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ABSTRACT

A modified version of the Instrumental Activities Inventory (IAI) was administered to a sample of Canadian Inuit children (41 girls and 37 boys aged 9 to 17 from Frobisher Bay and 40 boys and 35 girls aged 8 to 16 from Pangnirtung) for purposes of assessing role model preferences relative to the socialization process. Consisting of 12 female and 12 male drawings, the modified IAI represented the following role categories: (1) Modern--occupations and activities presently monopolized by Eurocanadians but open to Inuits with specialized training or advanced education (male doctors, teachers, etc., and female nurses, teachers, etc.); (2) Transitional--occupations currently represented by town Inuit of moderate or high levels of acculturation (male airplane mechanics, construction workers, etc., and female cooks, post office clerks, etc.); and (3) Contact-traditional--roles characteristic of either town or land based Inuit which do not require formal education, bilingualism, or wages (male hunters, carvers, etc., and female hunters, skin workers etc.). Responses indicated that Inuit girls were more strongly influenced by Eurocanadian role models than Inuit boys. Since statistical significance depended upon the role categories, it was suggested that further testing include Native role classifications/evaluations and expanded numbers of role types. (JC)

THE ASSESSMENT OF ROLE IDENTITY:

PROBLEMS OF ADMINISTERING THE INSTRUMENTAL ACTIVITIES INVENTORY TO INUIT CHILDREN

by

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Abstract

This paper discusses the administration of a modified version of the Spindlers' Instrumental Activities Inventory in 1970 to 153 Inuit (Eskimo) schoolchildren in two Eastern Canadian Arctic settlements, Frobisher Bay and Pangnirtung (Northwest Territories). Response patterns suggest that Inuit girls are more strongly influenced by Eurocanadian role models than are Inuit boys, but since the statistical significance of this finding depends on the categories ("modern", "transitional", or "traditional") by which the roles are classified, further testing (including eliciting of native evaluations and classifications of the roles) and expansion of the number and types of roles are recommended.

Topics: psychological anthropology, sex role identity, child socialization, projective testing, Arctic urbanization

This paper discusses the assessment of role identity of Inuit (Eskimo) schoolchildren using a research technique called the Instrumental Activities Inventory. This technique was first developed by George and Louise Spindler for study of the "perceptual and cognitive dimensions" of the acculturation patterns of the Blood Indians of Alberta, Canada (1965: 314). I administered a modified version of this inventory to 153 Canadian Inuit children in the spring of 1970 (McElroy 1973: 318-353). The present report will evaluate the use of the inventory (to be referred to as the IAI) in terms of problems of administration, interpretation of results, and suggestions for improvement of the technique in further studies of children's role identity and vocational aspirations.

Administration of the IAI to children living in two Baffin Island communities, Frobisher Bay and Pangnirtung (for location see figures 1 and 2), was one technique used in a study of child socialization patterns among town-living Inuit groups (McElroy 1972). The research covered fourteen months of field study between 1967 and 1971.[1] Approximately 58% of the 2,100 residents of Frobisher Bay (1971 census) are descendants of people historically identified as Nugumiut, Oqomiut, Akuliarmiut, and other Central Eskimo groups (Boas 1964: 13-36). The remainder of Frobisher Bay's population includes southern Canadians of diverse backgrounds and ethnicity (Eurocanadians, native Canadians, Europeans, Caribbean islanders, Africans, and southwest Asians). Frobisher Bay is a rapidly growing center of transportation, administration, medical services, and education on Baffin Island (for a full description of the development of Frobisher Bay, see Honigmann and Honigmann 1965). In March of 1971, 37% of the Inuit males and 31% of the Inuit females aged 16-65 were wage employed in Frobisher Bay; average annual income per Inuit household was $ 6,590 (per capita, $ 1,032).

Pangnirtung is a smaller and more isolated community; whereas Frobisher Bay's settlement began in the 1940's with construction of an air force base,

it was only after 1966, when an epidemic reduced the dog population, that large numbers of Oqomiut of the Cumberland Sound region were settled in Pangnirtung. The village has a population of about 650, 92% of the residents Inuit. My survey showed that in 1969, 27% of all males in the community between 15 and 65 were employed full-time, and 40% of all households had one or more individuals (including women) employed either full-time or on a steady part-time basis. The average annual income per Inuit household in Pangnirtung in 1969 was $ 3,366 (per capita $ 587).

Study of the socialization and role identity development of Inuit children and adolescents during initial field trips in the summers of 1967 and 1969 involved standard ethnographic techniques. I lived with three Inuit families, accompanying two of them to hunting camps. In town, I interviewed teachers, community leaders, adolescents, and parents of young children. One of the most intriguing observations was that the training of young boys within the nuclear family and extended kinship networks emphasized the traditional land-based subsistence skills to a greater extent than did the training of girls. Similarly, participant observation of the life of young adults made me aware of considerable divergence in the attitudes of young men and women toward Eurocanadian values, life-styles, and employment or education (McElroy 1971). Young women were clearly more interested in following Eurocanadian role models. I decided that assessment of role model preferences with a projective technique would yield some measure of the impact of this differential socialization upon children's aspirations.

Review of the literature revealed relatively little use of projective techniques with Arctic populations. Ferguson's analysis (Honigmann 1962: 84) of nine Rorschach protocols collected by John J. Honigmann in Great Whale River, Eastern Canada, indicated a meager number of determinants with F (form) predominant and a high percentage of animal and anatomical content. The restricted quality

of the responses suggests that the Rorschach may be a difficult technique to use with Inuit. Preston (1964) studied the personality structure of northwest Alaskan Inuit with measures of intelligence (three performance subtests of the Wechsler), the Rorschach, Draw-A-Person test, and the Thematic Apperception Test (TAT). The TAT was a particularly difficult test to administer and to interpret; there were language barriers and subjects were negative or confused about the task. Berry's studies (1966, 1969) of Baffin Island Inuit performance on tests of spatial ability and visual discrimination indicate interesting relationships between cognitive style, ecological factors, and socialization modalities. Parker's study (1964) of ethnic identity in two Alaskan villages used an original projective technique involving five pictures "designed to elicit stories relevant to ethnic identity" (ibid.: 326). The cards were shown to young people, whose stories were analyzed in terms of attitudes toward ethnic identity (with variables such as presence or absence of hostility, inter-ethnic social distance, intra-ethnic social distance, degree of attraction to symbols of western society, etc.) (ibid.: 332-333). While Parker's study provided a valuable method for assessing attitudes toward ethnicity, my research problem required a projective technique which would tap attitudes toward socioeconomic roles per se. The Instrumental Activities Inventory was a promising technique for this purpose, and in the autumn of 1969, while living in Pangnirtung, I arranged for a modified version of the test to be drawn by a local artist.

Description and rationale of the IAI

The Instrumental Activities Inventory was devised by George and Louise Spindler as a projective technique which was (in contrast to the Rorschach or Thematic Apperception Test) unambiguous and useful in yielding data on perception of socio-environmental realities (Spindler and Spindler 1965: 314). The inventory consisted of 24 line drawings, each depicting a male engaged in one type of

"instrumental activity" (as medicine man, priest, mechanic, farmer, boxer, bronc rider, cook, politician, doctor, bartender, formal chief-maker, and so on). Instrumental activities were defined as "those activities that an individual engages in for the achievement and maintenance of a life style and status in the social groups of which he is a member, or aspires to be a member (ibid.: 312). The cards were shown to males and females ranging in age from 18 to 87. Respondents were asked by the Spindlers to choose at least three pictures which they valued most highly and an equal number which they disliked the most. Female respondents were asked to choose "what they would like their sons or husbands (depending on age and family status) to do" (ibid.: 319). Free association to the pictures was encouraged.

In choosing the IAI as an appropriate technique for the study of role identification, I decided to have the cards depict female as well as male roles and to include only those instrumental activities which were visible as models to the children in the two communities being studied. Limits of time and finances required that only 24 pictures be prepared, so that each subject was shown a set of 12 cards appropriate to his or her gender identity.

Pilot testing in Pangnirtung in early winter of 1970 indicated that testing of adults would be difficult; interpreter services would be required and some individuals misunderstood the intent of my inquiries, believing either that I was offering them jobs or that I could influence local administrators regarding vocational training or employment opportunities. The people of Pangnirtung had never been exposed to projective tests (or for that matter, to anthropologists, since the time of Boas), and it was difficult to elicit cooperation even from those adults I knew best. Therefore I decided to test only schoolchildren, although the pictures depicted adults at work. The principal of the Pangnirtung school gave me permission to give the inventory to a representative sample of

each age level. I selected 45 girls and 45 boys from a total number of 124 children enrolled in school in grades 1 through 5, ages 8 to 17. Selection from the class rolls for 1968-1969 and 1969-1970 enabled me to choose samples of children with high and low attendance, those at advanced, average, and retarded age-grade levels, and those with and without hunting absences during the school term during the previous year. I distributed a statement to the teachers explaining the purpose of the project. Similar preliminary procedures were carried out the following month in Frobisher Bay, following completion of testing in Pangnirtung in March of 1970.

A local, semi-professional Inuit artist was contracted to draw the 24 cards. I prepared a short description of each picture and an Inuit woman translated the descriptions into syllabics (the Eastern Arctic writing system) as instructions for the artist. In order to control for factors of quality and style, my plan was to have all the pictures drawn by a single Inuk. The artist decided to go on a hunting trip after completing six of the pictures, however, and pressures of time required the services of a number of artists (some Inuit, some Eurocanadian) to complete the series.

The pictures represent three categories of roles: modern, transitional, and contact-traditional (see figures 3 through 7 for copies of the pictures, greatly reduced in size. The originals are 8" x 11"). During the test administration, the pictures were randomly ordered in respect to category and were shown in the same sequence to each subject. The categories are defined as follows and are represented by the following roles:

I. Modern: occupations and activities presently monopolized by Eurocanadians but open to Inuit with specialized training or advanced education

Male roles: doctor, teacher, radio operator, office clerk
Female roles: nurse, teacher, radio announcer, secretary

II. Transitional: occupations and activities currently representative of town Inuit of moderate or high levels of acculturation; generally learned by on-the-job training or through adult education programs

Male roles: airplane mechanic, construction worker, store clerk, catechist ("ayogeseyee", lay preacher).
Female roles: cook, post office clerk, store clerk, housewife

III. Contact-traditional: roles characteristic of either town-based or land-based Inuit which do not require formal education, bilingualism, and do not involve wage earning (although piece work or sale of products may be involved)

Male roles: hunter with rifle, spear hunter, carver, fisherman
Female roles: small-game hunter, skin worker, seamstress, tent wife

The children were tested individually, coming to a testing room in pairs during regular school hours. The same instructions and explanations were given to each child, that the pictures showed different kinds of work a person could do in the North and that the child should sort out the cards according to whether he thought he might be interested or not interested in that type of work when he grew up (or finished school, in the case of older subjects).[2] No limit was put on the number of choices, and the subject was assured that he was not taking a test with right or wrong answers or choosing an actual job, and that his choices would not commit him in his future. After sorting the 12 cards appropriate to his or her sex according to the initial "like-dislike" task (unlimited choice task), the child was then asked to choose the one card which showed the type of work which most interested him (limited choice task). Instructions were initially given in English. If the child was willing to sort the cards but appeared uncertain about the procedure, I read a set of instructions in simple Inutitut which an assistant had prepared for me.[3]

Of those 90 children chosen from class rolls in each settlement, it was necessary to delete the responses of 11 subjects from Pangnirtung and 15 from Frobisher Bay, leaving a sample of 41 girls and 37 boys, aged 9 to 17, from Pangnirtung, and 35 girls and 40 boys, aged 8 to 16, from Frobisher Bay.[4]

Subjects were deleted who did not understand the testing procedure, refused to take the test, or imitated a partner's choices. The sample, therefore, is skewed in the sense that it represents the attitudes and orientations of those children who were amenable to being tested or those who could understand enough English (or Inutitut as spoken by a foreigner) to comprehend the instructions. In that sense, the validity of the responses is confined to internal contrast and variation. We can analyze differences in male and female response patterns within this particular sample (representing 63% of the Pangnirtung school population and 27% of that of Frobisher Bay), but it is not possible to generalize to the larger population because the sample is not fully representative.

Results and interpretation

Tables 1 and 2 give the distribution of unlimited and limited choices by settlement and sex of respondents. Male responses indicate that occupations bringing high (or steady) wages and high prestige in the local setting (store clerk, construction worker, airplane mechanic) are preferred over traditional subsistence activities, which in turn are generally preferred over part-time work (carver, catechist) and over occupations requiring long-term education (doctor, office clerk, teacher). While hunter with rifle is given a consistently high ranking in both tasks (the 3rd highest frequency and equal to construction worker in the limited choice task), this role is considerably less popular than construction worker in terms of frequency in the unlimited choice task (41 persons choosing construction worker as one of the kinds of work they would like, 23 choosing hunter). It is interesting to see that catechist or "ayogeseyee" (lay preacher), a position of considerable power and prestige in the communities, moves from 9th rank in free choice to 5th rank in limited choice. Wages and prestige are strongly competing factors in the choices of these boys and adolescents.

The outstanding pattern of female responses (Table 2) is that work occupations are preferred over domestic roles, and traditional activities are least preferred. However, the role of seamstress, both traditionally and presently a source of prestige for an Inuit woman (and currently a source of income for adolescents in the settlements) has second rank. Although the role of modern housewife and mother was chosen by 50% of the subjects in the unlimited choice task, only 1 out of 76 girls chose the housewife role in the limited choice task, putting that role on a rank level with small game hunter (an activity characteristic of middle-aged Inuit women, particularly in Pangnirtung, who go on foot into the hills surrounding the settlement in groups of 2 or 3 to hunt for ptarmigan and hare with rifles).

In order to test the significance of the differences between the two settlements and between the sex groups, the cards were grouped into three acculturative categories and the frequency of responses by category tested by the chi square method. The distribution of frequencies and percentages of responses by category is given in Table 3.

Combining male and female responses, there were no significant differences between the frequencies of the total samples from each settlement (X^2 = 2.69 in unlimited choice condition; X^2 = 3.60 in limited choice). This indicates that although Pangnirtung children have lived in town for a much shorter period of time than have Frobisher Bay children, they have developed similar patterns of role identification. On the basis of the lack of significant differences between the settlements, we are able to compare the total male sample with the total female sample. Differences between males and females in the unlimited choice condition are significant at greater than the .001 level (X^2 = 21.15) and in the limited choice situation, significant between the .01 and .001 level of probability. (X^2 = 12.325). While the highest percentages of responses for both sexes are in

the transitional category, in both settlements a greater percentage of females than males chose those cards classified in the modern category.

Differences between the sexes in the Frobisher Bay sample for the unlimited choice situation are significant beyond the .001 level ($X^2 = 19.66$) and in the Pangnirtung sample, at the .05 level ($X^2 = 5.998$). In the traditional category, the percentage of female responses exceeds male responses in the Pangnirtung sample and is equal to male responses in the total sample. Clearly, the area of greatest divergence in role identification of boys and girls is between the modern and transitional categories rather than between the traditional and transitional roles. The test responses suggest that, with the exception of the popular seamstress role, the girls are identifying with roles which until recently have been filled in the settlements primarily by Eurocanadian women or, in the case of jobs such as store clerk, by Inuit and Eurocanadian men. Comparison of responses by age group showed a significant difference between younger (8-11) and older (12-17) males at the .05 level, younger boys choosing modern roles more frequently than older boys. There was no significant difference between age groups in the girls' responses. Tests of significance of response frequencies of groups with high and low attendance, advanced, average, or retarded age-grade levels,[5] and hunting absences/ no hunting absences showed that these variables were unreliable indicators of role orientation.

Problems of interpretation

The most serious methodological problem is that of the classification of the roles into categories. No attempt was made to see how Inuit children or adults might have grouped the cards. One Arctic ethnologist was asked to sort the pictures without knowledge of my classifications: the result was that 9 cards were grouped differently. Four roles which I had classified as transitional

were considered by this expert to be modern roles, while two of the roles in my modern categorization were considered to be transitional. The other three discrepancies were similar shifts between the transitional and traditional categories.

The most crucial pictures in terms of validity of categories and the weighting of distribution by category are airplane mechanic for boys and seamstress and store clerk for girls. I classified airplane mechanic as a role currently open to Inuit. In both settlements, Inuit men are employed to service airplanes, learning the routine of maintenance by on-the-job training, and this kind of job is open to Eurocanadians but not monopolized by them. But if the majority of respondents perceived the card as representing an airplane pilot rather than a maintenance crewman (although commercial pilots in the two settlements usually wear uniforms and are not frequently seen on the wing of a plane with wrench in hand), then the distribution of male responses in Table 3 would be very different. The total unlimited choice frequencies would be, by category, modern: 98, transitional: 104, and traditional: 97, a far more even distribution than at present. Frequencies for highest preference choices would be modern: 30, transitional: 32, and traditional: 16.

If seamstress were reclassified as a transitional role, and female store clerk placed into the traditional category (as suggested by the consultant), the distribution of female responses would be in unlimited choice, modern: 119, transitional: 139, and traditional: 102; in limited choice, modern: 26, transitional: 26, and traditional: 25. Thus reclassification of these three very popular cards, airplane mechanic, seamstress, and female store clerk, would lead to a very similar distribution of responses by category for male and female subjects. Certainly the differences between the responses of the sex groups would be statistically nonsignificant.

The major justification of the present categories is that the cards were classified according to three criteria based on observations in the settlements in 1969 and 1970: a) the degree of education and bilingual ability required to carry out the instrumental activity; b) the extent to which Inuit role models of the instrumental activity were present in the communities; and c) the extent to which the jobs were monopolized by Eurocanadians. While these criteria may satisfactorily justify the classification for the purpose of the study, there is some question as to whether identity processes per se are tapped by such a procedure.

In analyzing differences between age groups, it became apparent that the significant differences between boys aged 8-11 (who chose a higher frequency of modern cards than expected) and those aged 12-17 could be interpreted in several ways. Viewed cross-sectionally, it is possible that boys aspire to Eurocanadian roles less as they grow older and become less interested in obtaining the education required for such positions. From a historical perspective, it is possible that the older boys identified at an early age with the transitional male roles which were available to Inuit men in the settlements in the early 1960's and late 1950's, whereas younger boys have the opportunity to identify at the present time with Inuit men who hold positions as teachers and classroom assistants, office workers and radio operators. In the case of a role such as doctor, a popular choice for younger boys (11 chose this card, while only 3 of the older boys did), Inuit models have not been available. This would be an example of Eurocanadian influence on the boys' aspirations. Older boys would be more likely to have been hospitalized in the south for treatment of tuberculosis than younger boys, who are now treated locally with chemotherapy. Perhaps the role of doctor is more negatively perceived by boys who have had unpleasant hospital experiences. Unless a method for eliciting free associations to the

cards were established, it is difficult indeed to know what factors influence a child to accept or to reject the roles depicted in the cards.

A third problem involved sampling procedures. Selection of subjects from the class attendance books initially allowed a balanced representation by criteria of attendance, age-grade retardation level, and absences for the purpose of accompanying family members on hunting trips or early moves to hunting camps in late spring. Loss of subjects due to lack of cooperation, as well as difficulties in finding satisfactory substitutes, effected an inbalanced representation of these categories for female subjects and for the Frobisher Bay sample as a whole. In the case of girls, there was a negative correlation between high attendance, advanced age-grade level, and cooperation in taking the test. In addition, many of those children scheduled for testing because they were representatives of the high-absenteeism category (based on the previous year's records) were never in school to be tested!

Suggestions for further research

I recommend that the present set of cards be expanded to 48 pictures, 24 for each sex group. All but three of the cards (catechist, tent wife, and housewife) presently depict occupations or subsistence activities, while the Spindlers' series represent a broader range of status-maintenance roles. Expansion of the number and range of stimuli should be done in consultation with Inuit assistants, who could provide classifications into categories based on their own perceptions of important types of traditional, transitional, and modern roles. All cards should be drawn by a single artist to control for factors of style.

The problem of an Inuk's anxiety in being tested alone might be solved by training an Inuit classroom assistant to give the test in Inutitut. The

cards might be used more as a projective technique and less as a sorting technique by eliciting stories about the individuals in the pictures. Alternatively, one might ask the subjects to comment on the pictures in a generalized manner; e.g., by asking "which of these cards show work which Inuit boys would like to do when they finish school?" or "Is this a good job? Would Inuit boys like this kind of work?" A standardized set of questions following completion of choices would allow children to name the role as they perceived it and to give evaluative responses to the stimulus. Ranking of the cards by subjects would solve some of the statistical problems engendered by the variability in number of choices, and testing of all available children rather than drawing up samples would help compensate for loss of subjects. Allowing subjects to respond to all cards, both male and female roles, in terms of a generalized question such as "is this a good job for an Inuk to do?" might yield interesting results. If the figures in the pictures had ambiguous ethnic affiliations rather than being clearly Inuit (although the present cards vary as to how definitely the main figure is an Inuk), one of the sorting tasks might be to ask the child to put the pictures into piles according to which ethnic group usually (always, sometimes, rarely, never, etc.) did that kind of work. One of the ways that Inuit adults structure their choices, rationalize their decisions, and socialize their children is to classify behavioral styles, roles, material goods, recreational styles, food, and many other components into one of two systems, Inutitut or Kadlunatitut (white man's way). Focusing on ethnicity rather than role preference per se in using the modified IAI might yield interesting results, although the issue of ethnic relations in the community is a sensitive one at the present.

My inability to get parents of the subjects to respond to the inventory was the most disappointing aspect of the study. Comparison of children's

responses with parental perceptions of instrumental activities would be an invaluable addition to the data. However, the issue of whether it is feasible to use such a technique with Inuit should be considered. Inuit adults are not used to taking tests and they dislike questionnaires. They become characteristically withdrawn in most situations structured as official queries, even when intrepreters are present. Some of the school children responded well, but those most needed for a balanced sample (adolescents, students at an advanced age-grade level, and girls with high attendance) were among those subjects who gave minimal cooperation and brief responses.

In summary, the Instrumental Activities Inventory is a research technique of unquestionable value in the study of identity dynamics in communities undergoing acculturation processes. Whether it is a technique which can be profitably used with children, or with adults who for political or psychological reasons are not receptive to testing, is an issue which should be probed through experimentation with various kinds of eliciting techniques, a larger number of role choices, and a more open-ended series of tasks.

Notes

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2. The text of the instruction to female subjects is as follows:

"These are some pictures which show women working. Some of the women have jobs; this girl (first card) has a job in a store. Some of the women are working in their homes; this one is a housewife. She has children and a husband and here she is making palowak (bannock) for her family. These pictures show many kinds of work that a woman could do in the North. Now I want you to look at all these pictures and think about what you would like to do when you get older, when you finish school. If you like the work in any of these pictures, put the picture here. If you don't like the work, put the picture there. This is not a test. You can choose as many as you like. If you choose a picture, it does not mean you have to do that work when you are older. It just helps me know what you are interested in. You can choose more than one picture. Maybe you would like to have a job and be a housewife also. That is okay. Maybe you are interested in many kinds of work. You can choose only one, if you wish, or two, or four, or more, as many as you like. Do you understand? (if negative, explain again). Allright, look at the cards and if you like the work in the picture, put the card on this side, and if you don't like the work, put the card on that side."

After the cards had been sorted, I asked each subject to point to the pile of cards which showed work which she liked in order to check my scoring. I put aside the disliked cards and asked the subject to "choose the three you like the best" from the remaining pile if there were more than four cards. From the three, I asked the subject to "choose the kind of work you would like best of all". If there were only four or less cards from the initial sorting, I said "now choose the kind of work you would like best of all."

The text of the instructions to male subjects was as follows:

"These are some pictures which show men working. These are some of the jobs which men can do in the North. Look at these pictures and think about the kind of work you would like to do when you are older, when you finish school. Look at each picture and think if you would like to do that job. If you like the work, put the picture here. If you don't like the work, put the picture there. You can choose more than one picture. This man works with airplanes, and this man is a hunter. If you wanted to, you could do both jobs at different times. So you can choose as many as you like. You can choose only one, or two, or four, or more, as many as you wish. This is not a test. This is just to help me see what you are interested in doing. If you choose a picture, it does not mean you have to do that work when you get older, and it does not mean I can get that job for you. This is just to help the

teachers and schools know what the boys are interested in. Do you understand? (if negative, explain again). Allright, go ahead. Look at the cards and if you like the work in the picture, put the card on this side, and if you don't like the work, put the card on that side."

After the boy had sorted the cards, I followed the same procedure outlined above in terms of checking which pile represented the work that the child liked and in narrowing the preferences down to one "best choice".

3. Instructions given to the children in Inutitut may be translated as follows:

> "In these pictures, some Inuit women (or men) are working. Look at the pictures. When you are older ("become large") you will work. Think about what kind of work you would like to do when you are older. This is a game. You do not have to do this work when you are older. If you like the work in the picture, put the picture here. If you do not like the work, put the picture there. Do you understand? (After sorting, "which three do you like the best? Which kind of work do you like the very best?") "

4. The testing process in Pangnirtung began with serious difficulties. I had planned for each child to come to the testing area alone, and this was frightening even for the 12 year old girls who were the first to be tested. The first subject sat hunched over, her eyes down. She flipped through the cards quickly, put them down on the table, and said softly, "atchiw" ("I don't know"). I explained the procedure again. She shook her head and said "ayunarktok" ("it's too hard" or "it can't be helped"). I asked if she understood what I was asking her to do; she said that she did but that she was afraid ("kisiani kapiashupunga") The second subject responded the same way, and I began to wonder whether the project would be a failure. My solution at the time was to allow children to come to the testing room two at a time, with full acknowledgement of the possibility of peer influence. Subjects who gave responses identical to those given by partners were of course deleted from the sample. Of all the subjects tested, 44% of the males and 41% of the females were second-order partners. 12% of the males and 18% of the females were solitaries. Only 23% of the second-order males and 6% of the second-order females chose the same card as did their first-order partner in the highest preference task.

Ideally, the children should have been tested alone, but it is my opinion that the degree of inhibition and withdrawal would have been so great that a highly unrepresentative sample would have resulted, consisting of those few children who were not intimidated by the test and who were willing to take it alone (altogether 6 in Pangnirtung and 17 in Frobisher Bay).

Another problem in Pangnirtung concerned the 8 year old group, most of whom could not cope with the testing situation and could not discriminate among the cards. It was necessary to delete this age group from the sample, although in Frobisher Bay the 8 year olds performed adequately.

5. Subjects were classified as being at an advanced age-grade level if they were more than 12 months younger than the average age of the children in that grade in each settlement. If more than 12 months older than the mean age, they were classified in a retarded age-grade level. This classification is based on an index of performance in school developed by John and Irma Honigmann (1970) in a study of adaptation in the Western Arctic town of Inuvik.

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Figure 2. Eastern Canadian Arctic

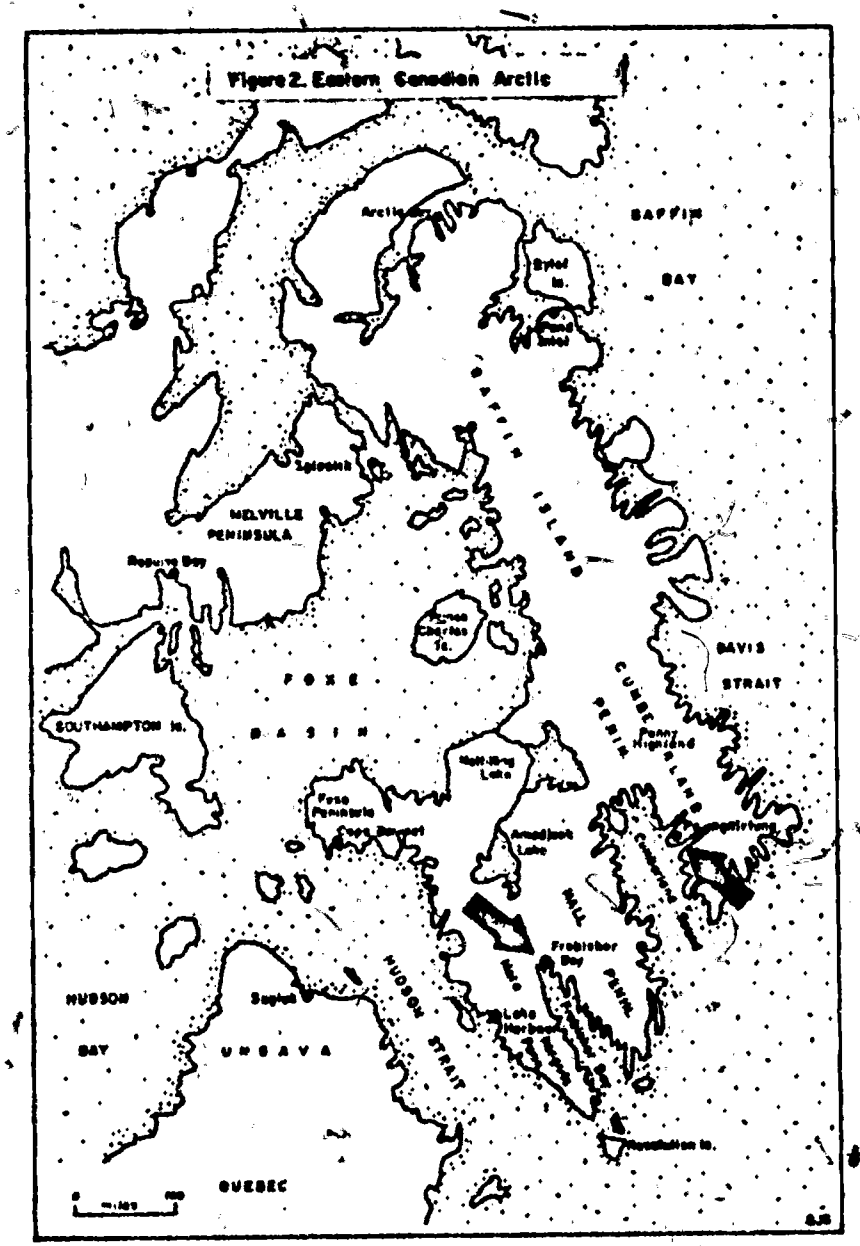
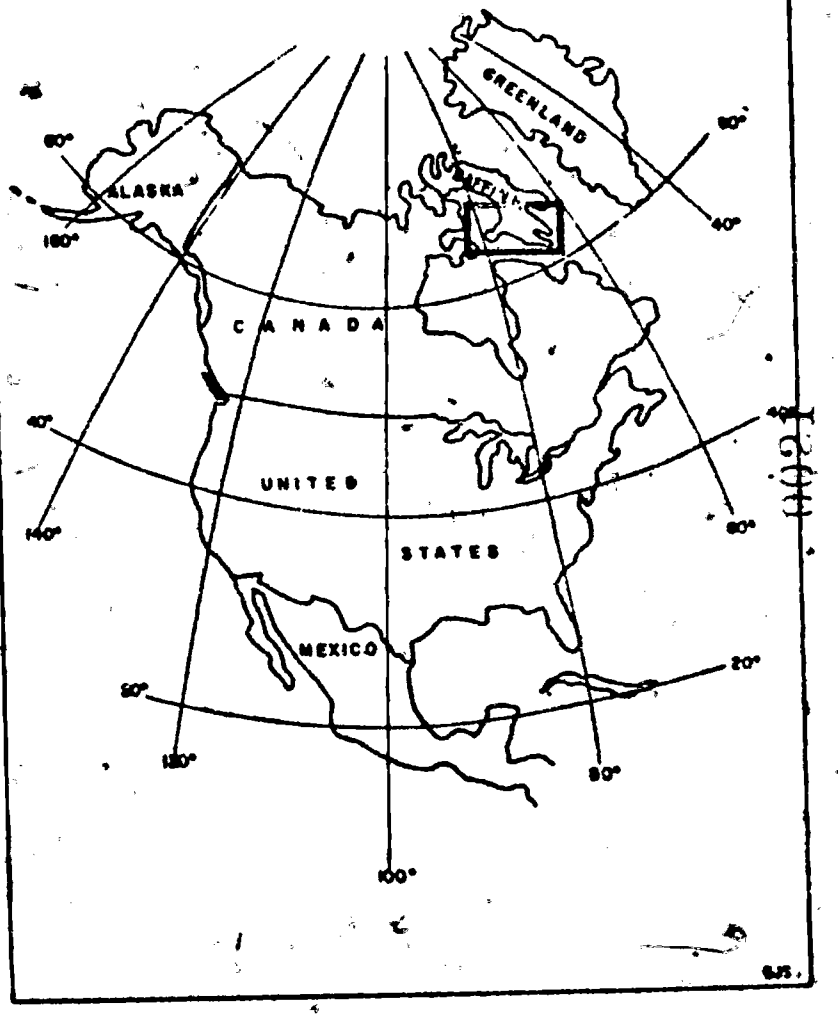
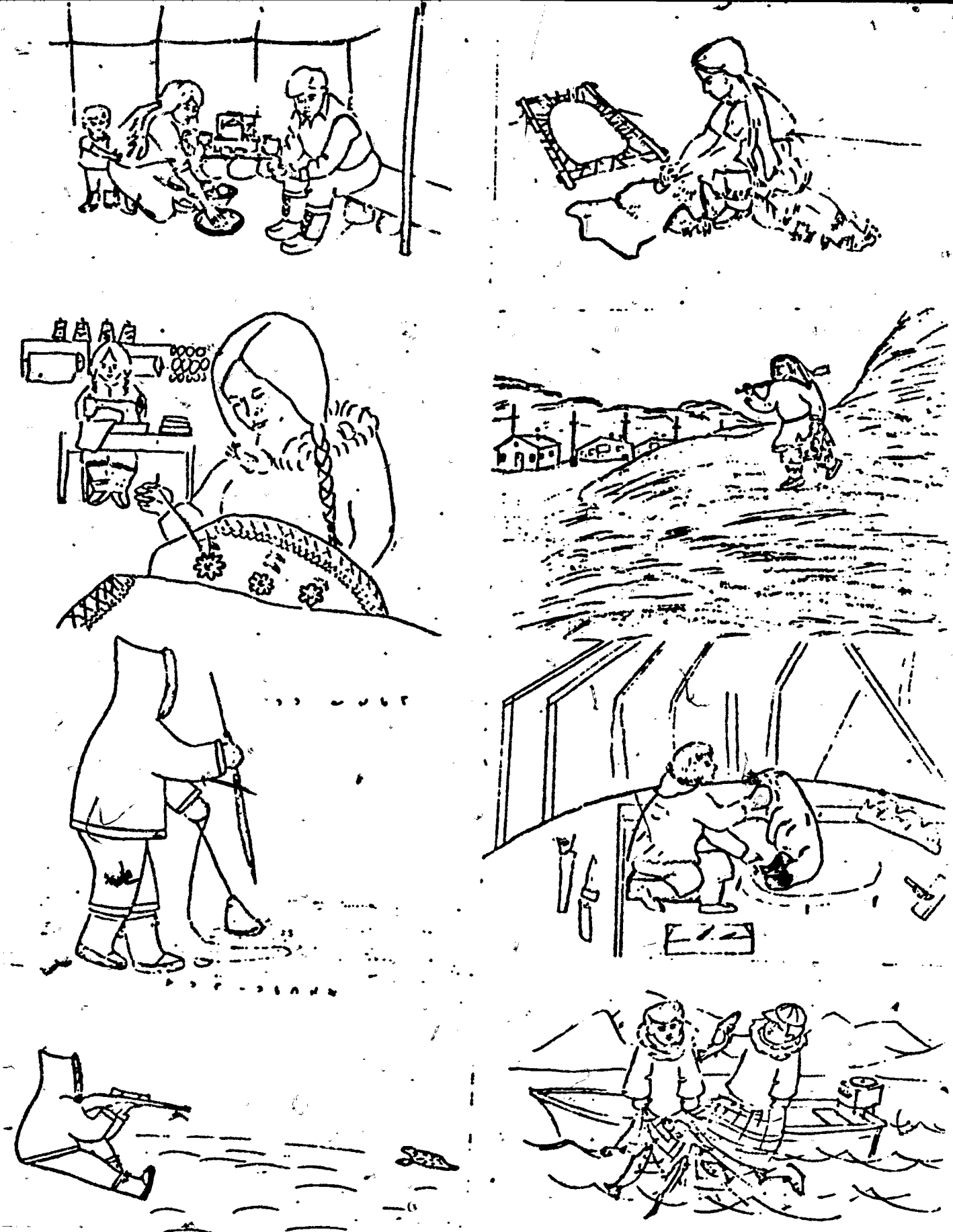
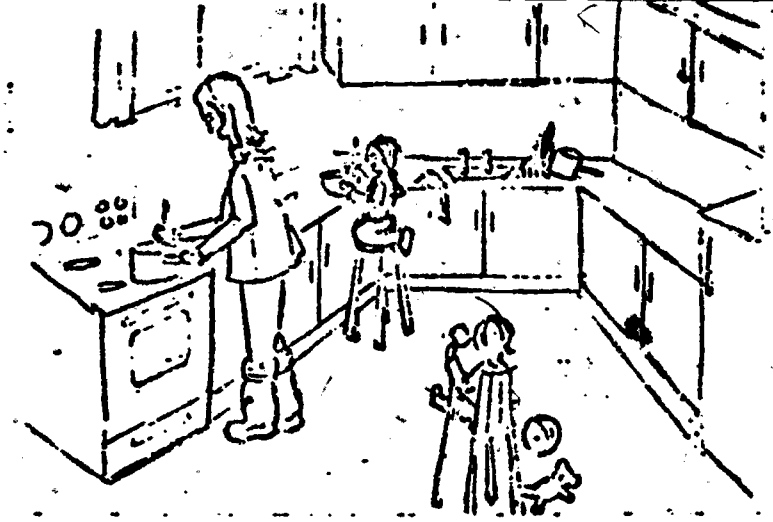


Figure 1. North America and Baffin Island.





igure 3: Contact-traditional roles (female and male). left to right, across: tent wife, skin worker, seamstress, small game hunter, spear hunter, carver, rifle hunter, fishermen



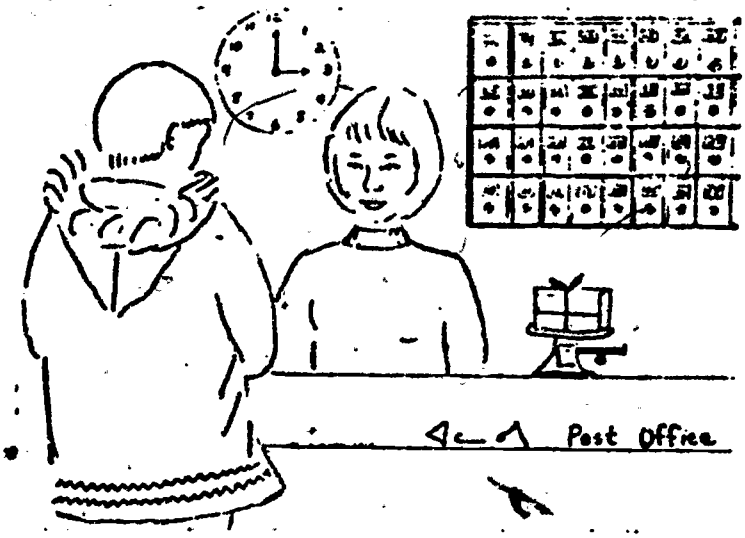


Figure 4: Transitional roles (female). top to bottom: housewife, post office clerk, cook, store clerk

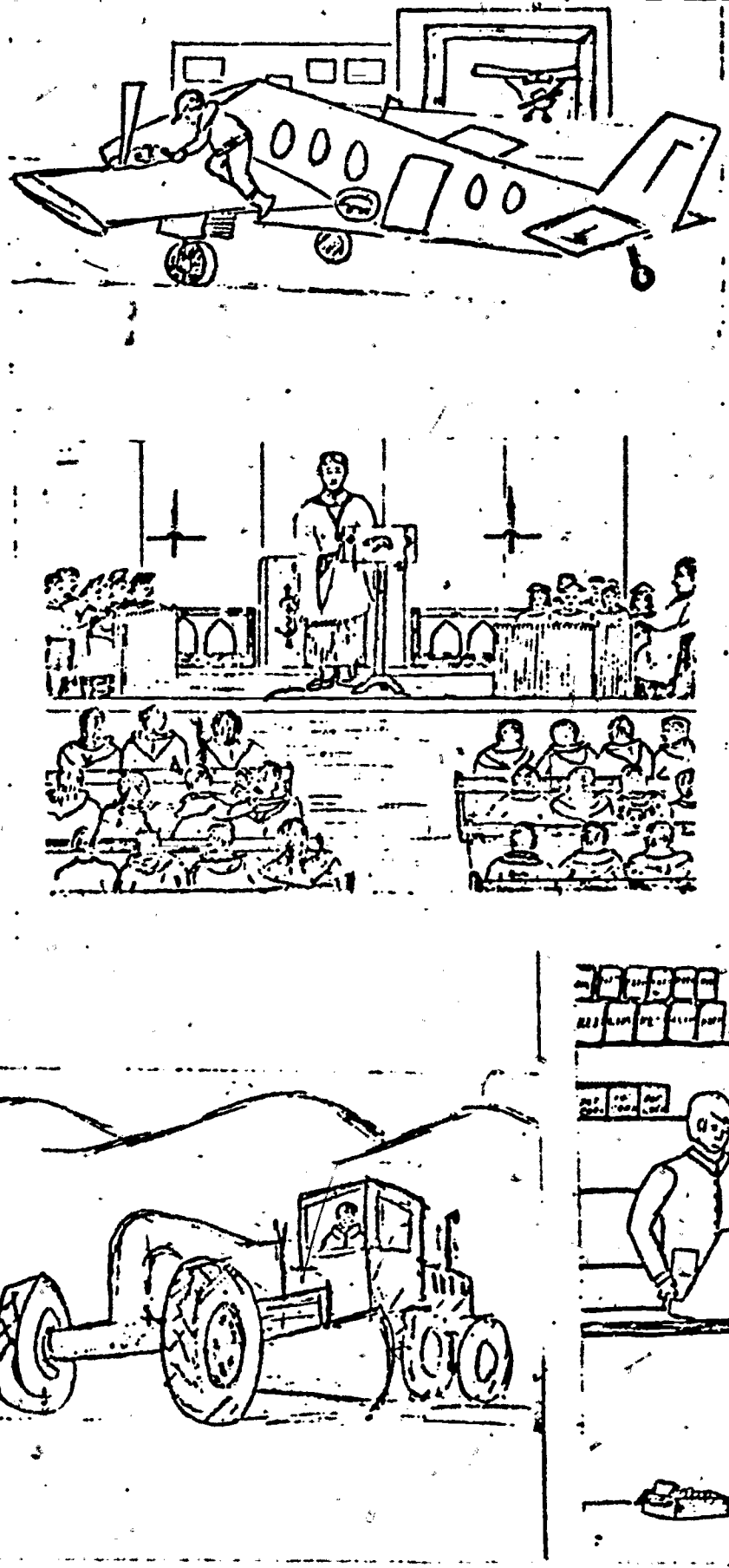
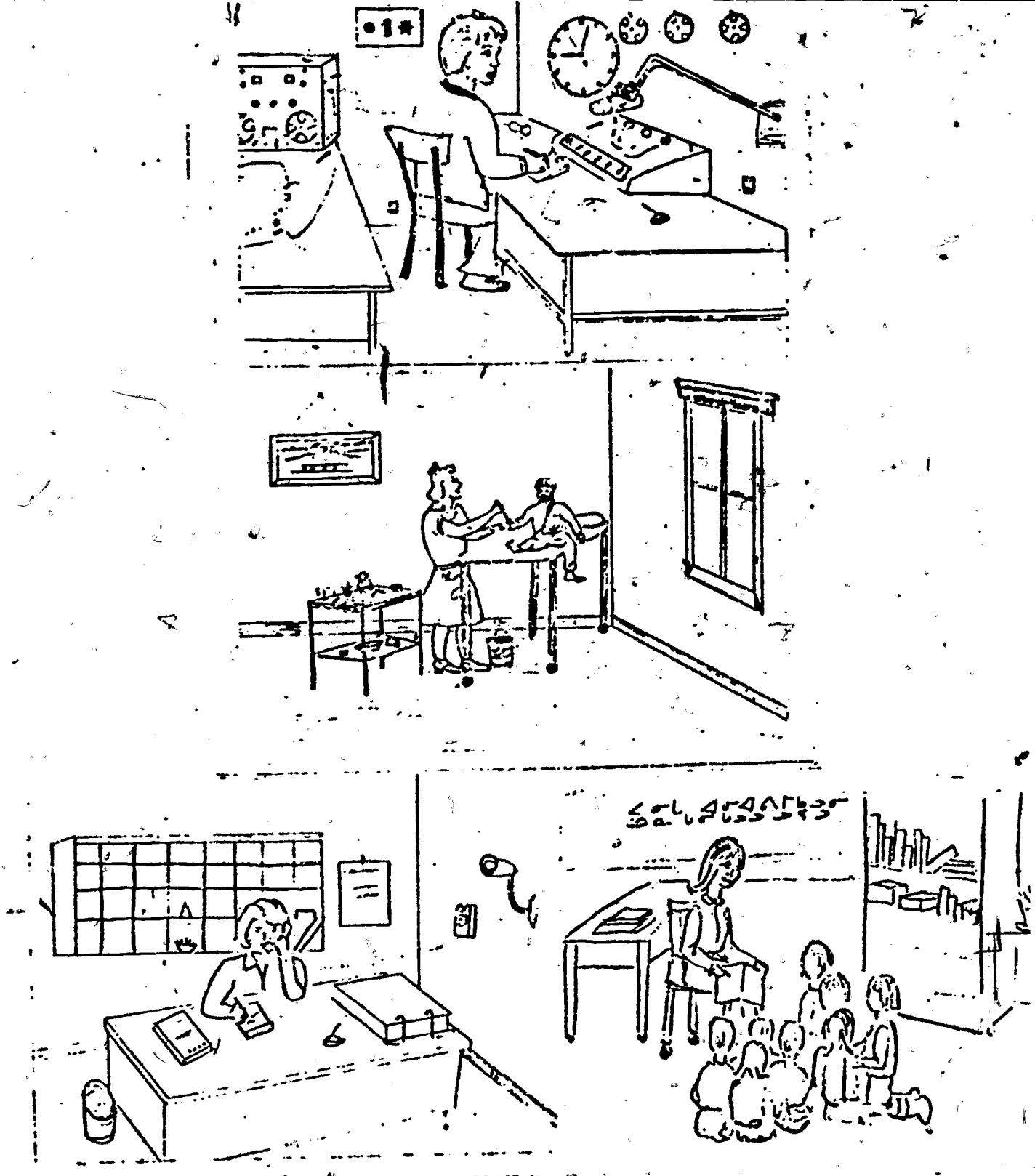
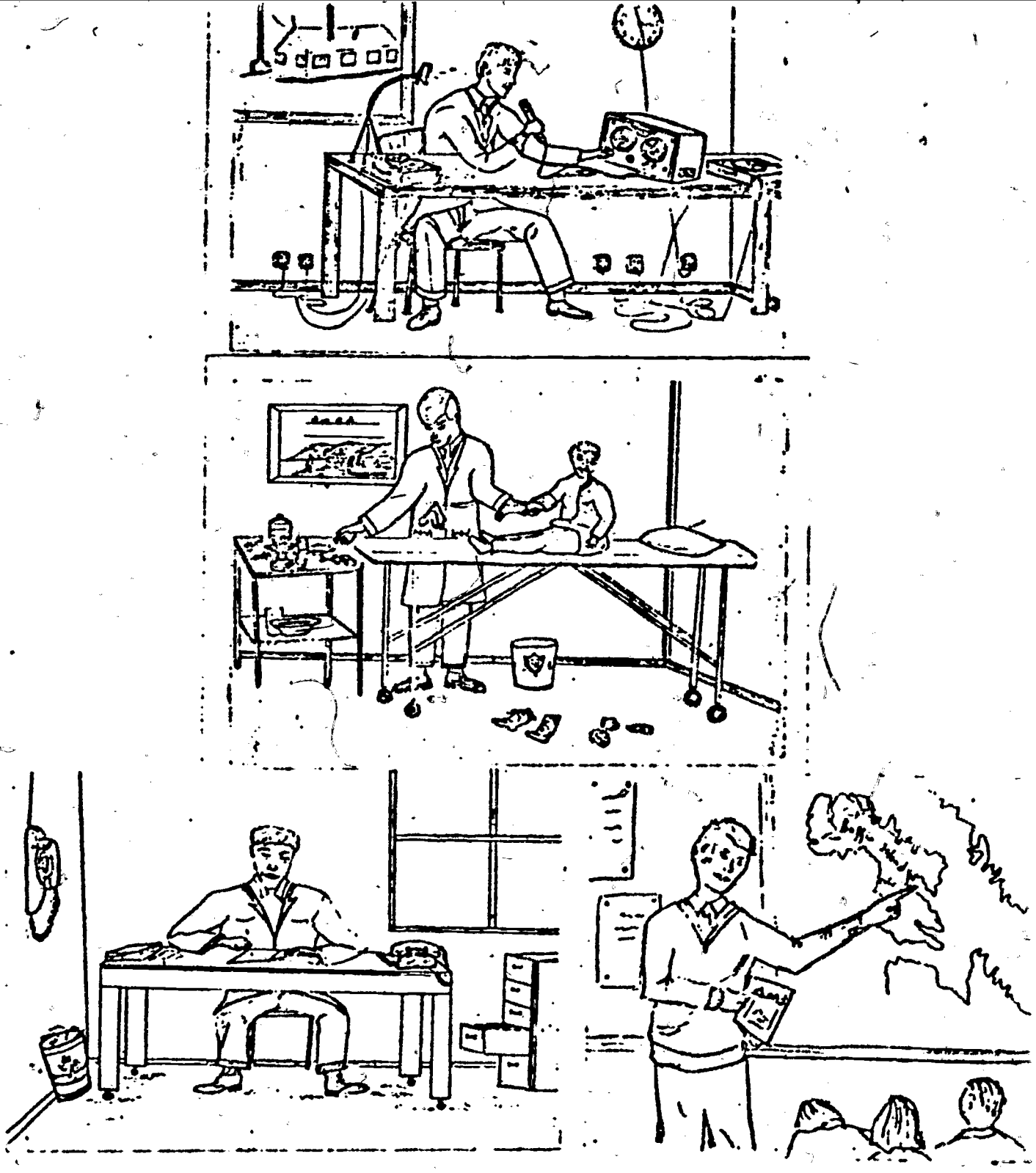


Figure 5: Transitional roles (male). top to bottom: airplane mechanic, catechist, construction worker, store clerk



igure 6: Modern roles (female). top to bottom: radio announcer, nurse, secretary, teacher



e 7: Modern roles (male). top to bottom: radio announcer, doctor, office clerk, teacher

Table 1: Distribution of unlimited and limited choices of modified IAI cards by male Inuit schoolchildren, Frobisher Bay and Pangnirtung, N.W.T., March-April 1970

Card Description	Unlimited Choice							Limited Choice						
	Frobisher Bay*		Pangnirtung#		Combined Settlements			Frobisher Bay+		Pangnirtung++		Combined Settlements		
	N	%	N	%	N	%	Rank	N	%	N	%	N	%	Rank
store clerk	20	50	26	70	46	60	1	6	13	14	37	20	25	2
construction worker	23	57.5	18	49	41	53	2	4	9	4	12	8	10	3
airplane mechanic	24	60	16	43	40	52	3	14	31	7	21	21	27	1
hunter with rifle	14	35	14	38	28	36	4	5	11	3	9	8	10	3
radio operator	15	37.5	12	32	27	35	5	4	9	2	6	6	8	4
spear hunter	14	35	12	32	26	34	6	4	9	0	0	4	5	6
fisherman	13	32.5	11	30	24	31	7	2	4	1	3	3	4	7
carver	11	27.5	8	22	19	25	8	1	2	0	0	1	1	8
catechist	10	25	7	19	17	22	9	3	7	2	6	5	6	5
doctor	8	20	8	22	16	21	10	2	4	1	3	3	4	7
office clerk	5	12.5	3	8	8	10	11	0	0	0	0	0	0	-
teacher	5	12.5	2	5	7	9	12	0	0	0	0	0	0	-

*Range of number of choices 2-11; 70% of Ss choosing 2-4 cards

+5 Frobisher Bay Ss could not choose between 2 highest preferences

#Range of number of choices 1-12; 78% choosing 2-4 cards

++1 Pangnirtung S could not choose between 2 highest preferences
3 Pangnirtung Ss declined to designate highest preference

Table 2: Distribution of unlimited and limited choices of modified IAI cards by female Inuit schoolchildren, Frobisher Bay and Pangnirtung, N.W.T., March-April 1970

Card Description	Unlimited Choice							Limited Choice						
	Frobisher Bay*		Pangnirtung#		Combined Settlements			Frobisher Bay+		Pangnirtung++		Combined Settlements		
	N	%	N	%	N	%	Rank	N		N	%	N	%	Rank
store clerk	20	57	26	63	46	61	1	7	19	16	39	23	30	1
seamstress	14	40	27	66	41	54	2	7	19	7	17	14	18	2
cook	13	37	26	63	39	51	3	3	8	2	5	5	7	6
secretary	16	46	22	54	38	50	4	5	14	6	15	11	14	3
housewife	14	40	24	59	38	50	4	0	0	1	2	1	1	9
nurse	20	57	16	39	36	47	5	6	17	2	5	9	12	4
post office clerk	16	46	13	32	29	38	6	5	14	1	2	6	8	5
radio announcer	12	34	12	29	24	32	7	2	6	2	5	4	5	7
teacher	12	34	9	22	21	28	8	0	0	2	5	2	3	8
skin worker	2	6	13	32	15	20	9	0	0	0	0	0	0	-
tent wife	4	11	7	17	11	14	10	0	0	0	0	0	0	-
small game hunter	3	9	4	10	7	9	11	1	3	0	0	1	1	9

*Range of number of choices 1-10; 60% choosing 2-4 cards, 26% 5-7 cards

+1 Frobisher Bay S could not choose between 2 highest preferences

#Range of number of choices 2-11; 56% choosing 2-4 cards, 27% 5-7 cards

++1 Pangnirtung S declined to designate highest preference

Table 3: Distribution of unlimited and limited choices of modified IAI cards by role category by male and female Inuit schoolchildren, Frobisher Bay and Pangnirtung, N.W.T., March-April 1970

	Unlimited Choice						Limited Choice					
	Modern*		Transitional#		Traditional+		Modern		Transitional		Traditional	
Frobisher Bay	N	%	N	%	N	%	N	%	N	%	N	%
Males	33	20	77	48	52	32	6	13	27	60	12	27
Females	60	41	63	43	23	16	13	36	15	42	8	22
Total	93	30.1	140	45.5	75	24.4	19	23	42	52	20	25
Pangnirtung												
Males	25	18	67	49	45	33	3	9	27	79	4	12
Females	59	29.6	89	44.7	51	25.6	13	32.5	20	50	7	17.5
Total	84	25	156	46	96	29	16	22	47	63	11	15
Combined Samples												
Males	58	19.4	144	48.2	97	32.4	9	12	54	68	16	20
Females	119	34.4	152	44.1	74	21.4	26	34	35	46	15	20
Total	177	27	296	46	171	27	35	23	89	57	51	20

* Male roles: radio operator, doctor, office clerk, teacher — Female roles: radio announcer, nurse, secretary, teacher

\# Male roles: store clerk, construction worker, airplane mechanic, catechist (lay preacher) — Female roles: store clerk, cook, post office clerk, housewife

\+ Male roles: hunter with rifle, spear hunter, carver, fisherman — Female roles: small game hunter, skin worker, seamstress, tent wife