the construct.

The analysis of the grid data utilizes a variety of statistical methods, thereby reducing the complexity of grid structures, but assuming that psychological and statistical meaning can be equated. Although the repertory grid represents a very sophisticated method for studying individual's images of reality, the connection between the image and the respondent's behaviour still remains unexplained.

The application of grids in behavioural studies has essentially been limited to small selective societal groups in urbanized and developed

communities; Hudson's¹(1974) twenty-six Bristol students and Harrison and Sarre's (1975) group of middle-class housewives in Bath are notable examples. The intention behind their research was to learn about the meaning of the image-formation process and its relation to behaviour. It is recognized, nevertheless, that practically any individual can be administered a grid provided that a suitable form is constructed (Chetwynd, 1974), and that the technique is potentially a flexible tool allowing a vast number of analyses for different contexts (Chetwynd, 1974). Townsend's (1975) study of the perceived worlds of the colonists of the tropical rainforest in Colombia, was an attempt to extend the principle of the controlled experiment outside the laboratory, and explore the utility of such a technique in a cross-cultural context. The informative results, reflecting the rationality and organization of the colono's (farmers active on the frontiers of settlement) perceived world, led her to posit the importance of the technique as an interactive device, and one which merited further application.

Chetwynd (1974) commenting on the potential utility in cross-cultural studies, emphasizes that the verbal content of a grid can be minimized thereby reducing translation inconsistencies. Use of the repertory grid technique in a different cultural environment can be seen as an exercise in communication, an open-minded experience in which there is an evolving learning procedure, both about the way the interviewees' view their world, and the way the interviewer does. Repertory grids are seen to have the quantitative advantages of survey work without the undesirable imposition of the investigator's opinions, common to other types of interviews (Townsend,

1976). Questionnaire surveys, for example, are of debateable value in cross-cultural work, due to the introduction of bias and contamination. Participant observation, whilst allowing an understanding of the non-linguistic 'silent' cultural assumptions, and the formulation of an appropriate research method, is not possible in many studies due to limited time availability. The repertory grid technique, therefore, appears to be not only utilisable in many investigatory situations, but frequently superior to techniques such as the questionnaire.

The further application of the repertory grid technique in a new context, that of an origin area migration study appeared useful on several accounts, and promised evaluation on methodological, substantive and communicative grounds.

Its testing in an experimental laboratory was also seen as valuable. To specify the individual precisely enough to control all but the attributes being studied is virtually impossible. It may also be undesirable as the factors related to behaviour may be unclear, and there is the danger of eliminating them in the sampling procedure.

CHAPTER III - RESEARCH FRAMEWORK

The research focused upon the evaluation of the repertory grid method in a specific problem context, that of measuring images of potential migration destinations. Its exploratory nature was justifiable on several grounds: first, the lack of origin area migration studies precluded a hypothesis-testing approach. Second, the application of the methodology in a new environment in which certain basic cultural assumptions could not be made, but only experienced through interaction, necessitated an open-ended research design. Unlike previous studies using the technique few operational factors, such as the sample, and the information field of the individual, could be controlled. This section covers the procedures developed, the difficulties encountered, and the modifications introduced.

Research Design

The type of image to be elicited and the wider problem context were critical in formulating the research design. The research was to be conducted in a rural source area of heavy outmigration with approximately equal access to a number of urban and rural 'targets'. It was thereby hoped to accommodate image variations resultant upon destination type. Migration destinations are a novel type of grid element, but Hudson and Townsend suggested utilizing the pretest to see whether ten known destinations, some urban, some rural, could be identified, for the most useful study would elicit stereotypes of the same places (1976 Personal communication). Furthermore as the study was exploratory it was suggested that a biographical questionnaire be included to aid interpretation of the images.

Fieldwork was to include a pretest with the intention of selecting a suitable work environment, deciding upon the nature of the elements, as these confine the field of the grid, and defining a standard set grid. Having defined the latter, elicitation would continue throughout the survey. Any individual would therefore be able to produce constructs, which if they were already on the set format would be ticked; otherwise they would be added at the end of the list. When no more constructs could be given, the interviewee would be told that others had supplied those omitted and the grid would then be completed on all constructs and elements. Obviously this is not as 'pure' as it would be had the missing standard constructs not been supplied, for ideas are suggested to the respondent which must distort the answers.

Two scaling methods, namely ranking and grading, were to be examined in the pretest. A five point scale from "yes" to "no" on each construct, relatively clear to use in Spanish, proved most acceptable in Townsend's (1976) study for completing the grid. Others have tended to prefer ranking over grading, the former supposedly being more stable with respect to a person's cognitive system (Chetwynd, 1974). Indifferent perception is allowed by having an exact range above and below the level of indifference, and helps control for a point made by Johnston (1970), that all individuals may not have given equal consideration to the various places. An attempt can also be made to control for this at the level of the interview, through the identification of relevant factors and their relative weighting in the person's mind. Generally in statistical analysis the weighting has depended upon the quantitative occurrence of a given answer; in reality the most important reasons could be missed.

A short questionnaire was to include the characteristics of age, sex, family status, level of education, income, job qualification, previous migration history of interviewee, and location of family. It was hoped that such information would facilitate the grouping of the sample population into various categories and allow the images to be compared accordingly.

The sample would be as varied as possible, where heads of households, assumed to be a reference group and guardians of stereotypes, and other individuals if independent decision-makers, would be interviewed.

Analysis of Data

The 'raw' results offer the first stage of analysis, and can reveal the following: the number of personal constructs elicited; the variety of personal constructs elicited; the numbers and range of places scaled; the relation of the above to migrant characteristics.

The data matrix is susceptible to a variety of statistical tests. Amongst those most commonly used is principal components analysis, which transforms the initial set of interrelated constructs to a new set of orthogonal independent dimensions. In-depth analysis can proceed to evaluating measures of cognitive complexity (Chetwynd, 1974).

A variety of computer programmes have been written to facilitate analysis, for both the individual case and for series of grids. INGRID gives a detailed account of the relationships present in the grid (Slater,

1967; 1972). The correlations between the constructs, the distances between the elements, the loadings of both constructs and elements on each of the components, and the inter-relationships between constructs and elements, are all given (Chetwynd, 1974). SERIES is utilized when all the grids in a group are aligned by construct and by element. It gives analyses of variance and forms a consensus grid. Thus any sets, such as those from age or occupational groups, can be compared. Detailed descriptions of these programmes and an operational manual can be found in Chetwynd (1974), and Slater (1967; 1972).

THE PRETEST

Three rural areas of high outmigration, Altamira, Guadalupe and Suaza, all within the department of Huila, were selected as possible research sites. These were chosen after consultation of the available census data for 1964 and 1973, and discussion with other workers in the field of migration. A further site Potrerillos, a hamlet of Garzon, was examined on advice, although no specific population data existed. Altamira, Guadalupe and Suaza are small municipios (comparable to the county in Canada), the cabeçera (municipal seat) populations according to the provisional 1973 census are 1,323, 2,683, and 1,768, respectively (Departamento Administrativo Nacional de Estadística, DANE, 1974). The four sites are accessible to the urban nodes of Bogota, Cali, Neiva and Popayan, and to the colonization areas of Meta and Caqueta (Figure 2).

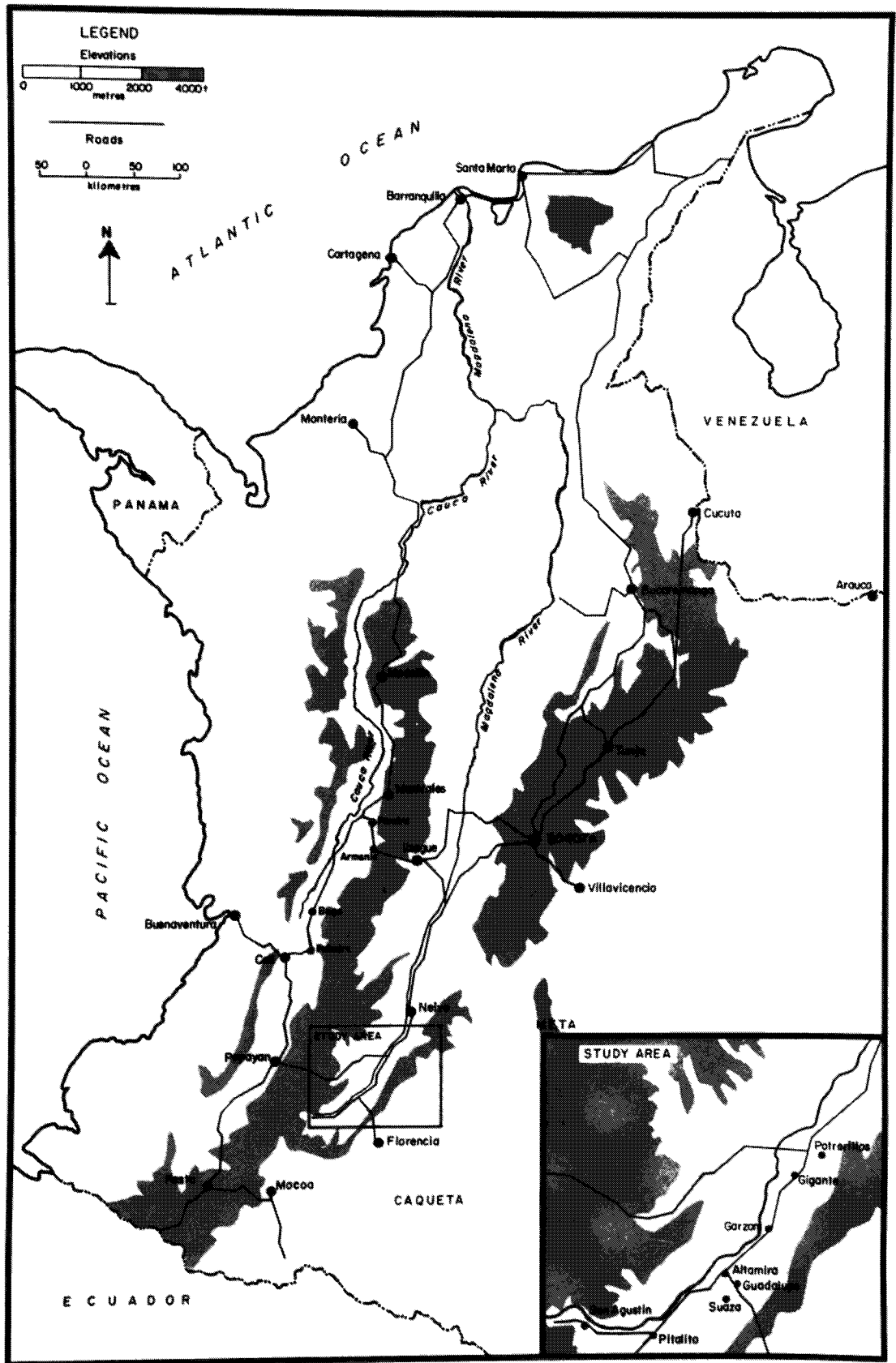


Figure 2. COLOMBIA: PHYSICAL and HUMAN FEATURES

Throughout the study period the interviewer was accompanied by a Colombian, who was familiar with the area. He initiated conversation, and helped to allay fears regarding the raison d'être of the research. Much negative feeling has been generated in Colombia, due to the association of resource exploitation with foreign presence: outsiders are regarded with suspicion, as are government officials. All four sites were visited and unstructured interviewing proceeded in order to obtain data on the composition of the population, the local economy and the nature of migration.

Once a degree of familiarity had been established more specific interviews including the biographical questionnaire and the repertory grid were undertaken. Ten heads of households, or other decision-makers from varying age and occupation groups were interviewed in each locality.

Selection of Site

Choice among the four sites depended upon simple criteria such as size, location and economic status, due to the unavailability of reliable data or other parameters. Altamira proved the most acceptable for the following reasons. It is the smallest of the three municipios, and yet larger than Potrerillos, which was eliminated on the size factor alone. Its economic structure is the least commercially oriented, and yet the employment structure more precarious. Both these factors were thought likely to initiate a greater outmigration. It is located on the main Pitalito-Neiva-Florencia road network, and thus directly exposed to urban and rural nodes. Although arguably the least significant village, its prestige is apparent in the Colegio

Marillac, where unlike Suaza or Guadalupe the final secondary school grades can be completed. The reputation of the school is widely acclaimed and reflected in the considerable number of boarders from the surroundings and from other departments. Imminent school-leavers, a group known to be migration-prone, could therefore be interviewed. Above all, the size and general atmosphere of the village allowed a greater degree of familiarity with the respondents.

The Grid

Several types of elements were tried in the pretest: the respondents were asked for any known migration destinations, those of their friends and relations, and any personally considered sites. It was implicitly assumed that in an area of heavy outmigration the majority of individuals would be aware of migration targets, and possibly through contact (direct or indirect) have an image of them. In reality this did not seem to be the case.

Those respondents who named objective destination targets appeared unable to differentiate between them, and grid completion was impossible. Some interviewees had thought of migrating, and yet did not provide names of specific places, thus the grid could not be completed by these people either. It was only with those respondents who themselves were considering an imminent move and who could name specific destinations that grids could be completed. Furthermore such respondents were few, and essentially restricted to the school children interviewed.

Utilization of the repertory grid technique with the school-children led to the questioning of other initial assumptions. It became apparent that urban and rural destination targets were distinct entities, and not grouped by respondents. Further, it was evident that a range of places were not considered, and that choice itself was perhaps a different concept to the one imagined. Only some two or three possible sites were forthcoming from the schoolchildren; from those elicited elements no consensus set was reached, and standardization proved difficult. Whereas it had been expected to find a greater similarity of migration targets, this was not found to be the case.

Besides having to restructure the research design as a whole, in response to the contextual situation as it presented itself, specific decisions had to be taken on the grid procedure. The choice was either to impose rigidity where it clearly did not exist, or to allow free elicitation with each respondent. The latter approach was adopted as the study was exploratory, and there would be no generalization of the substantive results beyond the population from which they came.

The elements were then employed in the elicitation of constructs by Kelly's triad sort. It was decided to include Altamira within each sort, as this would provide an easier base for comparison between the named places, and thereby facilitate construct determination. It was also hoped to aid greater evaluative thought concerning the decision-making process, and give rise to fewer superficial differentiating factors. Unlike previous studies the number and range of constructs were few and basic, and attempts at refined

differentiation proved fruitless. Standardization amongst the constructs, however, was more apparent.

A grid was then completed, evaluating each element supplied on all the constructs given by the respondent. Ranking of the elements in terms of the constructs proved inapplicable as the eventual choice appeared to depend upon circumstance. Thus, a three point scale, broadly signifying the presence or absence or indifference towards the differentiating factor was to be adopted for the main survey.

It should also be noted that several of the biographical questions, such as those relating to income and expenditure of the family, proved untenable. Generally, employment was sporadic and money was not earned on a regular basis. Specific information on previous migration history, whilst covering places and duration of stay, was often not dated. Later discussion with Colombian researchers suggested that this failing could have been the interviewer's since it can be assumed that the migratory move is such a major event in the life of an individual, that an exact date would be recalled. Admitting this possibility, it should be noted that dates of birth, and ages of children were often not specified, suggesting fluidity of time.

THE MAIN STUDY

The Study Area

Altamira is situated in the upper Magdalena valley, between the central and eastern cordillera at an altitude of 1,079 metres. It is within

the dry tropical forest zone, with monthly temperature averages between 23^o-26^oC, and approximately 1,246mm of rain per annum. Much of the surrounding land is devoted to cattle rearing and coffee growing, and latifundia are interspersed with small scale farming. Altamira itself has not benefited from its focal location in a rich agricultural area, nor from its crossroads position on the Bogota-Florencia-Pitalito road

Over the past few years there has been relatively little change in the employment structure, and the community seems to be stable or declining. Little commercial activity is present, mainly centring on tienditas (small, all purpose shops), with a market once a week; most of the produce for this is brought from Guadalupe, and is dear. There is a high unemployment and underemployment rate, and work opportunities are essentially manual. The majority of men are engaged in agriculture, working by the day for 70 pesos (\$2), clearing land, or collecting the harvests. Most of the women are in domestic service, either working in their houses, or earning a meagre sum washing and ironing for others. Many others made biscochos, (a type of cheese biscuit), and would sit by the roadside all day, competing for sales to the buses passing through to Florencia, Pitalito, San Agustin and Neiva. Many of the inhabitants did not have a constant income, and relied on the charity of kin and friends for meals, and some lived in one-room houses provided by the municipio.

Although no figures are available, the population structure was typical of many such villages with a high outmigration in the age group 15-34; thus there was a 'bulge' in the population pyramid above and below this

group. An unusual feature was the high proportion of female heads of households: many women had been abandoned generally due to economic circumstance, whilst their spouse or partner established new roots elsewhere.

It was posited that a number of such endogenous factors could give rise to high outmigration . Employment opportunities for skilled and unskilled labour were few. Migration was a very real path for self fulfillment, either in agricultural, manual or professional fields.

Selection of the Respondents and Interview Procedure

Whilst the pretest exposed many of the unforeseen difficulties of utilizing the repertory grid technique in an origin area migration context, it did not suggest the causes of these. The low incidence of people who could name potential migration destinations appeared paradoxical in what was perceived by the interviewer, and described by many locals, as a lifeless, dull community. It was also unusual, that even with those who had considered migration so few could be administered the grid. As no solution was obvious from within the original sample base it was decided to interview a group of nonmigrants (those who did not name destination targets), and discuss their perceptions of Altamira and reasons for non-migration, in the hope that these might further elucidate the decision-making framework.

A rigid sample frame was unnecessary: the results would be used to create a model rather than as data for analysis by inferential statistics. Further, it was impracticable due to the work schedule of the inhabitants: the temporary and infrequent employment required periodic absences by the male population. Others would leave early each morning, by mule or foot to work on a finca (small farm plot) and return late in the evening. No reliance could be put on arrival time of the decision-maker in the house, and so pragmatic adaptation to the situation at hand was mandatory. A house to house survey of the village was decided upon, where the decision-maker within the family, if available, was questioned; in the event of a refusal or if after several callbacks no contact could be made, conversation often ensued with the wife, although no interview was undertaken. A sample of schoolchildren in their final year of bachillerato (secondary school) were interviewed, after arrangements had been made with the nun in charge.

After some introductory statements concerning the nature and purpose of the work, the interviewee was asked if he had thought of migrating from Altamira, and if so where to; if not his reasons for staying were questioned (Appendix A). Where relevant the potential destinations were written down, and the constructs elicited as previously described (Appendix B). The questionnaire was also completed.

Of the approximate village population of 1,000, 75 heads of households and 45 schoolchildren were interviewed. Two types of interviewees were evident: 'potential' migrants (defined as those who were considering

leaving Altamira), and nonmigrants (defined as those who were not). Of the former, 46 named specific destinations, and 14 did not. Of the 43 nonmigrants, 28 had a migratory history, 7 respondents were transient (for example, the nurse). 10 interviews were rejected through insufficient data or non cooperation.

Interview results are presented in the form of a discussion for comparative purposes. The results are discussed in relation to the people from whom they were elicited, and no attempt at generalization for the total population can be made. The computer programme SERIES could not be used as the standard grid format had not been applied. INGRID proved unnecessary as the limited grid content could be easily hand tabulated (Hudson, 1977 Personal communication).

CHAPTER IV - COMPARISON AND IMPLICATION OF RESULTS

Several major points arise from the study concerning the nature of substantive results, and the implications of these. Firstly, it is necessary to consider why images of potential migration destinations were elicited from only a small number of people. Of the 60 respondents who had considered migration, only 46 could specify places to which they would migrate, and differentiate between these. One of these, aged 30, was waiting for a visa to leave for Venezuela in October. The other 45 were schoolchildren, between the ages of 15-22, who had completed 10 or 11 years of education, and planned to leave Altamira in November. The remainder gave such replies as donde me resulta, donde ocurre (wherever it is possible), suggesting a non-personal decision force.

From the results it would appear that explicit image formation was only apparent where overt behaviour was imminent. This result agrees with the findings of Tuan (1975), who notes that "image, whether of the imaginative or the memory kind, is perhaps always the result of attention." The schoolchildren either had to migrate, or consider unemployment or manual work, for which their education was not suited. Utilizing Uhlenberg's (1973) conception of dependence upon the local community and potential for assimilation elsewhere, it can be argued that this group would be the least dependent upon Altamira, which cannot offer them employment, further education or a means of self fulfilment. If any aspirations were entertained towards self realization, which it is assumed they were, or education would have been terminated at an earlier stage, ceteris paribus, migration would result.

Furthermore a consideration of migration differentials such as age, marital status, and level of education, indicates that they have a high assimilation potential elsewhere.

The situation would seem very different for those who stated a desire to leave, but did not name a place or elicit an image. The move itself was not necessarily imminent, nor defined by time, but was rather dependent on external factors such as opportunity and circumstance. The latency or evidence of an image can be debated, for the possibility exists that a non verbalized image was present. The image, however, was not focused and would have necessitated conscious attention, such as an imminent decision to formalize it. This group of potential migrants had considered migration, thus had a conception of the migratory process, but not of the end result, the target location. It is interesting that 5 of these 14 potential migrants had a migratory history, and presumably had an image prior to earlier departure. The possibility of a future move did not draw an image, and supports the hypothesis of images related to imminent behaviour only.

From Uhlenberg's (1973) hypothesis, potential migrants who did not name a specific destination are neither completely absorbed within the local community, such that their needs and aspirations are fully satisfied, nor totally rejected. Arguably there is not only an awareness of opportunities in the home area, but also a consideration that possibilities might be enhanced elsewhere, or at least there is a readiness to attempt migration given the opportunity. The notion of perceived satisfaction would appear relevant when this group is compared with the nonmigrants.

15 of the 43 nonmigrants had no desire to move, had not lived outside Altamira, and yet when asked 'why not?', could supply reasons for nonmigration (Table I).

TABLE I - GENERALIZED REASONS FOR NONMIGRATION

Reason	Number of Respondents Stating Reasons
House Ownership	12
Climate	9
Village Atmosphere	4
Sufficient Work	3
Lack of Means	3
Family Considerations	3
Total Sample:	15

These answers could have been based upon conscious mental behaviour, the reasoning of which led to a negative decision to move. They could, however, have been forced by the question, and be a mental reflex, not necessarily implying even a consideration of the migratory process. The concept of migration could be a non-personally related one and, whilst acknowledging comprehension of migration, it is perceived as related to others, those with less dependence on Altamira. Thus although the reasons appear to indicate rationality and an understanding of the implications of the migratory process, these could be the result of a perceived need to justify and rationalise a question which threatened their construct system.

Furthermore, it is argued that this group was highly dependent upon Altamira. Vested interests in the local community have been identified, reflected in physical, social and economic investments. Absorption by the community could prevent consideration of migration or mobility, and similarly portrayed a low potential for assimilation elsewhere. This is well illustrated by those women whose partners had left them with numerous children and a physical asset, a house, which although it has no realizable value represents security. It is perhaps unusual to find climate so frequently mentioned, and yet one has to remember the significant altitudinal stratification of society which exists in Colombia. Altamira has one of the more attractive intermediate climates in a country where high altitude and lowland areas are considered marginal. Many people appeared to be aware of the reasons for others' migration, realizing the absence of work opportunities and, the lack of ambiente (village atmosphere), yet they themselves were content, or saw no way of living elsewhere.

The 28 other nonmigrants were those who were not considering moving, yet had a migratory history and had returned to Altamira. Many of the older respondents had left as aventureros looking for work, or an easier life, but without the security of a job. The majority had left between the ages of 12-19, and had a minimal education. Many had gone to the colonization frontier in the Meta, where jobs and agricultural land had been abundant. Others had gone to the cities, some to the capital, and some to Neiva, Buga, Cali, and smaller urban centres. What is particularly interesting is the varied migratory background of this group, whereby the

majority had lived in a number of places. Whilst economic motives appeared to be the raison d'être of the earlier moves to both urban and rural targets, they were manifest in different forms. The urban stimuli were seen in terms of entry into the labour market, higher wage rates, and education of the children; the rural stimulus as ownership of land. A few of the return migrants had sought work in both urban and rural areas, adapting themselves to the perceived opportunities in each. This reflected an important phenomenon, the lack of specialization and training for one job, and rather an ability to undertake whatever was available.

The reasons for returning to Altamira were varied, reflecting both a negative appraisal of their previous destination, and a positive impression towards Altamira. The reasons can be grouped under 9 headings (Table II).

TABLE II - REASONS FOR THE RETURN MOVE

Reason	Number of Respondents Stating Reasons
<u>Negative Factors:</u>	
Cost of living	2
Demands of lifestyle	3
Boredom	1
<u>Positive Factors:</u>	
House ownership	13
Climate	13
Village atmosphere	11
Work	9
Family considerations	5
Education of children	4
Total sample:	28

Reasons such as boredom and the demands of the lifestyle, may well reflect a rationalization of failure to assimilate and integrate in the destination area. Retrospective rationalization may also explain the focus on positive factors. A definite image of Altamira existed in the minds of the majority of the return migrants: the return move was to mi tierra , (my homeland), a dominant concept signifying an association with a pattern of life. One which drew comments such as la vida tranquila, vida sabrosa, gente sana, gente formal, me amaña el clima, (a quiet existence, decent people, and a love of the climate). It perhaps reflects emotional ties to a quality of life not experienced elsewhere, where life could be enjoyed at a slower pace, the front door left open, and the climate appreciated. As one man aptly remarked uno nace, se crea, se va, pero regresa para morir (One is born, raised, and leaves, but returns to die); a move formed part of one's life, and yet it was conceived as temporary.

Many had vested interests in the home community: physical assets such as houses, passed on through inheritance. These nonmigrants were 're-absorbed' into the local community, and can be considered highly dependent upon it. Those factors perceived negatively at an earlier stage in the life cycle were reevaluated. Many of the same factors both precipitated migration and allowed nonmigration. Thus the insufficient employment, the restricting life of a small village, and the quiet life now become positively appraised. Aspirations are seen as changing, economic motives were replaced by qualitative ones. The quality of life was mentioned by several return migrants, for work could be undertaken at home in Altamira, whereas in the cities it often meant

working in a factory. Many felt that if it was necessary to live poorly it was easier to do so in the home environment, where if all else failed, the support of friends and relations could be relied upon.

Concomitant with this view of Altamira was a recognition that other people in their turn would migrate, elucidating the following no hay via economica, no hay que hacer, viven la gente de biscochos (a lack of employment, the people live from biscuits). Thus it would appear that providing there was the means or a reason for staying in Altamira, people did so. A house of one's own, sufficient work, not necessarily permanent, were tying or rooting factors, and constituted an absorption by the local community. If there was less dependence upon the local community, migration was more likely to be considered and the mental behaviour activated if the opportunity arose. The image would appear dependent upon the type of resultant behaviour.

Migration can be viewed as an extremely rational response to a given situation, and not one which can be examined in terms of economic variables per se. Furthermore the definition of a potential migrant as someone who is considering moving should be revised. Utilizing Wolpert's (1965) idea, any person may be thought of as a potential mover, some postponing the decision for periods of up to a lifetime. Thus the two categories into which respondents were grouped in this study, whilst useful for preliminary discussion and simplification are essentially reductionist, and should be reviewed along a time continuum. It is also suggested that some threshold exists between dependence upon the community and contemplation of

a move. Examination of the reasons for a postponed move would seem essential to an explanation of factors contributing to the move.

Whilst anyone maybe thought of as a potential migrant, only those who were actually considering an imminent move could be administered the grid.

CHAPTER V - EVALUATION OF THE REPERTORY GRID TECHNIQUE

This section covers the applicability to, and limitations of, the repertory grid technique in the study, since critical evaluation in research is imperative, especially in an evolving field.

The repertory grid technique is based on the assumption of an established image, which is a necessary part of decision-making and behaviour. The meshing of a technique and problem are of great importance, and yet little mention is made in the literature of possible areas where repertory grid methodology cannot be successful. This is perhaps understandable, for the evaluation has depended on the substantive results in contexts where the technique is applicable. This is well illustrated in Harrison and Sarre's (1975) paper on the measurement of environmental images held by two different groups of urban residents; a group of housewives' images of Bath, and shopkeepers' images of their business environment. Both of these groups frequently interacted with the studied environment, their images being challenged or reinforced through behaviour. Again, Hudson's (1974) study was an evaluation of images of the retailing environment, where overt behaviour was incorporated. Townsend's (1974) study on the perception of farms as identified by farmers' names in a frontier colonization context suggested that a mental evaluation of the environment by the interviewees was needed in order to organise and run his particular farm. The respondents were asked to elicit images of a 'concrete' environment, one in which they acted. Thus the applicability of the technique has been demonstrated only in studies in which behaviour, mental or overt, is apparent.

With potential migration destination, the interviewee must hypothesize and evaluate in a pre-behavioural environment, and the technique can be applied only where imminent behaviour formalises the image and leads to discrimination along a range of factors. As reflected in the research design (page 27) it was originally thought that a general awareness of migration would elicit images of potential destination targets. In retrospect one was asking for a grid irrelevant to their cognitive system. Lundeen (1972) utilizing semantic differential scales derived from personal constructs, infers a similar problem; he assumed that knowledge of, and spatial proximity to recreational facilities would elicit images. In fact only those for whom such facilities were salient could provide constructs which appeared to be closely related to their decision-making processes.

Further evaluation of the technique in the context of the present study must assess the substantive knowledge gained from the group of school-children to whom the technique was applicable. The grids were limited in content, the numbers of elicited constructs and elements few, and the differentiation produced a polarization of loadings but little inter-element variation. The number of places cited besides Altamira varied between 1 and 4 (Table III), whereas previous users of the technique had a minimum of 6 elements.

TABLE III - FREQUENCY OF ELEMENT ELICITATION BY SCHOOLCHILDREN

Number of Places	Percentage Response
1	18%
2	44%
3	27%
4	11%
Total sample: 45	

The possible sites were those which combined further education facilities and work opportunities (Table IV). Besides these causal factors the conditioning nature of the family network was evident, and reflects the milieu in which a decision is made, reducing the risk factor. A more lively atmosphere than that in Altamira was mentioned as an additional factor. The importance of climatic suitability was emphasized by the respondents, when considering a future work environment.

TABLE IV - RANGE OF CONSTRUCTS ELICITED BY SCHOOLCHILDREN

Construct	Number of Respondents Stating Reasons
Education	44
Work	44
Family	25
Ambiente (Atmosphere)	23
Climate	15
Total sample: 45	

The migration decision appears to be made within a narrow framework, whereby few and basic motives are delimited. These results reinforce those from destination based studies, which may contain the danger of post-hoc rationalization. While the economic factor may be the final and definitive motivation, other factors impinge upon the decision-making process.

A wide range of places were cited (Table V) and yet as might have been expected the national capital, followed by relatively accessible

TABLE V - RANGE OF PLACES CITED BY SCHOOLCHILDREN

Place	Number of Respondents Stating Place
<u>Colombia:</u>	
Bogota	38
Neiva	18
Cali	9
Medellin	6
Popayan	6
Garzon	3
Barranquilla	2
Florencia	2
Pitalito	2
Manizales	1
Cartagena	1
Bucaramanga	1
Buga	1
Palmira	1
Ibagué	1
<u>External:</u>	
U.S.A.	4
Europe	3
Africa	1
Russia	1
Sample base:	45

intermediate cities were most frequently elicited. If behaviour is based upon the image, the potential volume of migration would seem proportionate to city size. It is interesting to note that potential destinations outside Colombia were perceived as larger spatial entities (that of the continent) presumably due to more limited information. Mention of the external sites was differentiated along the family construct only, except in the case of Russia, where educational opportunities were stated.

The inter-element differentiation apparent was between Altamira and the other places elicited, not between those urban nodes cited. This is perhaps unusual, and could result from a variety of factors. It is arguable that the eventual choice between potential sites is dependent upon opportunity. If the basic requirements are met by each of the urban nodes, discriminatory evaluation is possibly irrelevant. Alternatively, further judgement may be restricted due to a limited information field. Interviewer inexperience and participants' misunderstanding of the research aims may also have affected the results.

Utilization of the technique has proved advantageous in some other respects. Once the initial field of investigation is outlined, that of potential migration destinations in this case, the individual defines his own set of questions and answers. The interview procedure then becomes an exercise in understanding and empathy. Whilst the interplay of language and conceptualization cannot be ignored, a framework for interaction exists. This is valuable in a context where much logical thinking derived from

developed countries is inapplicable, and formalized research designs need avenues for adaptation.

The idea of self formulated bipolar constructs was found to be particularly useful, as the evaluative procedure in the migration decision incorporated a consideration of positive and negative aspects. Tuan (1973) commenting on ambiguity in attitudes, notes that feelings, including those directed to environment and place, tend to require their opposites for completion.

The versatility inherent in the method is apparent in the grid procedure. Whilst the standardization of constructs and elements is useful when generalizing over a population and comparing between samples, freer gridding seems more valuable in exploratory studies. The method appears especially informative as a preliminary tool in a field in which little prior knowledge exists, where construct elicitation alone can provide an input into a more formalized research design.

Paradoxically much of the value of this study was an outcome of its limitations, allowing the formulation of a more viable future approach to origin area work. The repertory grid technique could be better used in a longer term study, leading to the evaluation of the evolving image, of overt behaviour, and of the coincidence of these. Furthermore the nature and extent of the information field of the individual, and its influence on the image needs to be examined. "A capsule statement on environmental attitude distorts through simplification: it fails to do justice to

experiences that result from the accumulation of positive and negative impressions" (Tuan, 1973). Recognition of change in image formation and environmental attitudes is essential. Whilst "what people do is a simple matter for observation, what they think or hold can only be inferred, for verbal expression itself is evidence, not incontrovertible proof" (Tuan, 1973).

CONCLUSION

As an exploratory study, covering two objectives, the primary function was to provide material for thought and allow the formulation of a future approach. Whilst the value of examining the decision-making prebehavioural aspect of the migration process is acknowledged, some of the major difficulties of working in an origin area of outmigration have been exposed. The suitability and applicability of the technique became apparent through the implementation of the research design, and adaptation to the context at hand. The major drawback did not emanate from the technique per se, but from its contextual application. It was suggested that mental or overt behaviour within the perceptual field by the individual was a necessary prerequisite to the utilization of the technique.

As an open ended interview method it allowed the evolution of an operational research framework, and the partial realization of an interactive potential between the interviewer and interviewee. The effect of social distance between these latter plays a critical role in any cross-cultural environment, and yet is immeasurable. Although the method facilitated communication, interpretation of the results remained largely inferential.

Substantively, the utilization of the repertory grid technique exposed more problems than it solved. Explanation of the limited range of potential destinations and differentiation between these, was not evident within itself but only by comparison with images from a group to whom the technique was inapplicable. Similarly the suggestion of a threshold between

migration and non migration, and the importance of noneconomic variables in the migration decision was only apparent by collation. This supports the idea of the repertory grid as an investigative tool, which should be used in conjunction with other methods wherever possible. Within the substantive material several behavioural notions were examined, and those of dependence upon a local community, and potential for assimilation elsewhere found relevant. The concept of a potential migrant was redefined along a time continuum.

As a study of perception patterns, no mention was made of all the possible conditioning processes. Perception is dynamic along social, economic and political dimensions, and yet this study investigated the static perception of an entity: migration destinations. The processes leading to the formation of particular environmental images, and the impingent conditioning factors necessitate further study.

The limited time available, and the isolated nature of the study prevented a complete evaluation of the potential of the technique. A number of directions as to future research emerge, critical amongst these are: the way in which images of potential destinations are developed, whether through direct or indirect contact; the extent of the information field of the migrant; and whether eventual behaviour is effected within the image sphere.

POSTSCRIPT

Much of the value of the research was personal. Living and working in a small Colombian village was a stimulating experience in itself. There were frustrating moments of despair when preformed ideas, evolved through cultural conditioning and academic reasoning, were shattered, and the research goals seemed unattainable. The contrasting lifestyle led to a questioning of affiliations, followed by acceptance of new values, and a build up of fresh ideas. The rewards were moments of delight at colourful glimpses of another's reality.

"But that was yesterday. Now I am ready for tomorrow."

Rachael Fields

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APPENDIX A: Questionnaire used in the main study for all interviewees

1. Cuántos años tiene usted?
2. Cuántos años de estudio tiene usted?
- 3.Cuál es el estado civil (conyugal, matrimonial) actual?
4. Es este pueblo su residencia permanente?
5. Dónde nació usted?
6. Tiene usted en la actualidad trabajo remunerado?
- 7.Cuál es? Cuales son?
8. Dónde nació su padre?
9. Dónde nació su madre?
10. Dónde vivían ellos principalmente?
11. Dónde nació su esposa?
12. Asistía a la escuela su esposa?
- 13.Cuál fue el último curso?
14. Trabaja su esposa?
15. Cuántos hijos tienen ustedes?
16. Cuántos años tienen ellos?
17. Hasta que curso espera que un hijo suyo estudie?
18. Ha vivido usted en otros sitios?
19. Por cuánto tiempo en cada lugar?
20. Cuántos años tenía cuando salió de la casa la primera vez?
21. De quién fue la idea de salir?
22. En el momento en que salió del campo la primera vez sabía que las posibilidades de trabajo iban a ser seguras o no?
23. Por cuáles razones salió?

24. Dónde vive sus parientes?

Initial Question:

Quiero que me haga un favor y me diga si piensa emigrar de aquí y hacia donde?

If yes proceed with grid.

If no: Porqué no?

APPENDIX BA SAMPLE GRID FORMAT

EDUCATION						
WORK						
FAMILY						
ATMOSPHERE						
CLIMATE						

CONSTRUCTS

ALTAMIRA
BOGOTA
NEIVA
U.S.A.

ELEMENTS