DOCUMENT RESUME

ED 206 160 FL 012 376

AUTHOR	Larson, Mildred L., Ed.; Davis, Patricia M., Ed.
TITLE	Bilingual Education: An Experience in Peruvian Amazonia.
INSTITUTION	Center for Applied Linguistics, Washington, D.C.; Summer Inst. of Linguistics, Dallas, Tex.
REPORT NO	ISBN-0-88312-918-3
PUB DATE	81
NOTE	413p.; Type in some figures will not reproduce.
AVAILABLE FROM	Summer Institute of Linguistics Bookstore, 7500 W. Camp Wisdom Road, Dallas, TX 75236 ($10.40 plus postage and handling; 10% discount on 10 or more).
EDRS PRICE	MF01/PC17 Plus Postage.
DESCRIPTORS	Adult Education; *American Indian Languages; *Bilingual Education; Bilingual Schools; Bilingual Teachers; Community Involvement; Cultural Awareness; Curriculum; Educational History; Educational Legislation; *Educational Objectives; Elementary Secondary Education; Instructional Materials; *Material Development; Multilingualism; Native Language Instruction; *Program Development; Quechua; Reading Materials; Second Language Instruction; Spanish; Supervisory Training; *Teacher Education; Teacher Role; Textbooks; Writing Instruction
IDENTIFIERS	Aguaruna (People); Amuesha (People); *Peru; Prestige Languages; Summer Institute of Linguistics

ABSTRACT

This book reports on an experimental bilingual education program conducted in Peru by Peruvian educators and Summer Institute of Linguistics (SIL) linguists. Sections of the book discuss: (1) the historical perspective of the program; (2) program aspects such as teacher training, goals, and curriculum; (3) what this program may contribute to the development of future programs; (4) the preparation of materials in vernacular languages; and (5) bilingual education as it relates to the development of indigenous communities. Papers include "The Role of Vernacular versus Prestige Languages in Primary Education" and "Training to Train: The Key to an Ongoing Program" by Mildred L. Larson, "The Training of Bilingual Teachers" by Olive A. Shell, and "The Challenges of Primer Making" by Patricia M. Davis. Tables include teacher-training course statistics, curriculum and textbooks for bilingual schools, and a synopsis of SIL work among the Aguarunas. Figures include sample pages from texts, primers, and readers, and a variety of letters and forms for supervisory use. Photographs of students, teachers, and other community members are provided. Appendices include the resolution authorizing bilingual education in the Peruvian jungle, laws relating to bilingual education, and sample pages of the 1977 curriculum. (JK)

Bilingual Education:

An Experience in Peruvian Amazonia

Edited by

Mildred L. Larson

and

Patricia M. Davis

SUMMER INSTITUTE OF LINGUISTICS
DALLAS

CENTER FOR APPLIED LINGUISTICS
WASHINGTON, D.C.

Funds for publishing *Bilingual Education* were supplied by:
The Center for Applied Linguistics
The M. E. Foundation, and
The Summer Institute of Linguistics.

ISBN 0-88312-918-3

Library of Congress Catalog Card No. 81-51059

CONTENTS

Part II

A Report on the Various Aspects of the Program

Part III

What We Have Learned from the Peruvian Experiment
Patricia M. Davis

Part IV

The Preparation of materials in Vernacular Languages

TABLES

FIGURES

PHOTOS

beliefs, values, and customs is acquired and traditional practices are challenged. The teacher is often asked to explain the new ways, to give counsel, and to help the people choose between old and new practices. This usually involves a considerable amount of time.

OUR CONCLUSIONS: *(1) We must be aware of the number of roles the teacher is trying to fill. If his work load is heavy, he may need help to reduce it. (2) The teacher and the community need to learn to depend on the head men of the village for matters of discipline and community administration, rather than on the teacher. Persons other than the teacher should also be trained to be responsible for medical work, airstrip building, storekeeping, community organization, etc. (Until community members can be trained, it may be possible to "borrow" short-term helpers from other communities.) Sharing of responsibility provides protection for the community in that it helps prevent any tendency the teacher may have to develop into a* patrón *or to exploit his own people. (3) Record keeping needs to be simplified until it falls within the ability of the teacher to complete in a reasonable amount of time. (4) Considering the special situations he faces, the teacher will need some flexibility in the school schedule. (5) Teacher stress is reduced when the community extends aid in construction of the school building and funding and transportation of supplies. (6) Teacher and community stress is also reduced when parents cooperate in helping the teacher avoid problems with students of the opposite sex. Sometimes a parent or the teacher's wife joins the class; some communities may choose not to accept older girls in the school.*

Clarifying the teacher's responsibilities

In view of the foregoing, it is especially necessary that, from the beginning of the bilingual school, the teacher and community together arrive at a clear understanding of what the teacher's role is to be (cf. chapter 11). If this concept remains hazy, it later becomes too easy for the many demands of the village situation to distract the teacher from his main responsibility.

However, if basic priorities have been agreed upon in advance, an important safeguard has been established. Such priorities might be: (1) that the teacher's first responsibility is to hold school—regularly and with adequate preparation; (2) that he will pay for specific services (such as help for clearing his field) in order to have sufficient time for book work; and (3) that he will give counsel when requested, but should not be counted on for many other leadership duties.

It is also necessary to clarify what role the teacher may play in handling the discipline problems of his classroom, i.e., when he is authorized to act independently and when the parents should become involved or what methods of correction will be applied (cf. chapter 13). Procedures may also be set up whereby parents are informed concerning the school and their children's progress. Lists will vary depending on individual communities.

Once initial responsibilities have been clarified, regular opportunities for reevaluation and discussion will assist all concerned to maintain balanced priorities and to correct deviations which may occur. This needs to be a long-term, continuing process.

OUR CONCLUSIONS: *(1) It is essential to provide early opportunity for community discussion to clarify the responsibilities the teacher will be expected to fulfill. His community involvement should be limited to tasks he can handle after dedicating adequate time to teaching and class preparation. (2) Regular reevaluation will be necessary in order to keep priorities in perspective.*

SUPPORTING A TEACHER

Over the years, bilingual school teachers have proved themselves potentially good educators and hardy pioneers, amazingly wise, persistent, and resilient. Taken as a group, they enjoy their work but also, according to the SIL doctors who attend them, tend to show signs of stress (headaches, depression, and psychosomatic illnesses) in somewhat higher proportion than is

found in Indian cultures in general. The ratio is not higher, however, than that observable among occidentals employed in high-stress occupations.[2]

Signs of stress become understandable, however, if one considers the complexity of the situations a teacher may face. We have come to realize that administrators need to be alert to the tensions peculiar to the jungle teacher's lot, tensions occurring in addition to those permeating the entire society. Sympathetic understanding, combined with appropriate action, can help to ameliorate strain. Discussed below are items which we have needed to keep clearly in focus.

The teacher belongs to a subculture

A teacher, with his advanced education, finds himself in the forefront of the changes caused by the meeting of the tribal and the national culture. His is the difficult role of attempting to synthesize the two, at least as far as his own behavior is concerned. Symptoms of "battle fatigue" are not surprising, but need to be watched for.

OUR CONCLUSION: *It is important to recognize the strain a teacher feels. Sources of pressure should be identified (they vary with the situation). As much moral support and reassurance as possible need to be provided for the teacher. If his experience or ingenuity proves insufficient to resolve certain problems, suggestions for possible alternatives may be appreciated. Sufficient vacation time also needs to be allowed.*

The teacher feels responsible for the people

In many cases, it is the teacher who has gathered the villagers, often his relatives, from their scattered homes into one location in order to attend school. He feels a high degree of responsibil-

---

2 Robert Silvester (in his article "Stress and the Classroom Teacher," *Instructors Magazine* 86.72–74, 1977) begins by saying: "Stress! It's the worst health problem teachers have to contend with."

ity for their safety and well-being. Since they may have little knowledge either of community living or of how to meet the outside world, he feels that he is the one who has to show the way and help them make community decisions until they are able to do so without guidance. Because of these pressures, teachers often tend to dedicate themselves to community needs to the detriment of class preparation and other school-related activities.

OUR CONCLUSION: *The teacher's concern for community members needs to be taken seriously. He may need help in order to meet their needs in ways that free him for his teaching responsibilities.*

The teacher needs administrative and logistic support

In addition to sympathetic understanding, the isolated teacher needs the reassurance of efficient administrative and logistical facilities. (Chapter 10 has already referred to this need.)

OUR CONCLUSION: *High priority needs to be given to providing administrative and logistic support, particularly a smooth-functioning system which supplies salary, books, supervision, and community orientation without long delays or frustrating red tape.*

The teacher has financial pressures

The teacher, who may never have had much income or experience in handling money, suddenly may receive what appears to be a large salary. At the same time, however, large expenditures, such as the following, may be unavoidable:

- PURCHASE OF FOOD the teacher used to hunt and gather himself, but for which he no longer has time; purchase of food no longer available locally because of overpopulation or because of new food habits learned while away from the village;

- MAINTENANCE OF ORPHANS and/or students from a distance who board at his home;
- PAYMENT FOR HOUSE CONSTRUCTION if time does not allow the teacher to handle the building himself;
- JOB-RELATED EXPENDITURES: travel to and from teacher training courses and district educational offices; room, board, supplies, and wardrobe for teacher training course; purchase of school supplies;
- PURCHASES FOR THE COMMUNITY: costs of processing land titles, construction and maintenance of airstrips, medicines, tools, new plants, seeds, animals, etc.;
- ECONOMIC AID TO OTHERS in the community as they enter training programs;
- PAYMENT OF DEBTS OF COMMUNITY MEMBERS to free them from *patrones*.

Teachers may find this financial world bewildering. Some may make mistakes which occasion hardships and increase anxieties, such as when their funds are stolen or entrusted to embezzlers; large loans and/or debts are contracted; or large investments are made for prestige items (expensive watches, record players), leaving insufficient funds for travel expenses, medicines, and food.

OUR CONCLUSION: *Prospective teachers need to receive orientation in money management. They need to learn to understand what expenses face them and how to apportion their salary appropriately. They would also benefit from information concerning reliable savings programs, such as the services offered by regional banks.*

The teacher experiences special pressures during teacher-training courses

Teacher-training courses have been much appreciated by bilingual teachers. Often, however, the only convenient time for them occurs during the summer vacation period, which allows little break for the teacher after a busy school year. It is

important to recognize the accumulation of pressures which can be involved:

- Travel may be difficult. Trails may be muddy, and rivers dangerously swollen. There may be long periods of waiting for airplanes at rendezvous points where food and housing may be inadequate. Trips by canoe or bus may be long and exhausting.
- Teachers, salary in pocket, may become the special target of dormitory thieves, pickpockets, vendors, con men, and prostitutes. They may also encounter salesmen who use very high-pressure techniques.
- The cost of plane flight, food, medicines, entertainment, and supplies for return to his village, as well as mismanagement, may leave the teacher without cash considerably before his training period is over. Pressures mount as he skimps and/or tries to arrange loans to tide himself over
- Teachers, particularly those with little scholastic background, may find the academic grind hard. Trying to grasp unfamiliar concepts day after day in Spanish (their second language) produces mental fatigue.
- If the year-end reports and statistics which the teacher is required to submit are beyond his ability, frustration can be generated as he struggles with his registers, perhaps at the expense of the classes in session.
- Unfamiliar philosophical, ideological, and religious views are often presented during the teacher training courses. Teachers struggle to understand the implications of new concepts such as: (1) nationalism/socialism/communism/capitalism; (2) Catholicism/Mormonism/Evangelicalism/Seventh Day Adventism; (3) agnosticism/atheism/naturalism/humanism.
- The native teacher is usually highly motivated to become a "good" citizen and is looking for ways in which he can identify with the national society. Depending on the person who seeks to influence him, "being a good citizen" has been represented to include such diverse qualities as: (1) loyalty to flag and country; (2) good ability in the dominant language; (3) mistrust of foreigners; (4) being a hilarious party-goer (Western style); (5) being fervently religious; (6) being a responsible leader; and (7) loving Western arts.

- Due to existing status systems, he often receives a bewildering diversity of treatment from those he contacts: (1) respect as a professional (by understanding professors); (2) counsel (by specialists); (3) flattery (by con men); (4) belittling and patronage ("Here, let me count your money for you."); (5) ridicule (by hostile "superiors"); (6) orders to do menial service (by people who expect Indians to be peons); and (7) friendship (by a few, mostly peers). The teacher learning to live in a new culture does not yet know what the real boundaries and norms are. What is accepted behavior? What values should he adopt? What should he reject, and on what basis, if he wants to be a good citizen?
- Since teacher-training courses provide an opportunity to present important orientation to representatives of many areas, a tendency has sometimes developed to place emphasis on record keeping, community development, health, school gardens, and other matters. It is taken for granted that the teachers realize that communication of academic knowledge is their first priority. In fact, the hard-pressed teacher may not have this concept well established, and many have bowed to the pressure to perform in peripheral areas in order to please their instructors, or a supervisor whose only remarks may have been directed towards the school registers and the appearance of the school building. As one teacher put it, "A good teacher keeps his school records well; it doesn't matter what he does in the classroom."

OUR CONCLUSIONS: *(1) Breaks should be scheduled between the school year and training courses, or else the teacher should be allowed time off from the training course occasionally to provide time for rest, reflection, and personal needs. (2) Whenever feasible, it is preferable to hold the training courses in tribal locations where the environment is familiar, accustomed food is available, and the pressures of "civilization" are fewer than in city or market-town locations. (3) Teachers would find it helpful to receive orientation in national values and etiquette (in simple language) to give general guidelines for conduct in the new culture. (4) We need to be aware of the struggle for*

identification going on in teachers' minds. (5) Training-course staff should be oriented to be conscious of the teacher's special needs; to be ready with extra tutoring in difficult subjects; to speak slowly and simply; to provide protection from thieves when possible; to reassure with positive, friendly attitudes; and to provide good examples (see chapter 6). (6) It is important to facilitate travel to and from training courses as much as possible. (7) Orientation and curriculum of teacher-training courses should highlight teaching as the teacher's primary responsibility.

The teacher and his family have special home needs.

These special requirements include:

- The teacher's wife may be required to move to a community where she has neither friends nor family. If the move also entails a new ecological situation, she may have to cope with unfamiliar conditions and diet. Given the shyness of many tribal women, considerable pressure may be felt, particularly if the women of the new community are slow in accepting her. In new locations she bears the brunt of child rearing without the help traditionally provided by relatives.
- In at least some of the cultures of Amazonia,[3] a bilingual teacher's wife and family seldom receive from him the amount of time they would normally expect. During her husband's absences, the wife faces alone such crises as floods, illnesses, fire, and death. The fields may suffer for lack of attention; chickens and ducks may be lost to predators; the children lack paternal attention. Interestingly enough, when wives have rebelled, the husband has often been too busy to realize that anything had been going wrong.
- Ordinarily, the teacher attends summer school each year. If his wife does not, a disparity of education and orientation may result which sometimes leads to tensions. We have also noted that teachers from tribal cultures who attend summer

3 Orna R. and Allen Johnson. "Male/Female Relations and the Organization of Work in a Machiguenga Community." *American Ethnologist* 2:644-45. 1975.

school without their wives are more prone to engage in culturally unacceptable liaisons. Wives, left alone, are also vulnerable. Whether or not there is infidelity, suspicions and recriminations can result.

- In cultures where polygamy is considered very natural and a sign of prestige, strong pressures may be exerted on a teacher to take more than one wife. Ambitious women have been known to force themselves or their daughters upon the teacher, even trapping him "if necessary." It may be difficult for a man to refuse in spite of the problems it will bring him in relating to mestizo administrators.
- If the teacher and his wife open their home to boarding students, as is often the case, they have the added responsibilities of foster parents—responsibilities which they take seriously. The wife assumes the additional responsibilities of being cook for the group, and young mothers in particular may find the work heavy when coupled with their own child-rearing and homemaking responsibilities.
- The wife may also become chief hostess for visitors to the community, thus depleting the food supply from her own field. If, as is the case during her first year in a community, she should be dependent on the good will of others to share food with her, the need for additional food for visitors may increase tensions.
- Domestic help is frequently needed to lighten the wife's workload. It seems, however, that this help must be chosen with care, preferably from among relatives, or additional problems will result.

OUR CONCLUSIONS: *(1) We need to study traditional family patterns and forewarn couples of potential problems, suggesting alternatives to help avoid pressure buildups greater than the wife can bear. (2) The teacher may need orientation on the importance of regulating his workload to take his family's expectations into consideration. He may also need his wife's and his community's support in helping him live up to national ethics. (3) The teacher will find it advantageous to inform his wife as he gains new knowledge so that her orientation*

parallels his. School attendance for the wife has often proved helpful. (4) In at least some cultures it is important to make provision for the teacher's wife to accompany him to training courses, and to provide training for her--sewing classes, child care, or whatever the wives identify as a felt need. (5) It would be valuable for the wife to be encouraged by official recognition of her role and the sacrifices she makes to enable her husband to be successful. Official letters of appreciation, diplomas for length of service, and an honor list for those assigned to hardship posts may be awarded.

SUMMARY

In Amazonia it has been important for administrators to gain a clear understanding of the unique factors that affect teacher selection; the pressures that a teacher faces in his community relations, his training, and his work, and the implications of these for his wife and family. As factors are identified, they can be balanced to help provide a more satisfactory arrangement for all concerned.

(Loos 1964)

A community development promoter inspects the harvest in Napuruk, an Aguaruna village (see chapter 20)

(Lance 1969)

Boats for the Ticuna school are cut at the community sawmill (see chapter 20)

13
THE PROGRAM AS IT RELATES TO THE PUPILS

A good deal of effort has been expended in the Peruvian experiment in trying to tailor the school program to the reality of the native child. Field linguists, administrators, and teachers constantly have sought to be alert to the cultural and environmental, as well as the linguistic, factors that affect the pupils' learning processes.

From these observations have come a number of insights, some of which have been incorporated into the program as it developed, some of which were made too late or for other reasons have not been implemented. The list that follows is not exhaustive, but all the items mentioned are lessons that we would want to keep in mind if there were occasion to initiate another program under similar circumstances.

BEGINNING WITH ADULTS (cf. also chapter 11)

Experience among groups of the jungle suggests that bilingual education tends to be most successful when it begins with the adults of a community. Beginning with the adult population will remove a large percentage of the problems that occur when the school program is begun first among children. However, if there is already an ongoing children's program, if the decision to teach children first is irreversible, or if (after a period of adult instruction) it is time to begin a children's program, the following pages list issues that we have found to be important.

Beginning with children

Trends observed in preliterate societies in which schooling is provided first for the children indicate that age and maturity are crucial factors.

Flexibility as to age of admission

Physical and emotional maturity is conditioned by many factors, among them cultural and family characteristics, nutrition, parasites, and environment. In the jungle, partially because of lack of orientation to the basic premises of the classroom (see the next section of this chapter), we have found, especially in isolated ethnic groups, that few children are mature enough to be able to settle happily into a full-fledged bilingual school program before they are eight years old. While there are notable exceptions, particularly among school teachers' families and among communities with a longer history of contact with the outside world, the generalization holds true.

Trends among six- and seven-year-olds. Six- and seven-year-olds are often eager to enter school, but frequently lack coordination and an attention span sufficient for them to perform well except in a nursery-school type orientation program under a specially trained and equipped teacher. However, in most bilingual schools, neither a special teacher nor the special materials are available or feasible.

Another factor which particularly affects these children is that in a 50-minute class period, a teacher with three to five levels may have only 10 to 15 minutes to present the lesson to each section. Young children often lose interest under these circumstances. The results of being obliged to continue in such a situation have included mental blocks which handicap the child throughout his school career, behavior problems which disrupt the entire school, and real distress for both teacher and students.

If social pressures, parental enthusiasm, and/or government regulations require that a child begin school at six, the bilingual teacher may be left with no alternative but to enroll pupils he

knows he cannot handle adequately. Because of his isolation, few administrators see his subsequent frustration and discouragement as he struggles under the burden.

OUR CONCLUSIONS: *(1) The teacher will need to consider carefully before admitting each new class of beginners. Is he able to dedicate the time, both for preparation and in the classroom, needed for an additional preschool class? If not, he should try to find alternatives. Perhaps another teacher can be trained, or perhaps the beginners could be allowed to wait a year before entering school. (2) The teacher will need to realize that considerably more maturity will be required for children to function happily in a classroom with a heavy section load than in one with a light section load.*

Trends among eight-year-olds (and older). In contrast to the younger children, those eight years old or older usually make the adjustment to school life quickly and are able to manage reasonably well, even in an overloaded classroom. The enthusiasm with which most of them study is in marked contrast to the discouragement often observed in younger children. Much teacher time and money has been wasted trying to teach children who were not yet mature enough to handle the classroom situation.

OUR CONCLUSIONS: *(1) It is important to allow flexibility in the age of admission of children, particularly in isolated groups. The criterion for admission should be maturity rather than chronological age. (2) Active orientation for parents and community is necessary to alert them to problems precipitated by premature enrollment of children in school. (3) Teachers will need training to recognize the signs of physical and emotional maturity which indicate a child's readiness for a classroom situation. For example: How long is his attention span? Does he demonstrate adequate coordination and manipulative skills? (4) Trial periods are sometimes helpful in borderline cases. The child can be allowed to attend classes with the understanding that in two to four weeks a decision will be made as to whether he should continue. If he enjoys being in school and is able to*

do the work, he continues after the trial period as an enrolled student. (5) Teachers are helped by orientation in strategies for averting problems by preventive methods, i.e., (a) varying activities; (b) programming enough work to keep students occupied; (c) allowing early recesses when work is finished or when younger children seem restless; (d) separating trouble-makers; and (e) acting (in culturally acceptable ways) to establish his authority in the classroom.

Trends among teenagers. We have noticed that in many tribal areas the majority of students do not expect to complete more than primary education. Consequently, there is not the same need for them to begin their studies early as there is for a child who is expected to pursue secondary, and even university, courses. In fact, some children who had terminated their primary education in the tribe, but were not yet mature enough to be considered adults, have been observed to be in a sort of limbo. In their case, it would have been advantageous for them to have begun their primary education a little later, finishing in their mid-teens—a suitable age to enter the adult world in many ethnic groups, especially for girls.

CULTURAL DIFFERENCES

As has been mentioned in chapters 6 and 7, children of isolated areas have not been exposed to many of the concepts that are basic to a classroom situation. For them, entering school is entering a new system, structured according to a set of assumptions very different from those to which they are accustomed. During the considerable period of time it may take for the child to reorient himself, little actual teaching of academics can be accomplished.

Presented below are some of the major areas of orientation needed by tribal children entering school for the first time.

Preschool orientation

The teacher must introduce the basic concepts involved in reading, writing, and performing mathematical calculations;

must explain the purpose of the school and proper care of school property. Additionally, he must emphasize the fact that there are: (1) activities considered proper and improper in the classroom; (2) times for group activities and times to work alone; (3) times to work, to play, to be quiet and to listen; (4) times to help each other and times not to help; (5) times to control oneself, to respect others' rights; and many similar ideas.

OUR CONCLUSIONS: *It is necessary to: (1) Prepare a nursery-school type of orientation geared to the needs of the students. (2) Train the teacher in (a) recognizing physical and emotional stages of children's development at beginning levels and how to meet their needs for praise, short-span lessons, etc., and (b) using the materials prepared for this level.*

Orientation to a new method of learning

In some of the tribal cultures with which we are familiar, one learns by watching. Children observe their parents, and others, for as long as necessary until they feel sure that they have mastered the techniques of the process in question. Explanations are not expected and are seldom given, yet when the child makes his first attempt, he ordinarily does very well. It is a great embarrassment to perform poorly; it demonstrates pride and too much haste. The modest person waits until he is able to do the work well.

Schools, on the other hand, do not expect perfect performance initially. Instead, students are required to practice to perfect their skills. Children may experience severe internal conflicts if they are pushed to try what they know they cannot yet do successfully.

OUR CONCLUSIONS: *In as many ways as possible the educational system should be adapted to the learning patterns of the culture. Where there are differences between tribal and western models, it is important to be aware of them. If teaching new learning methods is unavoidable, the following suggestions have proved helpful: (1) Allow for the lapse of time*

required for children to reorient themselves to the culture of the classroom. (2) Help the teacher recognize the differences between the native culture and school culture, and develop ways to explain them to the children: i.e., the teacher may explain to the children the difference between learning by watching and learning by doing and coach them in the method employed in the classroom. (3) Orient the teacher to: (a) provide practice whenever possible for the points the children find most difficult, and (b) coach and encourage them.

Orientation to generalization

Native children frequently seem to learn each skill separately: how to peel vegetables with a sharp knife (at very early ages), how to skin an animal, how to carve an arrow point, etc. In their way of life, many tasks apparently classify as isolated items, with little or no obvious relationship to other skills. They enter school not expecting any given piece of knowledge to relate to any other piece.

Schools, however, are based on the pattern of generalization. Main categories are subdivided: then information learned about one subject is applied to other areas. Knowledge thu transferred and related is made useful in many ways.

It is not unusual for native children to go through a period of some bewilderment before they are able to understand and to adapt to this new way of utilizing knowledge. A further adjustment is required to understand the use of abstract symbols.

OUR CONCLUSIONS: *(1) It is essential to allow for the reorientation required as the child learns to generalize or to recognize abstractions. (2) The teacher needs training to recognize where problems of generalization or abstraction occur in the subject matter he must teach. (3) The teacher may need help to find the explanations and drills which will prove most advantageous in his cultural setting; for example, a special mathematics workbook was prepared for the Machiguenga of Peru to help students grasp the concept of there being only one fixed symbol for each quantity, a device made necessary because the tribe had no fixed system of numbers beyond one.*

CLASSROOM CONDUCT (cf. chapter 12)

In cultures where children grow up with behavioral norms and familial duties different from those represented by Western culture, the matter of maintaining order in a classroom may become problematic for the teacher. It is impossible for him to teach or for the children to learn unless a certain amount of quiet prevails, the students pay attention to the lesson, and school supplies are not destroyed.

The teacher enters the classroom with the basic assumption that he will be able to enlist sufficient cooperation from the students in order to communicate new ideas. The students, however, often enter with the same basic assumption held in their homes, i.e., that they may do whatever they wish, with no need for restraint, deference to others, or caution in the care of property.

Certain cultures have well-established lines of authority. In these societies, the teacher usually can solve discipline problems by working closely with parents and community leaders. As they learn to have confidence in his judgment, attend classes to observe for themselves, and discuss problems together, the elders cooperate in backing the teacher and help him to orient and control the children.

However, in cultures where adults frown on coercion of any kind, the teacher may neither be supported nor appreciated by the parents for trying to maintain order. If he disciplines the students, he then risks a high level of community anger; if he does not, he may accomplish very little in the way of teaching.

OUR CONCLUSIONS: *(1) Teacher and community will be helped greatly by having a clear understanding regarding classroom discipline* before *classes begin. The teacher should discuss his plans for keeping order with the parents and secure their advice and consent for everything he proposes to do. (2) Suggestions such as the following will help the teacher maintain a pleasant classroom atmosphere: (a) praise as much as possible; (b) avoid clashes by using some effective strategy such as changing activities, separating problem-makers, providing a*

recess or rest break, programming enough interesting work to keep pupils' attention, etc.; (c) give only necessary orders; (d) give order (or request) once; (e) remind once (i.e., allow for forgetting, dawdling, etc.); and (f) act to implement the order/request. Consistency in these six steps usually helps resolve most classroom problems. (3) The teacher should be oriented to rely on parents or community leaders to handle all but minor problems. Even in communities where this is an innovation, good communication and cooperation between community and school has proved very effective. The teacher should not *attempt stringent measures without parental consent. (4) Inviting adults to attend classes (either permanently or as observers) often helps control children.*

SUMMARY

Although education tends to be more successful when begun with the adults of a community, children's programs can succeed, especially if careful attention is given to the cultural and environmental factors (as well as linguistic factors) which affect the students. These factors make it advisable to be flexible about age of admission to school, allowing time for the child to acquire the basic concepts usually imparted in preschool-type programs, to become used to new methods of learning, and to learn the technique of generalization. Classroom discipline varies greatly from culture to culture, and it is essential for the teacher and the community to reach a thorough understanding concerning it prior to the beginning of classes.

14
THE BENEFITS OF BILINGUAL EDUCATION

Bilingual education in the Peruvian jungle has brought numerous benefits to minority language groups. Native people, both children and adults, frequently comment that by attending school one can:

- LEARN TO WRITE LETTERS (the ability to communicate with distant relatives and friends is a new and much-appreciated facet of life in Amazonia today)
- ACQUIRE ALL KINDS OF IMPORTANT KNOWLEDGE through books
- LEARN TO SPEAK SPANISH (which enables one not to be afraid of outsiders and to communicate with them)
- LEARN TO ADD, SUBTRACT, AND COUNT MONEY to avoid being deceived when buying and selling
- PROFIT FROM PRINTED INSTRUCTIONS (such as instructions on pill bottles or signs in city streets and store windows)
- BE PREPARED FOR HIGHER EDUCATION and job opportunities never before available to the native peoples of the jungle
- LEARN WITHOUT THE DIFFICULTIES ENCOUNTERED BY OTHERS who have attended schools where only Spanish is spoken.

Since these expressions have been spontaneous, one can safely assume that the native people value bilingual education

highly. The types of advantages they usually mention fall into the general categories given below.[1]

MORE EFFECTIVE LEARNING

A Machiguenga bilingual teacher tells of sending his older daughter to a Spanish-speaking boarding school. She was well treated, loved her teacher, and began to speak a fair amount of Spanish. A younger daughter attended the bilingual school. After approximately three years of study, the younger daughter, to her father's surprise, outstripped the elder in her ability to read, write, and do arithmetic. This general tendency of students to learn more easily in bilingual schools has been repeatedly commented on by members of many language groups.

In places besides Amazonia studies have confirmed that learning is most effective when begun in the mother tongue. The National Indian Bilingual Education Conference, held in Albuquerque, New Mexico in April of 1973, declared that: "The most successful educational method is one that instructs in the local language and then proceeds to develop literacy.... Traditional monolingual methods have resulted in below standard achievement by American Indian students which, in turn spawn difficulties in secondary and higher educational pursuits, exacerbate acculturation problems, present significant barriers in securing adequate employment, and constitute a serious hindrance to the full enjoyment of life and its benefits."[2]

A report from the Seminar for Educational Planning for Multilingual Countries attended by bilingual education representatives from Peru, Bolivia, and Ecuador (Solá and Weber 1978:C-10) states the same principle in different words: "The

---

1 For part of the material in this chapter, I am indebted to my former colleague, Dr. Harry Boonstra, who currently teaches at Hope College in Holland, Michigan.

2 From a mimeographed document of the U.S. Department of the Interior (published by the Indian Education Resources Center, P.O. Box 1788, Albuquerque, NM 87103).

linguist... prefers that the teaching of reading be in the mother tongue because functional reading and writing is thereby attained much more rapidly.... Without difficulty, the reader can generalize the skill of reading and writing in his mother tongue to any other language which he knows how to speak."

Reduced cultural shock

- The local bilingual school allows the child to remain at home, or close to home, avoiding the traumas caused by forced abandonment of the home language and culture while at the same time recognizing the dominant language. These are advantages valued highly by jungle parents, many of whom fear the gap caused by sending their sons and daughters away to Spanish-speaking boarding school and prefer to keep them out of school altogether rather than to permit the separation. In some cases, vernacular-speaking boarding schools within the tribal area have been established for older students, and have had fairly good acceptance. In other cases, older students travel daily to a nearby village to attend a bilingual school, even though it is difficult and sometimes dangerous for them to do so.
- Within the classroom, the students are not forced into rejection of their mother tongue and culture (often an emotionally damaging process), and adaptations of methods and materials to the vernacular language and culture enable them to participate without undue psychological stress. As Wipio has already pointed out in chapter 5 of this volume, it is much easier for children to adjust to a teacher and language situation with which they are already familiar and then to learn the dominant language by means of second-language methodology. Research in Ecuador (Ortega 1978:39–43 and 53–55) also supports these conclusions.

Studies undertaken by UNESCO in 1951 (Fishman 1972:691) reported that it is best for pupils to begin studying in their mother tongue, not only because they understand it best but because thereby "the break between home and school [is kept] as small as possible."

Solá and Weber (1978:C-9) state:

> If a child is presented with primary education based on a different material culture, which utilizes norms of conduct unfamiliar to him and is oriented by symbolic values which have never before been part of his experience, he suffers massive cultural shock. Perhaps this explains why the child of another culture does not respond to the teaching and is many times classified as incapable, or even as mentally retarded.

The anthropologist does not reject the new culture which is to be imparted to the child; rather he suggests that curriculum content and teaching methods conform to the child's previous experiences and that the new elements be interwoven into the educational experience.

- The jungle abounds with individuals who, having been educated in a second language—the national language—have abandoned their mother tongue and cut themselves off from family and friends, refusing to be identified with them. It may be that long-term satisfaction is thereby attained in some cases, but those that we have observed can scarcely be called successful. The break is made at the cost of familial goodwill and support, and usually the individual, in spite of his alienation from his own culture, is not as well received in the new society as he wishes to be. The sense of loss to the rejected family members can also be severe.

In contrast, most of the students who go to bilingual schools acquire a healthy appreciation both for their own language and culture and for that of the majority. They are glad to belong to both. Where bilingual education has had strong influence, as among the Shipibo and Aguaruna, a trend towards increased pride in native dress and traditional crafts and customs has been evidenced along with increased ability to communicate with the outside world.

- Stresses caused by contact with the outside world are reduced through improved ability to understand the dominant language and culture. To the extent that they are fluent in the national language, individuals can master their circumstances and diminish the possibility of being their victim.

Progress from the familiar to the unfamiliar

The learning process is founded on sound educational principle—beginning with the familiar and expanding to the new experience. (See chapter 17 concerning the principle of culturally adapted education employed in the bilingual schools.)

Solá and Weber (1978:C-10) corroborate this principle by stating: "The psychologist insists that the elements used in teaching have meaning for the child.... The direct implication for the teaching of reading is that it should be in the mother tongue,... and that beginning lessons should be based upon natural expressions which the child already knows in oral form."

Improved ability to learn the second language

That education in the vernacular improves and develops a student's native ability to learn a second language has been effectively documented by Marleen H. Ortega (1978). By means of carefully constructed and controlled tests, she compared the degree of Spanish assimilation attained by the pupils of two similar Quichua-speaking communities in Ecuador—one with a bilingual school and one with a monolingual Spanish school. Not only did the pupils from the bilingual school score higher in academic subjects, but their command of Spanish—after three years of formal study in the bilingual school—was better than that of students who had studied exclusively in Spanish.

This corresponds to our observations in the bilingual schools of Peru, but is particularly interesting in the light of another of Ortega's observations (1978:57): "... many of the children in Colta had attended monolingual schools in Spanish where they were considered 'incompetent'. Nevertheless, upon attending a bilingual school, they proved themselves to be capable students, and—according to their parents—were 'now learning something'." She continues, saying of these same students: "It is clear that in both towns the children of preschool age are monolingual Quichua speakers. However, in the lapse of three

years, the students of the bilingual school demonstrated more knowledge of Spanish[3] and the materials studied in that language."

This study also proved that teaching children to use a second language does *not* imply replacement of their first language—an important point relating to the respect and appreciation due a student's own language and culture.

Ortega's charts, which need to be studied in detail in order to understand the complex factors involved, show the following percentage distribution of pupils tested:[4]

TABLE 14.1. COMPARISON OF DEGREE OF COMPETENCE IN SPANISH BETWEEN PUPILS OF MONOLINGUAL SCHOOLS AND THOSE OF BILINGUAL SCHOOLS

	Colta (bilingual school)			Calhua (monolingual school)		
	Out-standing	Fair	Unsatis-factory	Out-standing	Fair	Unsatis-factory
Mathematics:	80%	20%		40%	60%	
Spanish Grammar:		Low but better than Calhua			Low	
Social Science:	90%	10%		50%	50%	
Natural Sciences:	Similar competence			Similar competence		

3 The type of Spanish knowledge referred to is not merely theoretical (rules of grammar, for example); rather the children gradually internalize and master the structure of the second language until they achieve competent comprehension and production.

4 The chart presented here is a summary of three tests given in Spanish to three groups of different ages. (For full information see Ortega 1978:119–52.)

UNESCO specialists (Fishman 1972:692 and 699) support Ortega's findings. According to them, experience in many places has demonstrated that an "equal or better command of the second language" is acquired when schooling begins first in the mother tongue.

Gray (UNESCO 1956:73), citing studies by Hildreth and Horn, gives reasons for the above:

> A child's ability... to recognize and pronounce words, to grasp the meaning of sentences, to follow a sequence of ideas, or to read orally, are all influenced by his mastery of the language.... Many failures in reading are due to inability to interpret readily the language used.

If this is the case with native speakers, it is understandable why the problems are even more acute across language boundaries.

Baucom (1978:127), speaking from years of experience in Africa, states: "It is, in my opinion, much more successful to teach people *home language literacy first* and then put them into a second language programme. Thus a reading ability in some language can often be seen as a prerequisite for entering a language-learning course."

Enhanced language and analytical skills

Some studies indicate that bilingual education may help to promote language skills and facility in problem solving. Comparison of a group of monolingual and of bilingual ten-year-old children from six Montreal French schools (Lambert 1972:154–55) measured attitudes toward the English and French communities and tested verbal and nonverbal intelligence. According to Lambert, "Contrary to previous findings this study found that bilinguals performed significantly better than monolinguals on both verbal and non-verbal intelligence tests.... The bilinguals appear to have a more diversified set of mental abilities than the monolinguals."

Cummins (1977:83) comments on the social context in which the above study was conducted and points out that it, along

with other "positive" studies, "... generally involved middle or upper class subjects whose first language is dominant, or at least prestigious, and in no danger of replacement by their second language.... These children are adding another language to their repertory of skills."

Similarly, education in Amazonia is generally observed to be most successful in ethnic groups where the sense of cultural worth is sufficiently strong that Spanish is added to the repertory rather than learned as a way of escape from what is felt to be a humiliating position. (This is not to say that it may be even more needed in such circumstances.)

Although not quantitatively compiled, reports from bilingual teachers and parents of bilingual school children who have had experience in monolingual Spanish-speaking schools tend to confirm another of Cummins' observations (1977:81), which is based on a series of recent studies: "Bilingualism can accelerate the development of general intellectual skills. .. [It] promotes an analytic orientation to language... and several studies suggest that learning a second language increases children's sensitivity to feedback cues."

PROMOTION OF SELF-RESPECT AND A SENSE OF SELF-WORTH

Education as an individual and communal prestige factor

Having a school contributes to the community members' sense of self-worth and of self-respect. A commonly heard statement among tribal peoples of the jungle who are commenting on the value of education is that "we used to be illiterate but now that we have entered school, we can read, write, add, and subtract like other Peruvians." The statement reflects a sense of having had a felt need met.

This sense of pride in having a means of education in one's own community is so strong that even though internal problems may cause villagers to be very unhappy with some aspects of the school program, we know of no community which has requested that their school be withdrawn.

Promotion of ethnic pride

A legitimate pride in the native language and culture is developed as the community sees its language used in written form as a vehicle of instruction and as a means of self-expression. (Chapter 22 discusses this from the viewpoint of the jungle experience.)

The need for linguistic and cultural recognition is also expressed by the declaration of the National Indian Bilingual Education Conference:

> The right to one's own language and culture is inherent in the concepts underlying our national ideals.... Many... believe that schools have an obligation to provide education which is not designed to shift students unilaterally from one culture to another. American Indian students are representatives of viable, valuable cultures... which have a right to continue their existence as unique cultures.

Promotion and development of cultural heritage

Folk tales and other parts of the cultural heritage can not only be preserved but also enjoyed by new readers as members of a given ethnic group are able to write them for themselves and for others. (Chapter 22 treats this important aspect, and chapter 19 demonstrates the value placed by the Amuesha people upon their own writings. The Amuesha, like most jungle peoples, consider folklore stories their favorite type of literature.) In this regard, the National Indian Bilingual Education Conference stated: "Establishment of a bilingual program for American Indian students encourages the development of educational materials relevant to Indian history, legends, folklore, artistic expression, and characteristic lifestyles by recognizing that the local culture is a legitimate source of study and interest."

Feeling of equality

The appointment of a local teacher demonstrates to members of the native community that they are considered equally

capable of assuming responsibilities connected with the majority culture.

Solá and Weber (1978:C-9) illustrate the kind of respect native peoples covet—and merit—when they state: "Bilingual bicultural teachers would be the best instruments for implementing a curriculum conceived in this form, and even for participating in its preparation." Training programs now in progress are preparing representatives of various language groups of the jungle to participate in building their own curriculums and in textbook preparation.

Increased independence

Education helps the tribespeople become independent, with their own recognized leaders and representatives to national governing bodies and organizations. It also enables them to acquire the skills and trades needed by the society, freeing them from dependence on outsiders. This is the case, for example, with the Ticuna, whose radios and tape recorders are repaired by a skilled native technician. Among the Piro, Chayanuita, and Aguaruna, and on a larger scale among the Ticuna and Machiguenga, trained boatmen and mechanics from the native community make possible the transport of produce to market, without the need of depending upon majority-culture middlemen who historically have controlled trade by monopolizing transportation. The ability to make decisions independently is an important aspect of this process.

According to Solá and Weber (1978:C-8):

> Minority languages and cultures, which carry high symbolic value for their users, can become the means of strengthening an individual's dedication to his community, and his region. Two results of this can, perhaps, be anticipated. The region would be protected from the disintegration which can result from national-level intervention, which sometimes is blind to linguistic and

cultural considerations. And, in the case of rural bilingual zones, it would slow down heavy emigration towards the cities, which, as we know, is producing devastating socioeconomic effects in metropolitan areas.

A defense against exploitation

Bilingual education gives the ethnic groups a necessary, and recognized, protection against exploitation by outsiders. Illiterate adults now ask their children, or educated adults, to accompany them as they buy and sell. Teachers accompany community representatives when large transactions are involved, such as the sale of logs for lumber, the sale of community harvests, or the purchase of cattle. The ability to read scales, multiply, measure lumber, count money, and converse about these matters in the trade language has considerably increased the minority groups' probability of receiving fair treatment.

Furthermore, a knowledge of numbers brings self-assurance. The Arabela and other groups have commented on what a satisfaction it is no longer to be in doubt as to whether they have received—or been charged—fair prices. By means of simple arithmetic, they can calculate the correct amounts and can allay their suspicions—an obvious advantage both to themselves and to those traders and *patrones* who do seek to treat them fairly.

Adults, informed through the bilingual school about the laws of their country, have been able to solicit land and health services and have been able to take advantage of other services available to them.

Another less commonly recognized aspect is the defense this same knowledge provides within the culture. Machiguenga women, who lack an indigenous system of fixed numbers, want to learn how to count so that they can know for sure if all their chickens have been safely penned up at night or whether they need to look further for strays. Their peace of mind is consid-

erably improved if they know exactly how many balls of spun cotton thread they have stored away, rather than worrying that one is missing—probably stolen. Trading can be conducted on a more equal basis if everyone understands the value of produce or crafts. In these and many similar ways, education proves beneficial within the group.

Promotion of a common identity

The schools have also promoted a growing awareness of the jungle people's common identity. In many areas settlements, even within ethnic groups, are so isolated from each other that traditionally there has been very little knowledge or concern for each other's existence. When representatives from these scattered villages began to attend teacher-training courses and conferences (see chapters 6 and 9), they began to establish friendships both with those in their own language group and with colleagues from other groups. Their new sense of brotherhood, carried back and communicated to fellow villagers, has resulted in a new solidarity within and between ethnic groups. Increased optimism is present since there is now the possibility of approaching goals and problems as a group rather than individually.

Citizenship and patriotism, respect for the nation, and appreciation for its history—all new concepts to the isolated groups of the jungle—have been effectively and wholesomely taught by the schools. It has been encouraging to see the native people's warm response when they realize that they belong to a larger community, one in which they and their language are considered so important that special efforts have been made to provide them with education and the means of forming links with the larger society.

This sense of identity between members of the same group, members of other groups, and with the outside world has been greatly fostered by the newly acquired ability to communicate through letters. Now isolated villages and distant family members can remain in contact with each other. Invitations can be extended (to programs, football games, area business

meetings). Help can be summoned (to stem epidemics, to provide technical assistance, etc. Requests to authorities can be made. The mail carried by canoe, and by SIL pilots (in lieu of other postal systems) between different tribal communities, as well as between these communities and the outside world, provides deep satisfaction to all and has demonstrated that hundreds of comparatively new literates now respond to the written word as they would to the spoken word.

Improved career opportunities

In the jungle, bilingual education has not only improved career opportunities for its students outside the tribal areas, but has bettered the lot of those who continue within the community by providing new job opportunities—carpentry, transportation of goods and people, mechanics, teaching, medicine, animal husbandry—and by helping those who continue as farmers to market their produce at fair prices. Numerous communities throughout the jungle have organized sawmills, cooperatives for the sale of agricultural products, health posts, and small stores. The Shipibo have developed a cooperative for the production and sale of pottery and artifacts.

Outside the tribal area a limited but increasingly greater number of bilingual school graduates are going on to secondary schools and technical and university training, and one young woman of the Piro group is within two years of graduation from medical school. An encouraging number of these professionals are returning to their communities and using their training to benefit their people.

That this trend is not merely an isolated case is made clear by the National Indian Bilingual Education Conference meeting which underscored the career opportunities opened to bilingual school students of their area:

> Adoption of bilingual programs tends to bring an end to the deprecation of local culture elements and values by the schools, stimulates better communication between the

community and the schools in solving educational problems, effects a positive student self-image, provides more effective use of both English and Indian languages, fosters higher achievement levels in academic performance, encourages more successful secondary and higher education careers, eases the obtainment of employment, allows genuine options for American Indian students in choosing a way of life, and facilitates a more harmonious relationship between American Indian cultures and the mainstream of society.

GRADUAL EXPOSURE TO THE MAJORITY CULTURE

The school helps the community adjust to the inevitable impingement of the outside world in a somewhat relaxed way, and—most important—at a pace with which the members of the community are more able to cope.

- The teacher, a member of the community, assumes a major role in helping the group in its adjustment to the national culture. For example, cooperation with the teacher helps the community become accustomed to broader organization around local leadership—a necessary step towards more effective participation in the national life.
- The procedures for discussion and the concepts of cooperation are frequently learned in the establishing and maintaining of the local school.
- The cooperation of the community with the national educational system provides a concrete example of how to participate in the national life without losing one's own cultural identity.
- Many helpful concepts taught in the school filter through to the community, i.e., hygiene, the concepts of reading and mathematics, and news from the outside world, to mention a few. As a result, the entire community becomes aware of its relationship to the larger society.

CONCLUSION

Limiting factors

In spite of the benefits of bilingual education, there are hazards, of course, in introducing changes of this nature. The process of adaptation can be painful. Obviously, caution and forethought should be exercised by administrators initiating such programs.

We have found also that the ideal situation almost never exists. Small ethnic groups are reached by the educator many years after contacts with the outside world have been initiated. The people themselves have already developed opinions about and ways to cope with the impingement, with varying degrees of "success" as they see it. Governments and agencies charged with responsibility for Indian affairs have chosen certain policies. The educator works within the context of all that has gone before, with the parameters of his influence limited by it. His challenge is to provide the most long-range benefit possible to the tribal group, with the least possible disturbance.

Regulations, budgetary limitations, isolation, and social and cultural factors all serve to complicate the educator's task. Although guided by his ideals, he must constantly settle for what is possible. At the same time, it is always necessary to keep in mind the anthropological code of ethics that "work should not 'adversely affect... the lives, well-being, dignity, and self-respect of any portion of the community' unless the negative effect is minimal and in the long run positive" (Almy 1977:287).

Alternatives

Although it is often difficult for the educator to know how to proceed wisely, especially when a large number of factors are already predetermined, the concerned resource person is usually able to attain solutions which, though less than perfect, are better than the alternatives. To illustrate this, let us consider

the three other basic alternatives to bilingual education for minority groups.

- TO DO NOTHING. Where no, or insufficient, positive action has been taken to ameliorate the effects of contact with the outside world, hundreds of societies have been decimated or become extinct through disease and exploitation. Even if they survive, history abounds with examples such as those of the Huitotoan groups and the Cashibo of Peru which show that lack of constructive intervention immediately after the first violent contacts with the outside world proves demoralizing and destructive. Only in recent years, with the aid of modern medicine, bilingual education, and other government programs, are the Huitotoan groups and the Cashibo recovering a semblance of equilibrium. Abuses and killings by the "white man" decimated these groups during and after the rubber boom of World War I.
- TO ISOLATE. Some tribal groups have been alloted large reservations, and outside contact is prohibited. However, is it ethical to impose a zoo-type policy on other human beings, arbitrarily limiting their freedom of choice?
- TO EDUCATE IN THE LANGUAGE OF THE MAJORITY. This practice is no longer considered productive by today's best educators. George Blanco (1977:5), quotes Andersson and Boyer (1970), Saville and Troike, (1971), and von Maltitz (1975), saying: "Such authorities address the importance of language in bilingual education and they are convinced, along with others (UNESCO, 1955), that the... native language... is not only the best language for instructional purposes, but that its use in school can only enhance the child's self-image and esteem for his own culture."

There are also strong negative effects of educating first in the second language. Besides the mental blocks and discouragement commonly observed, a UNESCO study (1953:67) has pointed out that: "It is generally agreed by educationists and psychologists that a child should first learn to read and write in the language spoken in his home.... When this foundation has been laid, he can acquire a full command of his own and, if

necessary, of other languages: without it, there is danger that he will never achieve a thorough command of any language."

Some of the women of the Cocama language group of Peru exemplify this problem. Forbidden to speak their own language by their parents, yet unable to understand the Spanish language, they have grown to adulthood speaking only a very simplified pidgin without the rich communicative potential of either Cocama or Spanish.

Summary

Thus, when compared to the alternatives, bilingual education in the jungle, in spite of its hazards, has, in the judgment of vernacular speakers and specialists who have worked with the program, produced superior results: we find self-aware, confident individuals, improved participation in the national life, reduced trauma, improved health and economic status, and doors opened to greater independence and freedom of choice. Taken as a whole, no other solution found thus far has proved to be as effective; the positive results outweigh the negative. If acculturation is approached from the vernacular speaker's point of view, if as many concessions as possible are made to the Indian culture rather than expecting all the change to be done by the minority group, and if long-range planning focuses on native leadership, we believe that programs can be developed which are even more effective and more beneficial for all concerned than any we have seen thus far.

BIBLIOGRAPHY

Almy, Susan W. 1977. "Anthropologists and Development Agencies." *American Anthropologist* 79:287 (quoting from the Society for Applied Anthropology meetings of 1974).

Andersson, T. and M. Boyer. 1970. *Bilingual schooling in the United States, Vol. I.* Austin, TX: Southwest Educational Development Laboratory.

Baucom, Kenneth L. 1978. *The ABCs of Literacy: Lessons*

from Linguistics. Tehran: Hulton Educational Publications Ltd. in cooperation with the International Institute for Adult Literacy Methods.

Blanco, George. 1977. "The Education Perspective." In *Bilingual Education: Current Perspectives, Vol. 4*. Arlington, Virginia: Center for Applied Linguistics, pp. 1–66.

Cummins, James. 1977. "Psycholinguistic Evidence." In *Bilingual Education: Current Perspectives, Vol. 4*. Arlington, Virginia: Center for Applied Linguistics, pp. 78–89.

Fishman, Joshua A. 1972. "The Use of Vernacular Languages in Education: The Report of the UNESCO Meeting of Specialists, 1951." Reprinted in Joshua A. Fishman, ed., *Readings in the Sociology of Language*. The Hague: Mouton.

Hildreth, Gertrude. 1948. "Interrelationships among the Language Arts." *Elementary School Journal* 48:538–49 (quoted by William S. Gray in: *The Teaching of Reading and Writing*. 1956. Paris: UNESCO, p. 73).

Horn, Ernest. 1937. *Methods of Instruction in the Social Studies*. New York: Charles Scribners and Sons, pp. 155–56.

Lambert, Wallace E. 1972. *Language, Psychology, and Culture*. Stanford CA: Stanford University Press.

Ortega, Marleen H. 1978. "Evaluación de la educación bilingüe y monolingüe en Majipamba y Calhua." Quito: Instituto de Lenguas y Lingüística, Pontificia Universidad Católica del Ecuador.

Saville, M.R. and R.C. Troike. 1971. *A Handbook of Bilingual Education*. Washington, D.C.: TESOL.

Solá, Donald F. and Rose-Marie Weber. 1978. "La planificación educativa en países multilingües: un informe sobre una reunión de trabajo." Cuzco and Lima: Cornell University Language Research Program.

UNESCO. 1953. "African Languages and English in Education." *(Education Studies and Documents, No. 11)* Paris. UNESCO.

von Maltitz, F.W. 1975. *Living and Learning in Two Languages: Bilingual-Bicultural Education in the United States*. New York: McGraw Hill.

PART IV
THE PREPARATION OF MATERIALS

PART IV
The Preparation of Materials in Vernacular Languages

There are many books available on primer making.[1] Consequently this section is not a discussion of the "how tos" of book making. Rather, a number of articles have been selected which, growing out of the bilingual school program, illustrate some of the experiences which the field linguists have had while preparing material for vernacular languages.

The first article, written by Eugene E. Loos, discusses reading as the process of learning to identify a visual symbol with a psychological linguistic unit. He treats the need for a scientific alphabet based on the psychological units of the language and then the natural use of the vernacular in the materials prepared for literacy purposes. This presentation represents only one of several ways of looking at alphabets and relating them to reading. Loos has done linguistic field work, primer prepara-

---

1 See for example the following:

Faust, Norma, Furne Rich, and Mary Ruth Wise. 1975. *La preparación de meteriales de alfabetización en programas de educación bilingüe*. Lima, Perú: Centro de Investigación de Lingüística. Universidad Nacional Mayor de San Marcos.

Gudschinsky, Sarah. 1959. "Recent trends in primer construction" *Fundamental and Aault Education* 4:61–65.

1974 *Manual de alfabetización para pueblos prealfabetos*. México, D.F., Sep/ Setentas.

Wendell, Margaret. 1975. "An experimental project for production of reading material in a pre-literate society". *Notes on Literacy*. 18:5. Huntington Beach, California: SIL.

tion, and translation in the Capanahua language. He has served as Coordinator of Technical Studies, overseeing the academic work, and is currently General Director of SIL in Peru.

Patricia M. Davis presents the challenges encountered while preparing a series of primers in the Machiguenga language and describes and illustrates the solutions attempted. Problems include long verbs and the fact that in idiomatic Machiguenga repetition is not frequent except to indicate continuative action.

Martha A. Jakway has contributed two chapters to this section. The first shows how the bilingual education program in the jungle has been adapted to the culture of the vernacular speakers. In the second she describes how native authors have been trained through writers' workshops. Details are given on specific workshops held in Peru and the result they have had in terms of increased native literature.

The final chapter in this section shows how the children themselves contributed to materials used in the schools. In the Amuesha schools, students who had learned to write in Amuesha were each given a notebook in which they were encouraged to do creative writing when they had time. This proved to be a successful way to teach composition, and the materials were then also used in the preparation of primers and library books. The author of this chapter, Martha Duff Tripp, has worked closely with the Amuesha bilingual school teachers, preparing materials in that language and supervising the village schools.

15
THE APPLICATION OF LINGUISTICS TO THE PREPARATION OF DIDACTIC MATERIALS[1]

Eugene E. Loos

Mastery of the written page is the essential ingredient for formal education. The progress of the student in successive levels of study presupposes a good foundation in reading and writing in the lower levels, and the ability to read and write well in the lower levels presupposes a mastery of the language used as the means of instruction.

To point out the relationship between language and literacy, the diagram on the following page presents a conceptualization of the components of interpersonal communication.

Moving from left to right on the chart, communication begins with *Thought*, which we will not try to define except to say that it can be viewed as an abstract structure manifested by syntactic units that have assigned phonological values (phonemes) which are also abstract. The phonological units are put in sequence orally by the production of acoustic vibrations, using the nerves and muscles of the articulatory system, sometimes with many variations in the phonetic production of the same abstract unit.

Hearing involves the opposite process: the acoustic vibrations are perceived by the ear and interpreted as a sequence of

---

1 Revised version of an article published in 1972 by the Peruvian Department of Education under the title, "La lingüística aplicada a la preparación de material didáctico," *Primer Seminario de Educación Bilingüe, algunos estudios y ponencias*.

phonological units related to a syntactic structure that can be understood semantically. The process of oral communication depends on the production and perception of the acoustic signals that represent the abstract phonological units. We will call these units (phonemes) psychological symbols because they are assumed to exist in the subconscious.

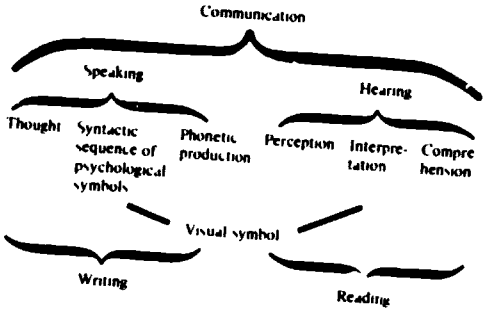


Figure 15.1 The components of communication, showing the relation between language and literacy.

Literacy is the acquisition of a new process: that of identifying a visual symbol with a psychological one. In writing, a psychological symbol is represented by a graphic symbol, i.e., a letter. In reading, the graphic symbol is identified with the corresponding psychological symbol, and when reading aloud, a phonetic value is assigned according to the variations indicated by the phonological system of the language.

The speaker of a language follows the speech patterns used by the other speakers of that language to produce phonetically the psychological symbols, with some small idiosyncratic variations. When compared in different languages, however, similar psychological symbols may differ in their phonetic variations. For example, in Spanish the nasal consonant *n* is pronounced as an alveolar before vowels but as a velar before velar consonants and word final (in some dialects). In Ticuna, on the other hand, the alveolar *n* is distinguished from the velar *ŋ*. The alveolar and velar nasals represent different psychological symbols. In Capanahua, the nasal consonant *n* is a single psychological symbol and requires only one graphic

symbol, although it is pronounced as an alveolar before vowels, as a velar before velars, as a bilabial before bilabials, as nasalization of the vowels that precede it when it occurs word final, and as nasalization of vowels and semiconsonants that follow it when it occurs immediately preceding a semiconsonant.

Beginning readers and writers seem to follow the process of mentally assigning the phonetic qualities corresponding to the symbol, even if they do not produce the sound orally. Considering that the phonetic articulation of any of the psychological symbols of the alphabet of a language can be different from a similar counterpart in another language, it is evident that we cannot demand an exact identity of graphic symbols (practical alphabets) between languages that are different. The adaptation of a practical alphabet presupposes analysis of the phonological system so that the most adequate graphic symbols can be chosen to represent the psychological symbol. In addition, to facilitate the students' transition from reading in their own language to reading in another language, it is convenient to choose the graphic symbols that offer the best possible correspondence of phonetic values between the two languages.

The preparation of educational materials also requires a knowledge of the syntactic system of the language so that the syntactic constructions used in the materials will be natural and will not draw the student's attention to strangeness in the expressions but rather toward the material to be learned. Literacy should have as its goal the enabling of the student to read not only with comprehension and fluency, but for enjoyment and acquisition of new information.

In our experience, we have observed that native teachers find life in an isolated community less difficult and more productive than nonnatives because they are members of the same language group. As a member of his culture, the native teacher has great advantages over a nonnative one. Although his education is often limited, he knows and understands his language and culture and the ecology. In the Amazon area, the native speakers available to serve as teachers have no formal teacher training, many having never even attended high school.

Even if a prospective teacher has had more scholastic background, this does not guarantee that he will be ingenious enough to utilize all the basic pedagogical principles in his teaching, especially if during the first year of work he must cope with various levels of students. It can be expected that a teacher with less education will have even greater difficulty.

For this reason it is important that the materials be prepared in such a way that a teacher with a minimum of sophistication automatically follows well-founded pedagogical techniques. Specifically, whoever prepares the materials should help the teacher by incorporating into them such basic pedagogical principles as:

(1) moving from the known to the unknown, using concepts that are interesting to the student
(2) adapting the instruction to the cultural limitations and peculiarities of the student
(3) providing sufficient repetition
(4) providing systematic comparisons
(5) providing systematic contrast
(6) promoting progress by controlled introduction of new concepts
(7) progressing from the first stage of learning (recognition) towards the second stage (application).

If these pedagogical principles have been incorporated into the design of the book, the teacher will be less burdened and will be free to devote more effort to taking better care of the individual needs of the students. For example, the principle of adapting the instruction to the cultural and linguistic peculiarities included the necessity of organizing the first Machiguenga reading books on the basis of the verb instead of the noun and of following the syntactic pattern of the language, which limits the repetition of nouns. In Machiguenga, nouns functioning as subject are not ordinarily repeated in subsequent sentences within the same paragraph (see chapter 16).

The number of new concepts and the rate of their presentation will determine the speed at which the student will progress

through the pages of a given book.[2] Thus, a primer which included the 31 letters of the Amuesha alphabet in 20 pages would be more difficult than a primer which included 16 letters in 48 pages, and the progress of the students would be slower. Progress in using the art of associating subjectively the graphic symbols with the psychological symbols is important for the student's encouragement. To promote use of the new skill, the introduction of new concepts in a book is limited, and the number of exercises based on each concept is increased. This can be determined by a study of the letters of the alphabet. The letters which occur more frequently, and which therefore can be used to produce a greater variety of sentences, are chosen as the most productive ones. Using these productive letters, it is possible to teach only a part of the alphabet in the first book of a series, using many exercises and presenting from the beginning varied sentences that sound natural to the student. Thus, beginners have a sense of accomplishment because they are reading sentences that are meaningful and natural in their syntactic form: the sentences "speak" to them.

The first primer is begun by choosing from among the most productive letters those that exhibit the greatest contrast in size and shape: round, straight, tall, low. New words are presented utilizing a minimum of these contrasting letters and combining them in different ways, gradually introducing new combinations in natural sentences based on subjects that are familiar to the culture. Since the readers already master subjectively the rules of their language, they will pronounce the letters correctly once they learn to associate the graphic symbol with the psychological one.

---

2 Most of the principles described in this section were used in primers based on the psychophonemic method during the early years of the Peruvian experiment. These were often supplemented with books which included drills on syllables and frequently occurring affixes and combinations of affixes. Since about 1966 other methods have also been used

When preparing primers it is also important to pay attention to mechanical orientation in the art of reading, such as:

(1) Reading readiness orientation
  (a) Reading from top to bottom of the page
  (b) Reading from left to right of the page
  (c) Recognition of pictures
  (d) Reading pages in sequence
(2) Reading orientation
  (a) Breaking down complete units (words) into their parts (syllables)
  (b) Using these parts (syllables) to form complete units (words)

Fluency in reading is developed by using texts that conform to the linguistic patterns of the language. It is important to use expressions that can be illustrated with clear pictures and to make attractive pages. The size of the letters should be controlled, as should the amount of content on each page.

Providing writing exercises in conjunction with the primers helps students to progress early or simultaneously towards the production stage (writing) until they can write their own cultural accounts (legends which so far have been passed on orally) and new productions, such as autobiographies.

A bilingual education program normally requires a basic linguistic analysis on which to base the preparation of materials. The analysis should include:

(1) phonological analysis and formulation of a practical alphabet.
(2) grammatical analysis, to distinguish natural from unnatural patterns
(3) a survey to determine dialectal variations in cases of hitherto unstudied languages.

The materials prepared should include:

(1) a basic series of short reading primers (four to eight, depending on the complexity of the language) (Mastering a

series of primers has a better psychological effect on the student than completing one thick volume.)
(2) intermediate primers
(3) advanced reading texts.

Gudschinsky[3] and her colleagues proposed that the syntactic form of expression and the relationship of the reading material to the culture and to the personal experience of the reader or writer, can be used as parameters to determine expected degrees of difficulty of the materials.

TABLE 15.2. RELATIONSHIP OF CULTURE, PERSONAL EXPERIENCE, AND SYNTACTIC FORM TO DEGREE OF READING DIFFICULTY OF A PIECE OF LITERATURE

Degree of Difficulty	Relationship to Culture	Relationship to Experience	Syntactic Form
1	Internal	Direct and Personal	Free
2	Internal	Indirect	Free
3	External (Foreign)	Indirect	Free
4	External	Indirect	Free
5	External	Indirect	Restricted literal translations

The easiest materials are those dealing with subject matter which is already known by the reader, is familiar to the culture, and is expressed naturally. The most difficult are those dealing with subject matter which is foreign to the culture and to the personal experience of the learner and which use a

restricted syntactic form,[4] such as materials translated from another language in which the original text has been followed closely.

The use of materials in a bilingual education program presupposes trained personnel: (1) teachers who have received orientation in the philosophy, method, and materials used; (2) trained supervisors; and (3) communities that are ready to receive them (officials, parents, and the public in general). The materials cannot achieve the purpose they are designed for if they are not used according to their design.

3 Sarah C. Gudschinsky, *A Manual of Literacy for Preliterate Peoples* (Ukarumpa, Papua New Guinea: Summer Institute of Linguistics, 1973)

4 Materials of this type are not recommended for use in a primary school program since they are unnatural stylistically and are therefore very difficult to comprehend.

16
THE CHALLENGES OF PRIMER MAKING[1]

Patricia M. Davis

The purpose of this chapter is to present some of the problems that complicated the preparation of a series of primers in the Machiguenga language,[2] and to describe the solutions attempted. It is necessary for the reader to realize that the Machiguenga language and world view are totally different from that of Indo-European cultures. Also, since most Machiguenga live in extremely isolated areas, many of them are not familiar with concepts which the mechanized world considers basic.

Reading is one of those concepts. The task of the educator, therefore, is to make comprehensible a concept which is totally foreign to the Machiguenga, using the natural forms of the mother tongue as the key. Some of the problems treated here may be limited to the Machiguenga language and to some varieties of Campa; others may be encountered more frequently around the world. However, the search for solutions serves as an example of the importance of tailoring literacy materials to the linguistic structure of the target language in order to facilitate learning.

---

1 An earlier version of this chapter was published under the title "Confeccionando cartillas" in *Comunidades y Culturas Peruanas* 1, No. 1, December 1973. (Pucallpa, Perú: Instituto Lingüístico de Verano.)

2 Machiguenga is one of the closely related Campan languages and dialects within the Arawakan family. It is spoken by an estimated 7,000 people.

After a lengthy period of experimentation, we were convinced that methods used successfully to teach reading to some language groups produced unsatisfactory, or at best mediocre, results among the Machiguenga. It appeared that this occurred because, in one way or another, those methods were oriented to languages in which nouns were predominant, or at least could be repeated frequently, and did not make adequate provision for the predominance of verbs in Machiguenga discourse. It would be necessary, therefore, to find a method which would concentrate on verbs.

The problem was complicated by the fact that Machiguenga verbs are *very* long (see figure 16.1). More complex still, the distribution of syllables is almost infinitely varied. It was extremely difficult to find segments larger than the syllable which were similar enough to be usable for drill purposes. Furthermore, in idiomatic Machiguenga, exact repetition is infrequent except for indicating continuation of an action.

Given these restrictions, how could we communicate the sophisticated concepts inherent in reading? How could we prepare readers to handle the complexity of natural text without unnatural repetition? How could we stimulate interest among a people who found "paper too hard"? To accomplish all of this, we finally devised a series of primers which incorporates various methods and divides the teaching of basic reading concepts into two phases. The first phase is prereading: students learn to recognize pictures[3] and, simultaneously, use a workbook which, by means of pictures, teaches recognition of similarities and differences (figure 16.2). This is followed by a primer which teaches 23 sight words, most of them nouns which are highly contrastive in shape. In the simplest way possible, the concept is established that the objects of our world can be represented with written symbols (figure 16.3).

The teacher presents new words using the following steps: (1) the class converses about the pictured object, (2) the teacher shows how the name of the object is written,

3 It is important that the pictures represent objects which are both familiar to the people and interesting to them.

students find other occurrences of the word on the same page, (4) find other occurrences of the word throughout the book, and (5) read the entire page for themselves.

It is important to mention here that, in our experience, if primers are to be taught by tribespeople with a limited amount of educational preparation, it is best to restrict the methods within a primer series to the few which can consistently be used page by page. Unsophisticated teachers have performed very well when they were able to recognize by the structure of the page itself which of two or three methods should be employed (one for new words, another for new syllables, and another for review). However, they may easily become confused if they are required to use any extensive variety of methods and/or visual aids.

The second phase of the reading program initiated the teaching of syllables. My colleague, Betty Snell, who speaks the Machiguenga language fluently, was the one who suggested—after a long search—the advantages of a folklore story with its familiar cultural concepts and natural vocabulary. One relatively simple story seemed appropriate, and although it was rather long, it contained four natural divisions. It was divided into four primers, using the vocabulary and concepts taught in each to accelerate the learning processes in the following book.

The story had to be drastically abbreviated in the first primer. However, it was published in full in the introduction, with instructions to the teacher to read it to his students, thereby familiarizing them with the content of the material they were about to study. High interest and motivation were aroused as students looked forward to learning to read the story for themselves.

The first page begins: "There lived (was) a man" (figure 16.4). Two contrasting words are taught in the setting of a natural sentence, and each word is practiced four more times on the same page.

The second page repeats the sentence and teaches the syllables *i* and *ma* (figure 16.5). At first, the Machiguenga found the concept of syllables extremely difficult, since syllables often have no inherent meaning and are not ordinarily

pronounced in isolation. It takes at least two days to teach page 2 thoroughly, even with the use of accompanying drills.

Throughout the primer series, the pattern of key sentence, key word, key syllable is repeated. New items are limited to one, or at the most two, per page, with intensive drill on the page of initial introduction and on the following several pages. Large check charts, compiled as each page was constructed, tabulated the items introduced, enabling us to keep track of the frequency of repetitions and helping to ensure sufficient practice for each item.

Capital letters were first introduced on page 5 (figure 16.6). Subsequently, complete sentences employed capital letters and periods. However, each capital letter was considered to be a new item and was given corresponding drill. Each new sentence added information to the story. These sentences were drilled (with different word order wherever grammatically permissible) in order to avoid the problem of students memorizing the material.

By the time they had reached page 10 (figure 16.7), students had learned four syllables and were ready to begin combining them into new words. (It has proved important for pupils to realize that each syllable is useful for building many words and that with a knowledge of syllables one can attack words one has never before seen.) The simple process on page 10 helps the student understand how to sound out a new word. Thereafter, this type of practice is included after the introduction of each new syllable.

On page 25 (figure 16.8), the concept of syllable "families" is introduced. It would be very difficult to memorize all the syllables of a language individually, but once students see the similarities between groups (*a, ka, nc. ma* etc.), it is easy for them to learn the whole group and generalize to other similar sequences.

Pages 44 and 45 (figures 16.9 and 16.10) introduce the longest word of the primer. We have found that it is not difficult for students to learn one or two long words (either by sight or by syllables), if they are known words and contribute to the sense of the story.

Finally, on page 57 (figure 16.11) the children read an abbreviation of the story and finish the first phase of the man's adventures, having learned 34 words and 22 syllables. The following is the simplified plot of the story:

> There was a man who was walking through the jungle. He heard an armadillo which had climbed up a tree to chop down clusters of fruit, leaving his shell at the foot of the tree. Since this man was a trickster, he thought that it would be funny to smear the shell with a slippery substance. When the armadillo descended and tried to "dress himself," the shell slipped off *soáa*. But the man took pity on him, cleaned off the shell, and they became friends.

Primer 2 continues with the second stage of the man's journey. As in Book 1, the teacher first reads the story to the students, and then the story is built slowly for the students to read, using the same methodology. This second stage of the story required the presentation of a heavy load of new syllable In order to give adequate drill, it was necessary to add small paragraphs—drilling new syllables and the reading of sentences—to supplement the main legend. Primer 2 also introduced hyphenation of words at the end of lines (figure 16.12), the reading of two syllables as a unit (figure 16.13), and the continuation of a story from one page to another (figures 16.14 and 16.15). It gives special attention to closed syllables (figure 16.16), which seem to be especially difficult for Machiguenga students.

By the end of the book, the students know 30 more syllables and can read a two-page abbreviation of the story (figures 16.17 and 16.18), consisting of a conversation between the man and a toucan whom he has met during his journey.

The third primer continues the story, this time without the need for the teacher to read an introduction for the students (figure 16.19). Two-syllable particles are taught as one unit (figure 16.20)—a device begun in Book 2 to help the student to group syllables and to span a long word in two to four eye motions, rather than having to grapple with each syllable

individually. Instead of each word being taught and drilled separately, words "built" from known syllables are pointed out by underlining, and students are challenged to read them without help since they know all the components (figure 16.21). The teaching of syllables is now extended to members of the syllable "family" not listed in the story (teaching by extension of known patterns: figure 16.22). The entire alphabet is taught (figures 16.23 and 16.24), and reading of capital letters is practiced (figure 16.25).

By the end of Primer 3 the students know 25 new syllables and six new particles larger than the syllable, and can read a simplified version of the story. The subject of the man's encounter with a magical anteater who comes apart at night.

Primer 4 continues the story, giving special attention to the use of syllables in new words (figure 16.26). In many languages it is not possible to teach all the syllables, especially if there are a great many syllables closed with consonants and consonant combinations. In these cases one must teach each *type* of syllable thoroughly (for example, *rom*, *tom*, and *pom*), and experience has shown that the students will be able to make the extension to other variations of that type (such as *mom*, *com*, *som*).

Additional exercises in Book 4 show the relationship of long words to their simpler forms (figure 16.27). There is drill on reading capital letters (figure 16.28) and on answering questions about the story content (figure 16.29)—a check on comprehension—and the remaining syllables of the language are introduced and practiced in "family groups." At the end of the book, students are able to read the complete version of the story, which leaves the man living contentedly with his sister in the home of a jaguar. At this point, students are able to read uncontrolled vocabulary.

It should be mentioned that this program does not depend exclusively on the use of the primer. Flash cards which drill both words and syllables are used for each new item introduced in all primers except the fourth, which has only syllable flash cards. Words and syllables are drilled on the

blackboard. The writing program, carefully geared to correspond day by day to the reading program, reinforces the reading with practice on each new item as it is introduced.

Testing has shown that with this method students of average intelligence can complete the program in three school years, often less, and are able to read their language with comprehension—a considerable accomplishment in view of the difficulty of the long words in Machiguenga literature (figure 16.30—a page of text). However, to maintain the skill permanently and to achieve speed and fluency, considerably more practice is needed with various types of stories.

LENGTH OF MACHIGUENGA VERBS:

Average: 12 - 18 letters.

Yovirɨnitanakero.

"He made her sit down."

Common: 25 - 35 letters.

Impashɨventaigavetanakempatyo.

"They will be ashamed, but they won't do anything (about it)!"

The longest found thus far:

51 letters and digraphs.

Irapusatɨnkaatsempokitasanoɨgavetapaakemparorokarɨtyo.

"Probably they will turn right over into the water when they arrive, but they won't stay that way."

Figure 16.1. Example of verb length in Machiguenga.

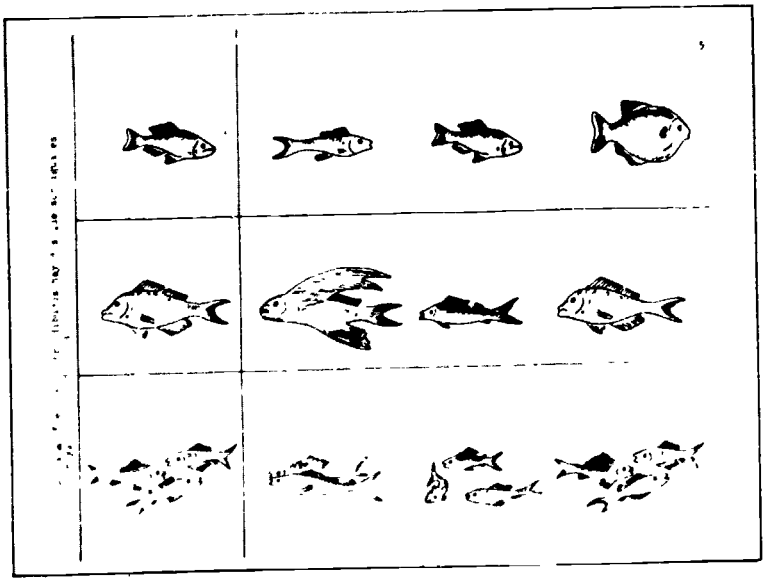


Figure 16.2. Sample page from a preprimer.

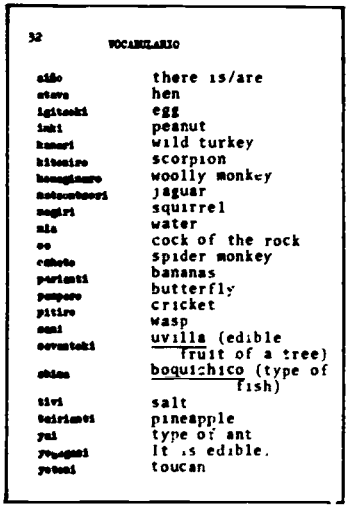


Figure 16.3. Sample of Machiguenga vocabulary.

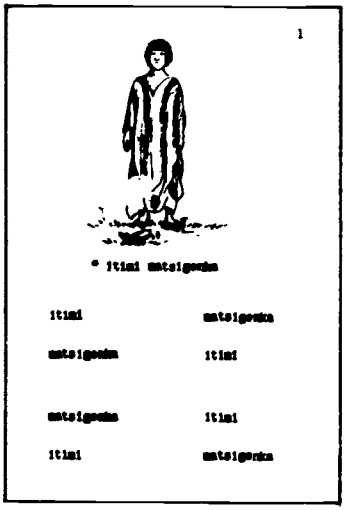


Figure 16.4.

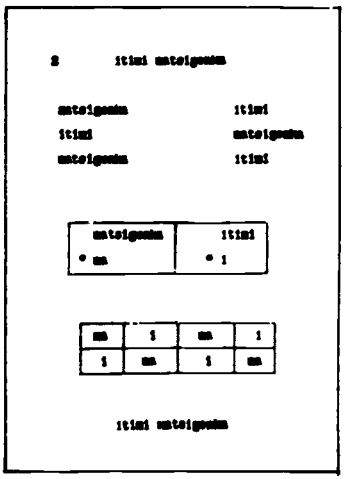


Figure 16.5.

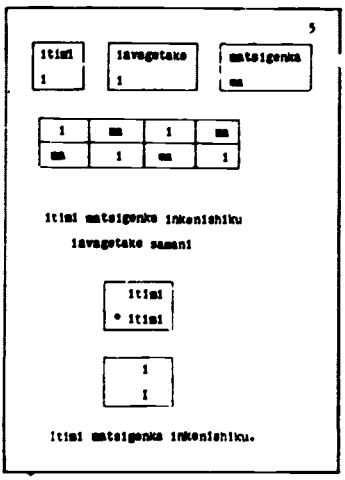


Figure 16.6.

Figure 16.4–16.30. Sample pages from Machiguenga readers.

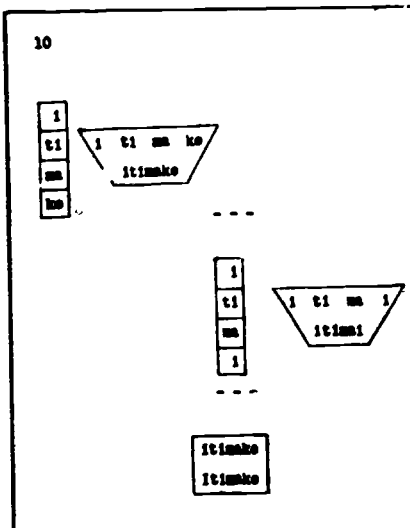


Figure 16.7.

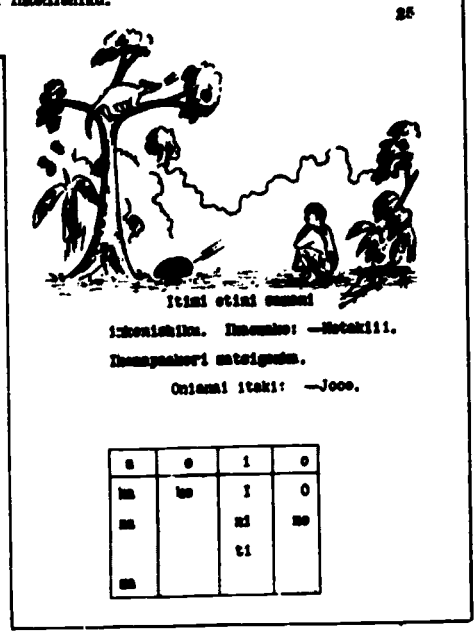


Figure 16.8.

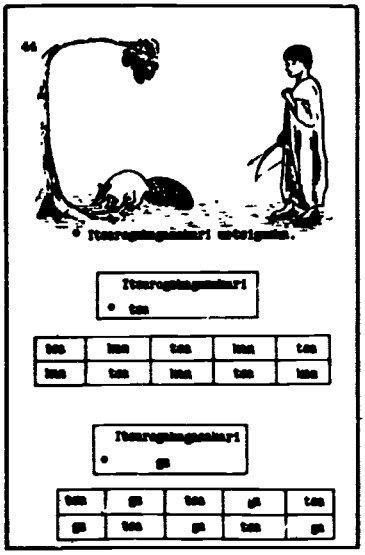


Figure 16.9.

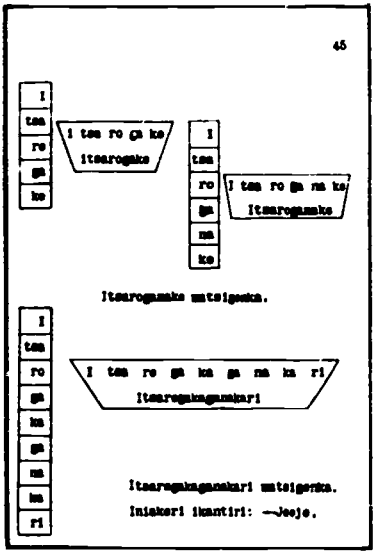


Figure 16.10.

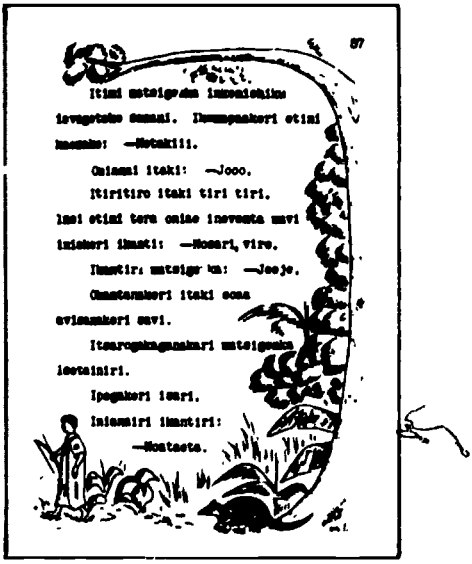


Figure 16.11.

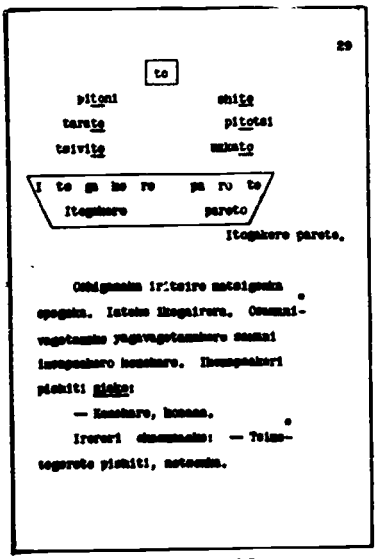


Figure 16.12.

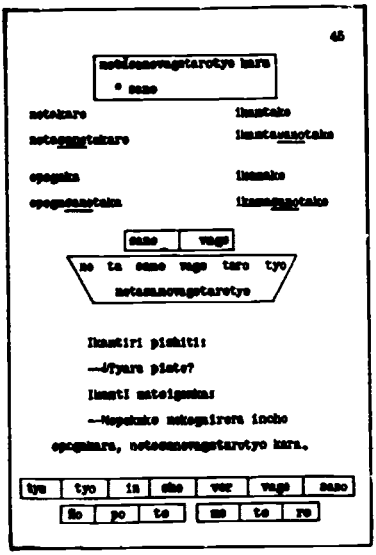


Figure 16.13.

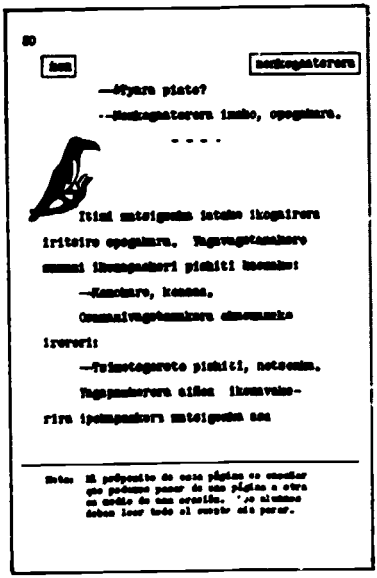


Figure 16.14.

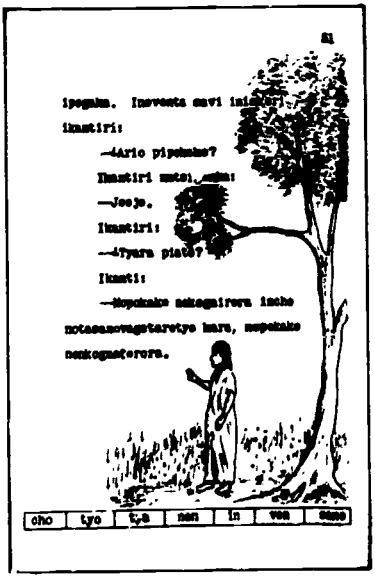


Figure 16.15.

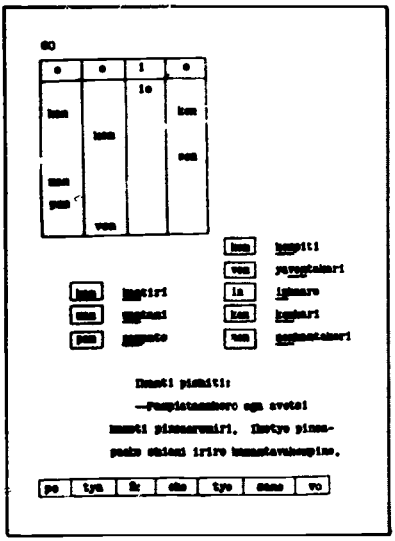


Figure 16.16.

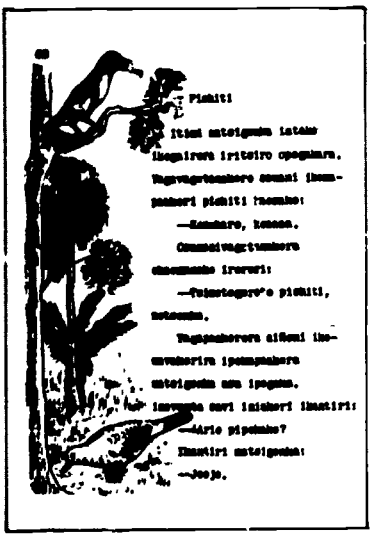


Figure 16.17.

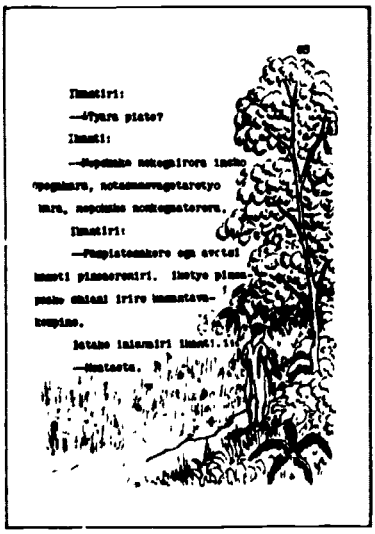


Figure 16.18.

Figure 16.19

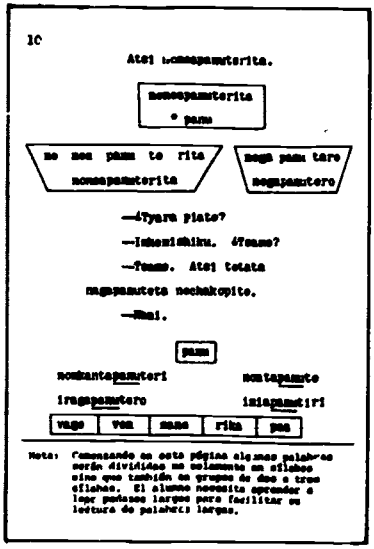


Figure 16.20.

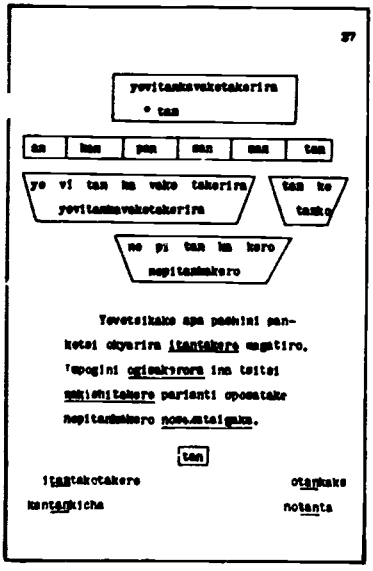


Figure 16.21.

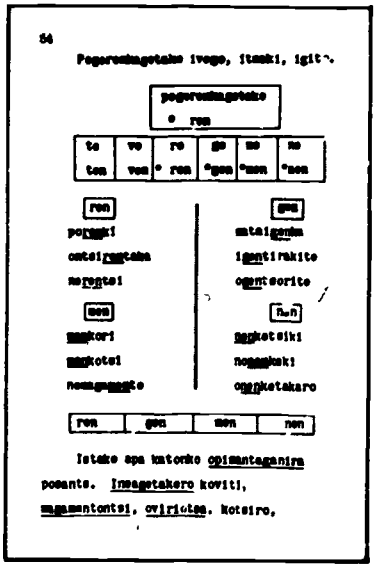


Figure 16.22.

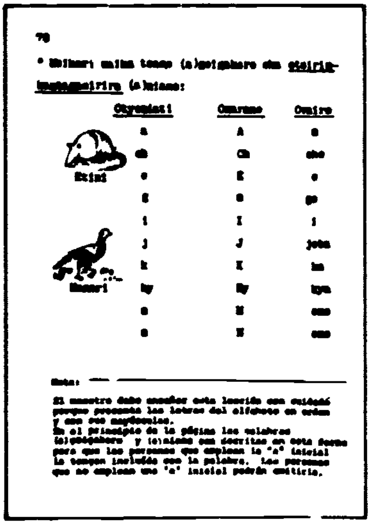


Figure 16.23.

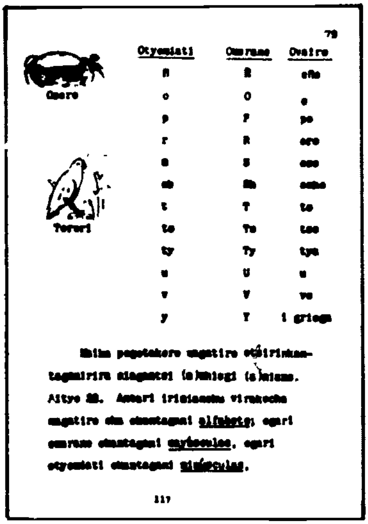


Figure 16.24.

81

Kantankicha aikiro okonogaka otsirinkantagani mayúscula magatiro.

¿Pagaveako piniavantakero oka?

ITIMI MATSIGENKA INKENISHIKU IAVAGETAKE SAMANI. IKEMAPAAKERI ETINI KAEMAKE: —NOTAKIII. ONTANAI ITAKI: —JOOOO.

ITIRITIRO ITAKI TIRI TIRI.

INEI ETINI TERA ONTAE INEVENTA SAVI INIAKERI IKANTI: —NOBARI, ¿VIRO?

IKANTIRI MATSIGENKA: —JEEJE.

OKANTANAKERI ITAKI SOAA AVISANAKERI SAVI.

ITSAROGAKAGANAKARI MATSIGENKA ISETAINIRI.

IPEGAKERI ISARI.

INIANAIRI IKANTIRI:

—NOATAETA.

Figure 16.25.

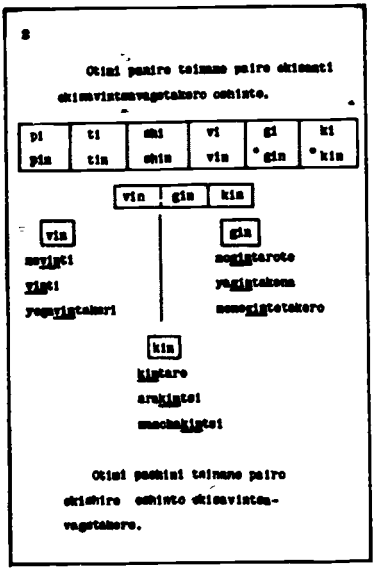


Figure 16.26.

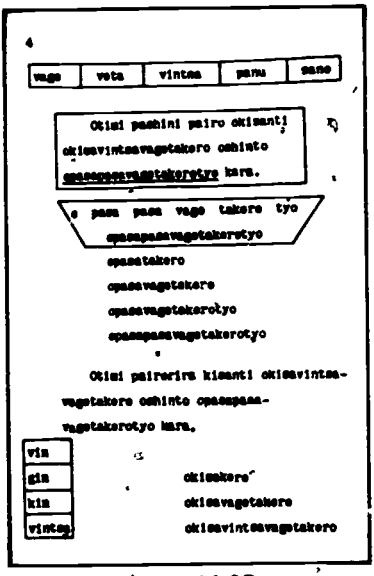


Figure 16.27.

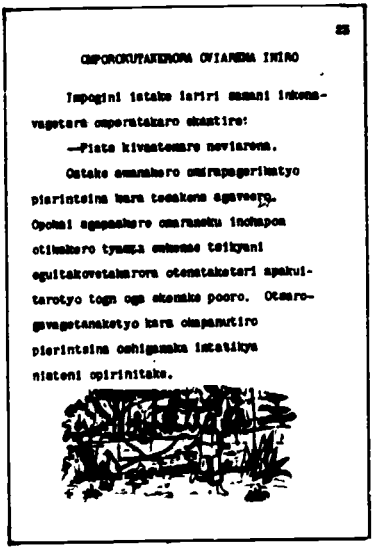


Figure 16.28.

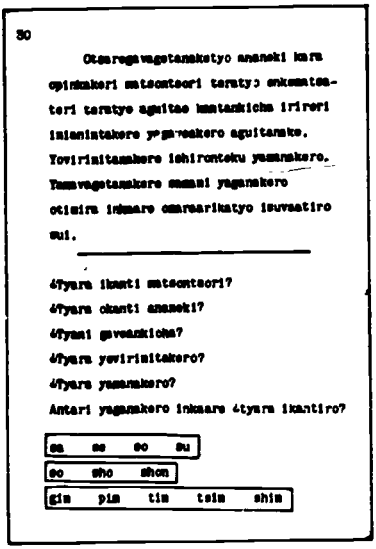


Figure 16.29.

18

Yamanakeri otishiku samani. Ikaemanake surari:

—¡Eeee, tainakario narokya iragavagetake ivegaga!

Okemisantumatirityo itsinanetsite teroogn, teroogn, ituakagagematanakerityo inchato. Mameri tyanimpa pugamentanakerine. Okemi ariompa, ariompa, itsirepeenkatanake. Osamanitanake asa ipegaka imatanakeri yagaveakeri. Otsarogavagetanake oshiganaa aventaiganaarira pashini matsigenka. Otovaigavagetanai ikamosoigavetari iporoakagavagetakeri itimponkitirenkakagavagetanakerityo inchato. Intimakeme pugamentanakerinerira intime, iragaveakenkani kasonkaatini. Maika intagati.

Figure 16.30.

(Lemke, 1968)

Aguaruna school children learn about what causes disease as health promoter Julio Paukai points out a colony in a bacterial culture (see chapter 22).

(Congdon, 1973)

Oral polio vaccine is administered to a Ticuna infant by the health promoter, Lucas Cándido (see chapter 22)

17
CULTURALLY ADAPTED EDUCATION[1]

Martha A. Jakway

Why should a one-room schoolhouse in the jungle of Peru (with thatched roof, walls of wild cane, dirt floor, and homemade desks) be of interest to educators all over the world? Because this schoolroom is the practical demonstration of an educational adventure, on a relatively large scale, which has been tried in few other countries.

In its official statement concerning bilingual education policy, Peru indicates that a minority group does not have to reject its own life-style in order to fit into the national culture. Peru's policy of cultural pluralism allows for different traditions and languages within the national framework.[2] Peru's schools reflect such pluralism. Rather than a monolithic system which requires the same educational aims and procedures for all pupils, the educational system allows diversity and flexibility. Educational goals and practices are tailored to the needs of local communities. The jungle bilingual schools are an expression

---

1 An earlier version of this paper appeared in *Educación*, 13:7–12 (Lima: Ministerio de Educación, 1975).

2 The following appears in *Política Nacional de Educación Bilingue* (Lima: Ministerio de Educación, 1972), p. 10. "The objectives of bilingual education are:... 2. To contribute to the formation of the new man in a just society through the reinterpretation of the cultural and linguistic plurality of the nation, with the intent of creating a national culture. 3. To achieve the use of Spanish as a common tongue of the Peruvian population, at the same time affirming respect for the linguistic diversity and the value of the tribal languages."

of this policy, because the educational program is presently adapted to many indigenous cultures.

What are some of the ways the bilingual school takes the local situation into account?

First of all, the schoolroom itself is adapted to the culture and the locale. Leaves and wild cane or wood are available at no cost in the immediate area, and the people know how to use these building materials and how to maintain and repair the building. Attempts to build with cement and aluminum, however, have usually not been successful, as outside help is needed for the use of these materials and both the initial purchase and upkeep are very expensive. Moreover, wild cane or wood walls and leaf roofs keep out the intense heat much better than cement and aluminum do.

Another local factor which should be taken into consideration is the daily schedule of the home. Children are needed to help their mothers by working in the garden and by baby-sitting. Some children require one or two hours to walk to and from school. Most jungle families do not eat at fixed times, but eat when mother gets home from the garden and cooks the manioc, perhaps at 2:00 or 3:00 in the afternoon. The class schedule in some schools is therefore continuous from 7:00 to 1:00 rather than being interrupted by a lunch hour and lasting until late in the afternoon.

A more important feature is the use of the indigenous language for instruction. Rather than trying to learn reading, writing, and arithmetic through the medium of an unfamiliar language, thus leaving many gaps in the skills and the understanding of the student, children learn the skills in logical progression in their own language. Oral Spanish is learned simultaneously and, by the time the children have mastered some Spanish, they do not need to spend very much time on mechanical skills. And since they only need to learn the few letters which differ from their own language, they can spend most of their time concentrating on understanding the ideas presented in the new language.

Moreover, the children are being taught by a teacher from their own culture. What is the value of this? Each person tends

to believe that his own language and culture are the best. If a teacher of another culture teaches the native children, the teacher often subconsciously transmits the thought that his own language and culture are superior to those of the students. The students then grow up with the idea that their language has no value, that it cannot be written, and that they have to forget it in order to gain prestige as a national citizen. Even if a person from another culture speaks the vernacular language rather well, his thought patterns may be different, and he may have a different system of values.

A classic example of the interference of such cultural differences is the case of the Navajo Indians who were shown a filmstrip prepared by someone from another culture. The film taught a process by pictures, with no narration. When asked what they thought of the filmstrip, the Navajos said they couldn't understand it because it wasn't in Navajo. Obviously, knowledge of a language is not the only element necessary for communication. There is a certain manner of presentation, of approaching a subject, which differs from one culture to the next.

Children taught by a person from their own culture are free to concentrate on the skill being taught, rather than undergoing the emotional strain of coming into conflict with someone from another culture who does not understand them or their way of thinking. A teacher with the same background as his students generally respects his own culture and language, and can impart this healthy respect to the students.

Another of the principal ways in which the bilingual schools take the local culture into consideration is in the curriculum—the materials and teaching methods. It is worthwhile to look at this aspect in detail.

The reading material for jungle children has been prepared with their culture in mind. The average indigenous child has no books, magazines, or newspapers at home, initial contact with the printed page occurs in school. *Mirar, Pensar y Hacer* (Look, Think and Do) is a book of reading readiness prepared specifically for jungle children, teaching them left-to-right progression, to distinguish similarities and differences, and other

prereading skills. All the pictures used in this book are jungle oriented and thus do not cause confusion by presenting an abundance of objects the children have never seen. (See figures 17.1, 17.2, and 17.3, which are designed to teach determining likenesses, differences, and left-to-right progression.)

The basic reading series in most vernacular languages teaches one syllable or a set of syllables in each lesson. The key word used to introduce these syllables and consequently the pictures used to illustrate them are jungle oriented (see figure 17.4).

After mastering the basic reading series, the students read simple storybooks. The initial books are stories about jungle birds, animals, houses, legends, means of transportation—subjects which are all familiar to the students. The more advanced books broaden their horizons by introducing the city, animals of other countries, hygiene, and many other subjects. Whenever circumstances permit, these books are written by a native speaker, so that children are first introduced to new subjects

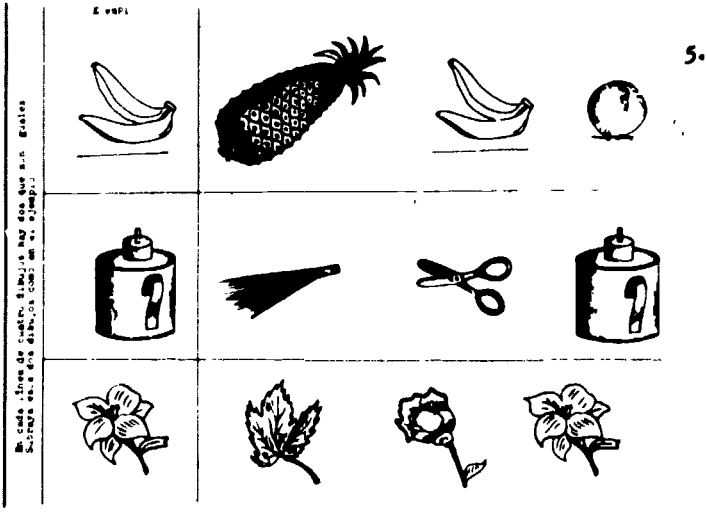


Figure 17.1.–17.3. Pages from preprimer workbook, *Look, Think and Do.*

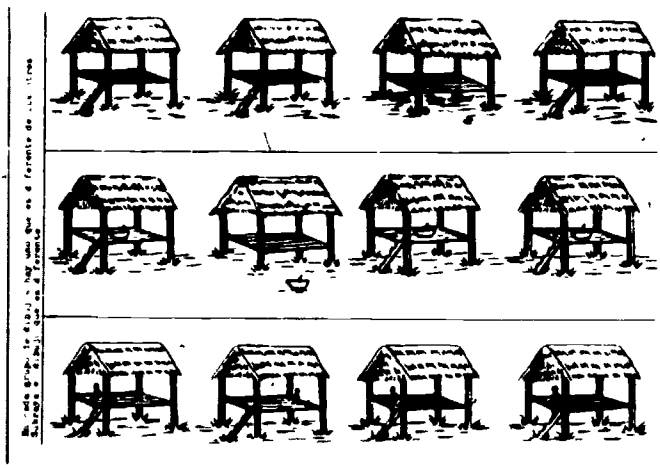


Figure 17.2.

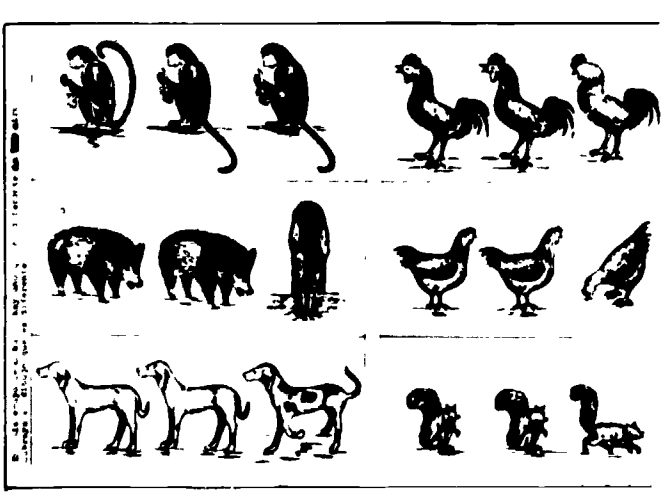


Figure 17.3.

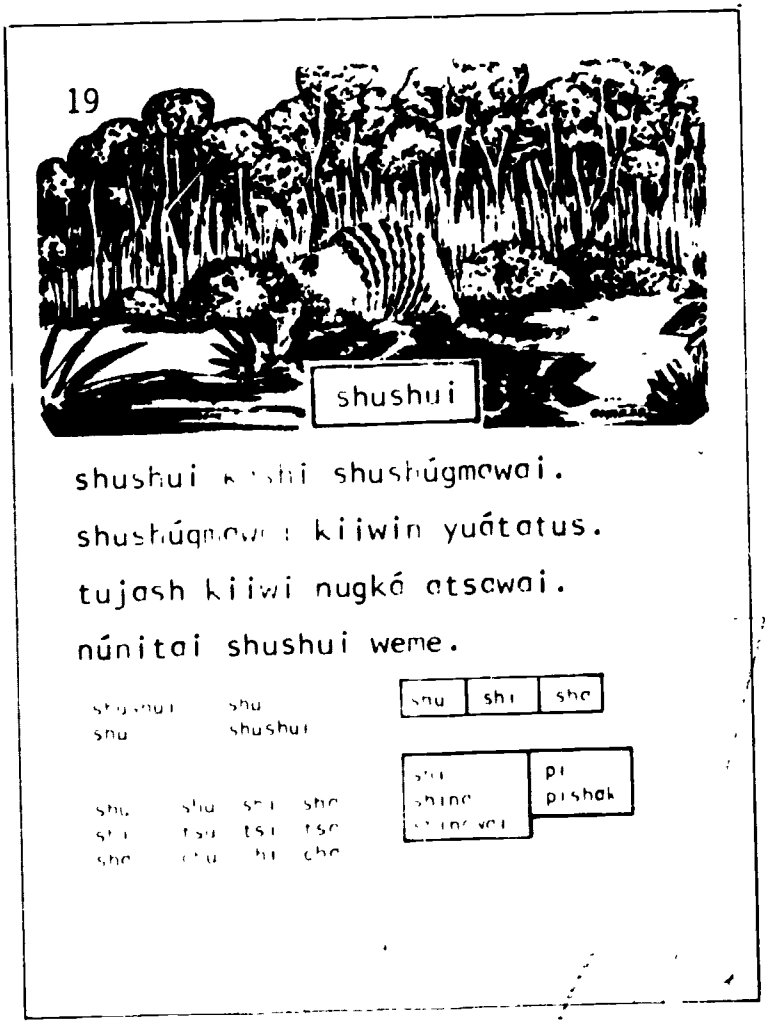


Figure 17.4. Primer page with Keyword by itself, in text, and analyzed

through the eyes of someone from their own culture. For example, an Aguaruna who made a trip to Lima wrote a book about the trip, thus introducing his fellow tribesmen to Lima from the Aguaruna point of view. For some time the school children and teachers in many tribes have been writing these kinds of books for their fellow tribesmen to read. Now literate vernacular speakers, with a flair for writing, are attending workshops to learn the rudiments of writing stories and producing their own books, in order to develop a more extensive body of culturally adapted literature.

How has the presentation of mathematical concepts been adapted to the culture? Jungle children have to gain familiarity with a counting system which is new to them. Many languages

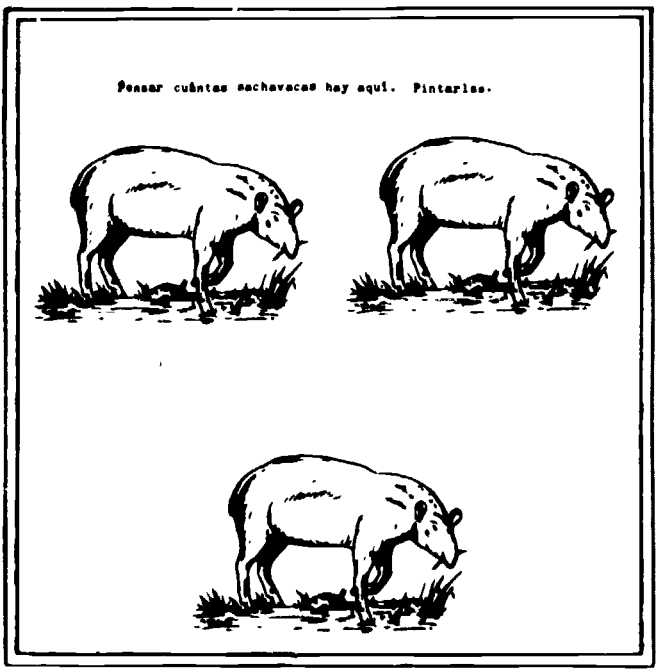


Figure 17.5. Sample page from arithmetic-readiness book.

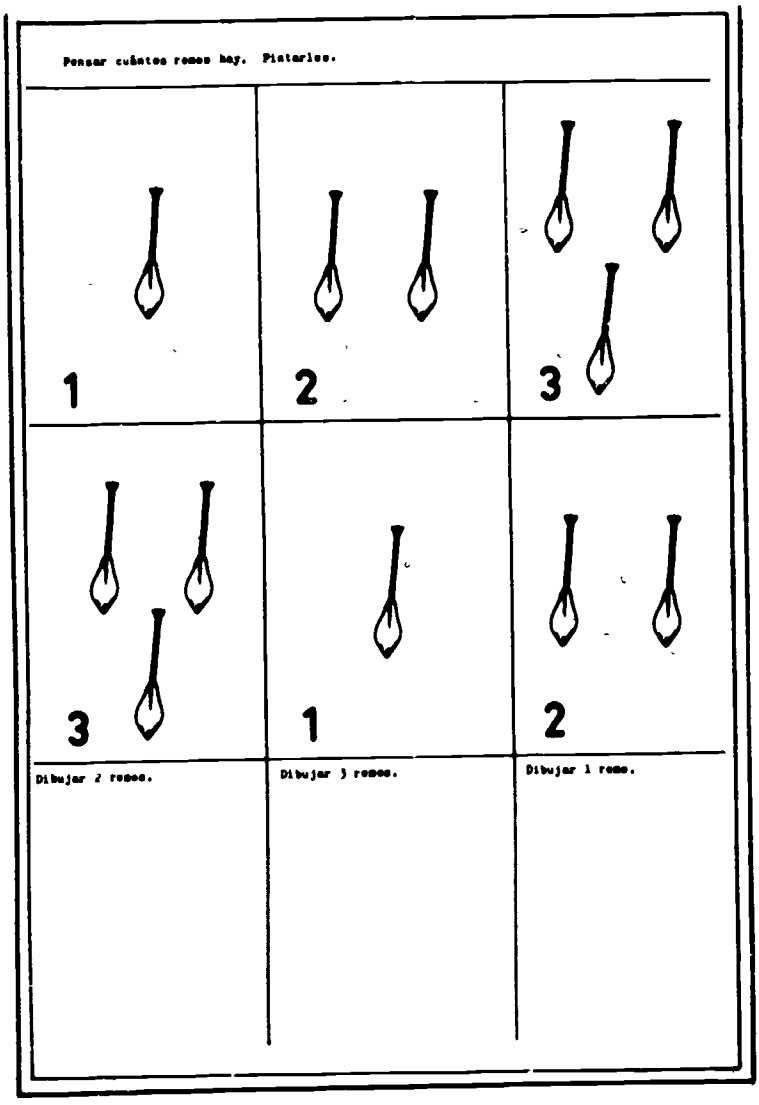


Figure 17.6. Sample page from arithmetic-readiness workbook.

have number systems only up to 3, 4, or 5, which the people count on fingers or toes; higher numbers are simply designated as "much" or "many". Learning the value of each number and number combination for addition and subtraction up to 20 is no small accomplishment for the children.

Vamos a Contar (Let's Count), an arithmetic-readiness book, has many pages of activities for building the number concepts from one to ten, ordinal and cardinal, and teaching children to write them. This book uses pictures familiar to the jungle child, since unidentifiable pictures, abstract numbers, and geometrical shapes do not have much meaning to the child who has no background in this new number system. The emphasis is on varied experiences with concrete material and much repetition of number facts in order to reinforce these new concepts.

Later arithmetic books teach addition, subtraction, multiplication, division, and other processes. For each new process taught, the teacher first presents the material in a concrete situation, then with a drawing, and finally with the abstract symbol. This method of presentation, which has proved to be most effective, is used until the children have completely mastered the process. If one were to go on to abstract symbols too quickly, the children would have no comprehension of what they were doing. For instance, if the teacher presents 1 + 1 concretely, graphically, and abstractly, and then teaches 2 + 2 without a concrete example, the children will not really understand what 2 + 2 means (see figure 17.7).

Word problems throughout the arithmetic books are jungle oriented. For example:

> Luisa has 3 chickens. In a week each chicken laid 4 eggs. How many eggs has Luisa collected in a week?
>
> or
>
> Six people went upriver in 2 canoes. There were an equal number of people in each canoe. How many people traveled in each canoe?

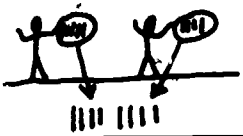
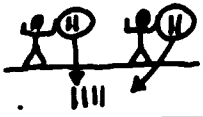
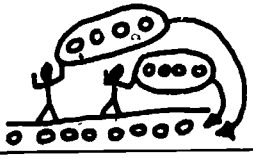
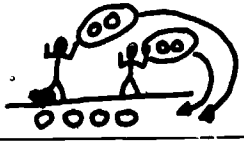
Illustration	Numbers
	4 X (each group) 2 (Groups) 8
	2 X (each group) 2 (Groups) 4
	4 X 2 8
	2 X 2 4

Illustration	Numbers
	2 - 1 1
	2 - 1 1

Figure 17.7 Arithmetical concepts are presented by illustration and by symbol.

The teaching of Spanish as a second language is also adapted to the needs of the indigenous school. The initial audio-oral course includes the learning of children's songs in Spanish as well as simple commands that the children will need, such as, "Come here. Sit down. Open your books. Erase the board." The main part of the lessons contain useful conversations which the children also need as they communicate with the Spanish speakers coming into their area. The course consists of the presentation of a series of tape-recorded stimulus-response exercises. The children "overlearn" this conversation to the degree that they respond automatically to the given stimulus question. They may learn, for example, to respond to a visitor in the following manner:

VISITANTE: *¿Hablas castellano?*	VISITOR: *Do you speak Spanish?*
ALUMNO: *Sí, un poco. ¿En qué puedo servirle?*	STUDENT: *Yes, a little. May I help you?*
VISITANTE: *Llama a tu papá. Deseo hablar con él.*	VISITOR: *Call your father. I'd like to talk with him.*
ALUMNO: *Mi papá se fue al monte ayer para mitayar.*	STUDENT: *My father went on a hunting trip yesterday.*
VISITANTE: *¿Dónde está tu mamá?*	VISITOR: *Where is your mother?*
ALUMNO: *Se fue a la chacra.*	STUDENT: *She went to the garden.*
VISITANTE: *¿Sabes cuándo volverá?*	VISITOR: *Do you know when she will be back?*
ALUMNO: *No sé.*	STUDENT: *No, I don't know.*

No attempt is made in the first course to give a systematic presentation of grammar. The teaching of grammar is begun in the second course after the children can carry on a number of simple, basic conversations.

A beginning Spanish reader has been published which provides for transition from reading in the native language to read-

ing in Spanish. It teaches the syllables which occur in Spanish but seldom occur in the native language. The book also emphasizes activities for comprehension and language learning. An episode of an exciting story, written from the jungle point of view, unfolds in each lesson and is repeated in a variety of ways, while questions about the current episode and previous ones appear. After finishing this book, the children begin to use the reading books used in schools for Spanish speakers.

The curriculum for the art and manual arts courses has also been constructed with the jungle child in mind. Because of the isolation from stores and towns, paper, paste, crayons, and similar materials which often are used in great quantities are not readily available. Moreover, these materials are usually expensive, and one cannot very well suggest spending money on art supplies when the people frequently lack sufficient money to clothe their children for school. However, each vernacular group has its own native arts and crafts, and the necessary materials for them are close at hand and can be collected free of charge. In addition to monetary considerations, one has to take into account that these native arts, if not taught in the schools, may be lost. Due to a lack of time many parents no longer teach them to their children who go to school. Thus, in order to keep native art alive and student expenses down, in many communities art classes have been set up with the adults of the community as teachers. The children are taught how to make such artifacts as baskets, combs, blowguns, spears, pottery, woven belts, and adornments, depending on the grade level and ability of the students. These artifacts are then sold so the school will have money to buy teaching supplies. The children, moreover, develop a growing pride in their own culture as they see their arts in demand.

As part of their schooling, the children work several hours each week in the school garden and take care of such school animals as guinea pigs, chickens, and rabbits. This "farming experience" teaches the children about soils and crops and about proper animal care. At the same time the gardens serve as a food source, since some schools have boarding facilities. If the food is not needed in the school, it can be sold for cash.

Social studies and natural science are taught from the jungle viewpoint. For instance, the geography lessons begin with the study of the states of Amazonas and Loreto, where most of the jungle children live, and are then expanded to include all the other states, thus progressing from the known to the unknown. These subjects are taught in both languages through the second grade so that the children are assured of mastering both the subject matter and their second language (Spanish).

Animals and plants discussed first in natural science courses are native to the jungle. The books used in teaching these subjects contain many activities which involve the children in their environment.

The hygiene presented in natural science courses keeps the needs of the jungle child in mind. For instance, since some families don't have access to soap, the course suggests *huito*, *cocona*, and lemon as substitutes for washing one's hair. (These are all jungle fruits which cut grease.) Because 90 percent of the jungle people suffer from parasite infestations due to poor sanitation habits, much time is spent on teaching about washing hands, bathing, washing clothes, cleaning houses, building latrines, keeping the pigs and other animals fenced in, boiling drinking water, cooking food sufficiently, sterilizing food which is to be eaten raw, washing dishes correctly, etc.

All instruction is done with the jungle home in mind. The section which prescribes that the people need to boil their water so that it will be pure tells them: "We must boil the water in a pan with a lid or in a teakettle. You can also use an earthen pot with a leaf for a lid." The instructions on "Keeping Food" tell the student: "We ought to eat in a clean place on banana leaves or a clean table." Good nutrition is also taught, using foods available to the jungle people.

The role of the teacher in the bilingual school is a crucial one, and his task is very demanding. The beginning teacher often needs considerable guidance in the planning aspects for the different levels and in the preparation of lessons for students working independently. But, as the teacher gains experience and as he furthers his own education, he learns how to cope with the demands of the teaching and is able to provide

an education which "fits" the children of his community.

All of this helps equip the jungle child with a majority culture educ ..on, which, at the same time, is adapted to the needs of the local situation.[3] Buildings, scheduling, and especially the language of instruction and the curriculum all take into account the potentialities and needs of the indigenous community. This openness to the local situation in turn will teach the children how to function in their own setting within the context of the national culture.

---

3 For further discussion of this topic see Paul Powlison, "Adaptación de grupos indígenas a su medio ambiente frente al choque con la civilización," in *XXXVII Congreso Internacional de Americanistas, Actas y Memorias*, IV (Buenos Aires Librart, 1968), pp 261–76.

18
TRAINING NATIVE AUTHORS IN WRITERS' WORKSHOPS

Martha A. Jakway

NEED

One of the major goals of bilingual education is that vernacular speakers become fluent readers of their own language. To accomplish this, a large body of vernacular literature is necessary, both to help develop reading skills initially and to help maintain them. In addition, such a body of literature fosters the author's pride in his language and culture and thereby helps to create a positive self-image. Last, but not least, vernacular literature is essential to the continued use of the language in its written form.

In Peru, field linguists have endeavored to produce a basic reading series for each viable vernacular language studied,[1] and have prepared translations of health manuals, community development manuals, Scripture, and other informational books. Such a limited quantity of literature, however, is hardly sufficient to accomplish the aforementioned goals. What was needed was an authentic literature produced by the vernacular speakers themselves.

To train vernacular speakers in the skills necessary to produce their own literature, writers' workshops were developed.[2]

---

1 For languages such as Resígaro, which is currently spoken by only eleven people, vernacular literature has not been prepared, as it is obvious that such languages are about to become extinct.

2 These workshops were first developed in Mexico. See Dorothy Herzog, "A Literature Workshop: Part I," *Notes on Literacy* 17:2, 1974, and Margaret Wendell, "Writer Training Workshops," *Notes on Literacy* 18:19–22, 1975.

The workshops brought together potential authors to share experiences and to learn how to set down ideas effectively in writing, as well as to learn the mechanics of typing, stencil cutting, duplicating, and putting a book together.

GOAL

The ultimate goal of the workshops was that the participants become contributors to their society by producing various types of literature—personal experience stories, descriptions, instructional manuals, histories of the culture, biographies, newspapers, legends, folktales, origin stories, primers, advanced readers and other books for the schools, and translations of materials from Spanish.

EXPERIENCE TO DATE

Eight writers' workshops have been held among various vernacular groups in Peru, the first in the mountain town of Ayacucho. At this workshop, fifteen Quechua speakers from six different dialects met for three months. Later, a two-month workshop was held for fifteen Aguarunas in their tribal area. Asháninca Campa and two San Martín Quechua workshops were held in their respective areas, while two two-month workshops for six more dialects of Campa were held at Yarinacocha. The eighth workshop, held in the mountains, served as a follow-up for the Quechua writers who attended the workshop in Ayacucho.

Since I was more directly involved in the Aguaruna and the first Quechua workshops, most of the experiences referred to here are taken from those seminars.

Staff

Two Aguaruna men, former bilingual teachers, were trained specifically to teach in the Aguaruna workshop and were given additional training by the SIL literacy worker as the workshop progressed. Teachers for the Quechua workshop in Ayacucho

were the literacy workers themselves. The San Martín Quechua workshop was supervised by an SIL field worker, but was taught by two of the participants from the Quechua workshop in Ayacucho. The remainder of the workshops were taught by literacy personnel.

Participants

The choice of participants was crucial to the ultimate success of the program. Selection included: their knowledge and appreciation of their own culture and language, as well as a positive awareness of the Spanish language and culture; a wide background of experiences from which to draw; some facility with words; and a desire to express themselves in writing.

To help determine who would best meet these requirements, we asked those who expressed an interest in participating in the Aguaruna workshop to submit a story they had written. These stories were often the determining factor in the final selection.

We also tried to choose participants from many different areas so that the literature would represent the whole vernacular group and stimulate a wider production of materials.

Stages of writing

In discussing the production of vernacular literature, Wendell (1975) and Herzog (1974) describe four stages of writing, from the easiest to the most difficult.

First stage writing deals with topics within the author's experience and within the culture of both the author and the reader.

- *Second stage writing* deals with topics within the experience of the author but outside his own culture. Writing at this stage is more difficult to express clearly enough so that the reader will understand fully.
- Writing about a topic with which neither the reader nor the author have had experience is considered to be *third stage*

La Dirección Zonal Nº de
El Instituto Lingüístico de Verano

CERTIFICAN

Que don
ha participado en el Seminario de Escritores para la preparación de Literatura Popular en el Idioma
llevado a cabo en del
al

DIRECTOR ZONAL — Instituto Lingüístico de Verano

Figure 18.1. Certificate presented for attendance at a writers' workshop.

writing. Information for this type of literature must be gathered from reading resource materials and/or interviewing persons who are knowledgeable on the subject. This information is then presented in the free idiomatic style of the vernacular.

- Translation, or *fourth stage writing*, is the most difficult because it is not within the experience of the writer or the reader, and both form and style are limited by the original document.

Location

One of the more important factors to be considered in determining the location for each workshop was the stage of writing at which the participants were working. If the majority were working on stage one or stage two materials, the area where the vernacular was spoken provided the type of resource materials needed, and the writer could better test the accuracy and acceptability of his work.

On the other hand, if the majority of the participants were working on third and fourth stage materials, where the writing depended on resource materials outside the culture, a location was chosen which provided not only a wealth of resource materials in the form of books and specialists in various fields, but also a whole gamut of new experiences about which to write.

In some vernacular groups, however, lack of reasonably-priced transportation to another location and other factors have made the home area of the group the more advantageous location for the workshop, regardless of the stage at which the participants were working.

Authorization

Once the location for the workshop had been chosen, steps were taken to tie it officially into the existing educational program. In the case of the Aguaruna workshop, for instance, a group of bilingual teachers sent a petition to the area Director of Education, requesting that the workshop be incorporated

into his official yearly plan, and that he designate one of the bilingual school plants as the location and appoint a literacy worker from SIL to serve as official advisor for the workshop.

The area director was delighted to grant these requests and authorized it as an extension course as soon as the literacy advisor submitted a plan for the workshop. The workshop was placed under the administration of the director of the bilingual school where the course was to be held.

When the workshop ended, a final report was filed with the area director, and he and the literacy advisor co-signed the certificates granted those who successfully completed the course (see figure 18.1).

Physical plant

After official permission for the workshop had been granted, a location selected, and dates set, the physical plant was chosen or constructed and the necessary furniture was obtained or built. After holding several workshops where there was barely enough space for each participant, it was concluded that one of the most important considerations in the choice of a physical plant was that there be ample space where more than one activity can take place simultaneously and people can move about freely.

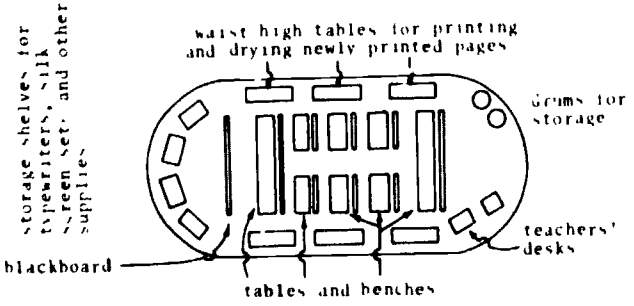


Figure 18.2. Layout of the physical plant for the Aguaruna workshop.

In the case of the Aguaruna workshop, such a building was constructed of native materials (figure 18.2). Storage shelves for typewriters and silk screen sets stretched along the end of the building. Large tables with ample space for typewriters and writing materials were constructed in the center. Care was taken to make them a comfortable height for writing and typing. Silk screen printing was to be done at long, waist-high tables constructed at one side of the building. These same tables were also suitably high for drying freshly printed pages and later for collating books. Fifty-five-gallon drums provided adequate storage for paper and books, keeping them away from moisture, insects, and animals. A blackboard was installed for teaching purposes, and a bulletin board for mounting displays of interest to the participants.

Schedule

The daily schedules for the workshops were flexible, depending on the desires and other responsibilities of the participants as well as on the workshop's location.

Since two of the Campa and the first Ayacucho Quechua writers' workshops were held concurrently with linguistic workshops, half-day sessions were held for the writers, giving them sufficient time to act as language helpers for linguists. Among the San Martín Quechua, the workshop was held only in the morning hours to allow a half-day for the participants to do seasonal harvesting and planting. The Aguaruna workshop was planned for a full-day schedule because the participants had come from some distance and wanted to learn as quickly as possible in order to be free to return to their families and home responsibilities.

In the first Quechua workshop, Thursday was dedicated to field trips, planned to broaden the writers' experience and to provide stage two and three writing materials. Aguaruna writers, on the other hand, felt they wanted to preserve traditional tribal practices and crafts in their literature. So, rather than go on field trips, they invited the older men from the community to teach them about such topics as tribal medicines and

cures, marriage customs, advice of tribal leaders to young men, how to spin thread, and how to make combs, belts, etc. The participants then wrote articles on the material presented and illustrated them. The best of these were selected and printed.

The Aguaruna workshop involved activities lasting all day Monday through Friday and Saturday morning, with Saturday afternoon left free for hunting, fishing, writing, washing clothes, etc. Sundays were also free. Nevertheless, the writers often spent much of this free time practicing their typing and composition. The following are the daily schedules for the two months of the Aguaruna workshop, given here as an example of what might be done in such a workshop.

First Month	Second Month
8 00 Typing instruction	8 00 Typing instruction and practice
8 30 Typing practice	9 00 Discussion of topics
10·00 Recess	10 00 Recess
10 15 Discussion of topics	10 15 Story writing, working on book projects
11·00 Aguaruna punctuation and grammar	11 45 Aguaruna punctuation and grammar
11.45 Presentation of, and motivation for, writing assignments	12 30 Lunch and rest
12:30 Lunch and rest	2 00 Book projects
2.00 Work on writing projects	5 00 Recreation and rest
5 00 Recreation and rest	

Instruction

Typing. Spanish typing manuals were used in all the workshops; however, an exercise book in the vernacular would have been more appropriate. During the typing instruction period, in addition to the parts of the typewriter and instruction in keys and fingering, processes necessary for making dummies and cutting stencils were also taught. (See Wendell 1975:19–22.)

The teachers oriented workshop participants to the special care required for a typewriter in the jungle. For example, its users must keep it covered with a cloth to keep myriads of

particles (some dead, some alive) from falling into it from the leaf roof. When not in constant use, it needs to be returned to its case and put in a plastic bag away from the humidity. Dried-out ribbons may be reactivated with kerosene.

During the first week, typing practice periods were devoted to simple exercises from the typing book. During the second week, participants began to type all their stories in dummy form and very shortly began typing the dummy for their first book. After the keys and fingering had been mastered, speed tests were given to help increase speed. In addition, writers learned to type letters and address envelopes.

Punctuation. The course in punctuation taught in the Aguaruna workshop included lessons in the use of capital letters, periods, commas, colons, semicolons, dashes, question marks, exclamation marks, and accents, as well as lessons in paragraphing. Since conversation is such an important feature of Aguaruna discourse, special attention had to be given to the punctuation of quotations. Care had to be taken to differentiate between the punctuation of quotations in legends and that of quotations in contemporary literature.[3]

Discussion of topics. The topics chosen to be discussed during a given workshop depended largely on the stage of writing at which the participants were working: the literary types used by the vernacular group; and the interests, needs, and problems of both the participants and the audience for which they were writing. In some groups much time was spent in discussing the worth of the vernacular as an adequate vehicle for the expression of ideas.

Listed below are the topics discussed in the Aguaruna workshop. (For other details concerning discussion topics, see Wendell 1975:12–15.)

What are the goals of the Workshop?
What is Aguaruna literature?
Why do the Aguarunas need a literature of their own?

---

3 See Mildred L. Larson. "Punctuating the Translation for Ease of Reading." *Notes on Translation* 60, 1976.

The importance of the Aguaruna language as a means of communication:
  What were the means of communication in the Aguaruna communities before the creation of schools?
  What are the advantages of the written message over the oral one?
  Written vs. oral style
  Written vs. oral literature
What are the types of writing in Aguaruna prose and poetry?
What makes a good story?
  Keep in mind the audience to whom you are writing—age, background, experience, interest.
What are the stages in writing?
  Writing stage one materials
  Writing stage two materials
  Writing stage three materials
    How to interview
    How to take notes on an interview
    How to organize and rewrite the notes
    How to gather information from resource material, organize it, and write it up
  Writing stage four materials
What is a book dummy and how is it made?
  Measuring margins
  Placing illustrations
  Placing page numbers
  Taping pages together
What are the parts of the book and how is each prepared for the dummy?
  How to plan the book cover (figure 18.3)
  How to print capital and small letters by hand
  Making the cover picture relate to the content of the book
  How to make the title page (figure 18.4)
    Centering on the typewriter
  How to write the Spanish summary of the book and its placement in the dummy
  How to make the copyright/publication history page
  How to make the layout dummy (figure 18.5)

How to cut a stencil
Measuring the margins
Typing on the stencil and using correction fluid
Outlining the illustrations
How to print with the silk screen set
How to clean the silk screen set and the stencil
How to collate pages and bind the book
How to send copies to the National Library and the form for writing the cover letter
The cost of book production and setting sales prices for books
Ideas for promoting the sale of books
Planning a newspaper
Writing a newspaper
Planning the closing ceremony

Stage four writing

None of the beginning workshops has advanced very far into stage four writing. Some exercises leading up to translation were done in the Aguaruna workshop. In the first exercises the teacher read a Spanish story to the writers. They discussed the important incidents taking place in the story and then listed them briefly on the blackboard. They were then asked to write the story using the list and comparing it with the original story.

At the end of the second Quechua workshop, eight days were dedicated to the teaching of translation or fourth stage writing. Orientation classes, taught by a translator, emphasized the basic principles of translation and how to apply them. Translation was described as a process of (1) understanding the meaning of the Spanish and (2) expressing the meaning in idiomatic Quechua.

Morning hours were used to teach some of the basic adjustments that need to be made from Spanish to most of the Quechua dialects. These are: (1) passive to active; (2) implicit information to explicit (primarily expanding on items unknown in Quechua culture); (3) abstract nouns to verb phrases (this often involves adding implicit information); (4) use of direct quotes (from indirect discourse or to express attitudes or

feelings); (5) Spanish idioms, i.e., the need to understand the meaning and express it in natural Quechua; (6) use of pronouns; (7) breaking up long sentences and complicated constructions. Each adjustment was taught by working through many simple examples and exercises together during class hours. The participants were then able to check their grasp of the daily lesson by translating a number of one-paragraph animal descriptions in the afternoon hours. Time was given during several morning hours to read the translation assignment in class and to discuss the adjustments which had been made during the translation process.

It soon became apparent that there was a marked difference in the ability and interest of the students. The writers who lacked ability in Spanish had a very difficult time understanding the source material which they were to translate, and it became evident that they would need to study a great deal more Spanish before they could undertake translation. On the other hand, some who knew Spanish well and were very interested made excellent progress, and with more training could become effective translators.

The *Translators' Field Guide*[4] lists a number of simple exercises which can be used to develop the skills in stage four writing:

Materials

The materials needed in a given workshop depend on the number of participants, the local availability of material, the stage of writing being included, and the goals of each workshop. A list of materials ordered for the fifteen participants in the Aguaruna workshop and for their postworkshop writing is given at the end of this chapter.

Challenges to ingenuity. There is much room for creative ingenuity in the isolated jungle workshop where transportation,

4 Alan Healey, ed *Translators' Field Guide* (Ukarumpa, Papua New Guinea, Summer Institute of Linguistics, 1970).

space, and funds are limited. Teachers are always on the lookout for the best, most economical way of carrying out each process. In the Aguaruna workshop the stencil-cutting kit for making pictures included a flattened tin can for backing and a dry ballpoint pen for a stylus. Pie pans, cookie sheets, and squares of masonite have also been used for backing. Old toothbrushes and needles were used to clean the type on the typewriters. *Chambira*, a palm fiber used in making bags and hammocks, was used to hand sew the books together. It's much cheaper and more readily available than commercial thread or staples. When participants in one of the Campa workshops were ready to start typing dummies for their first book, they still didn't have an established alphabet. In order to make the most effective use of time, however, the teacher taught them to cut pictures on stencils, and they used this method to make picture books for beginning readers.

RESULTS

The major results of the writers' workshops have been the large volume and variety of the vernacular books that have been produced. In each workshop at least one, and usually two, books have been produced by each individual writer. There have been a few books produced by a group of authors collectively.

Quechuas have produced books of songs, riddles, jokes, and poetry, as well as books about such topics as pasture grasses, prenatal and postnatal care, Quechua letter-writing form (developed by the author), school, personal experiences, stories for children, Tupac Amaru (a Peruvian hero), how married people should live, trips to Ayacucho and Lima, how an orphan boy became a professional teacher, some legends, and folk tales such as "The Deer and the Turtle," "The Child and the Fox," and "The Foxes and the Burro."

Aguaruna writers have produced books on Aguaruna musical instruments; jungle medicinal herbs; descriptions of traps, some for catching rodents, others for catching birds; how to make stools, blowguns, tote bags, combs, and crowns; how to

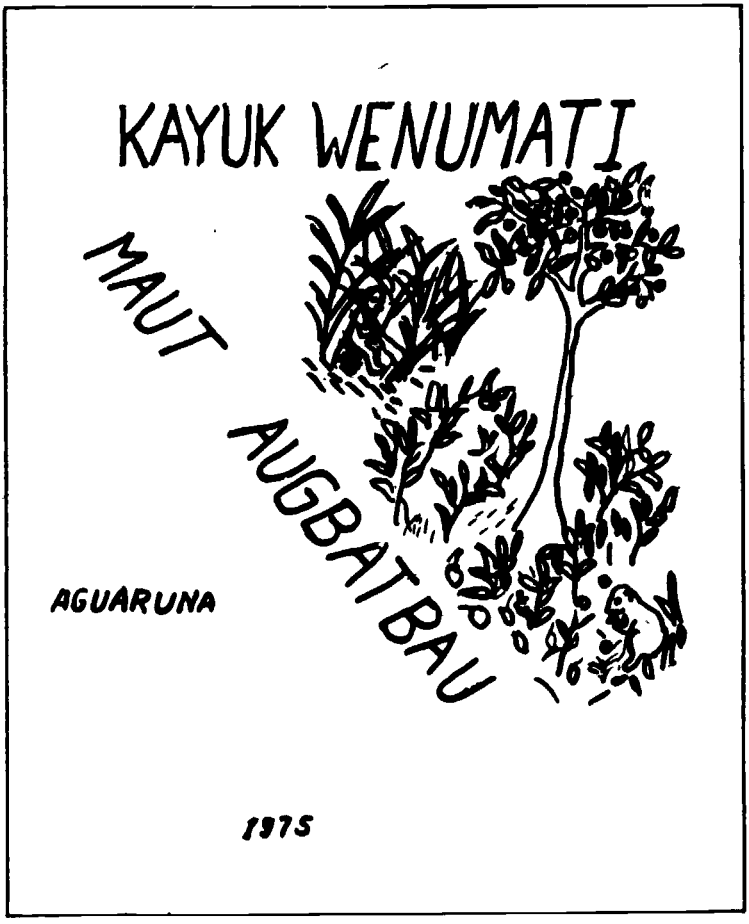
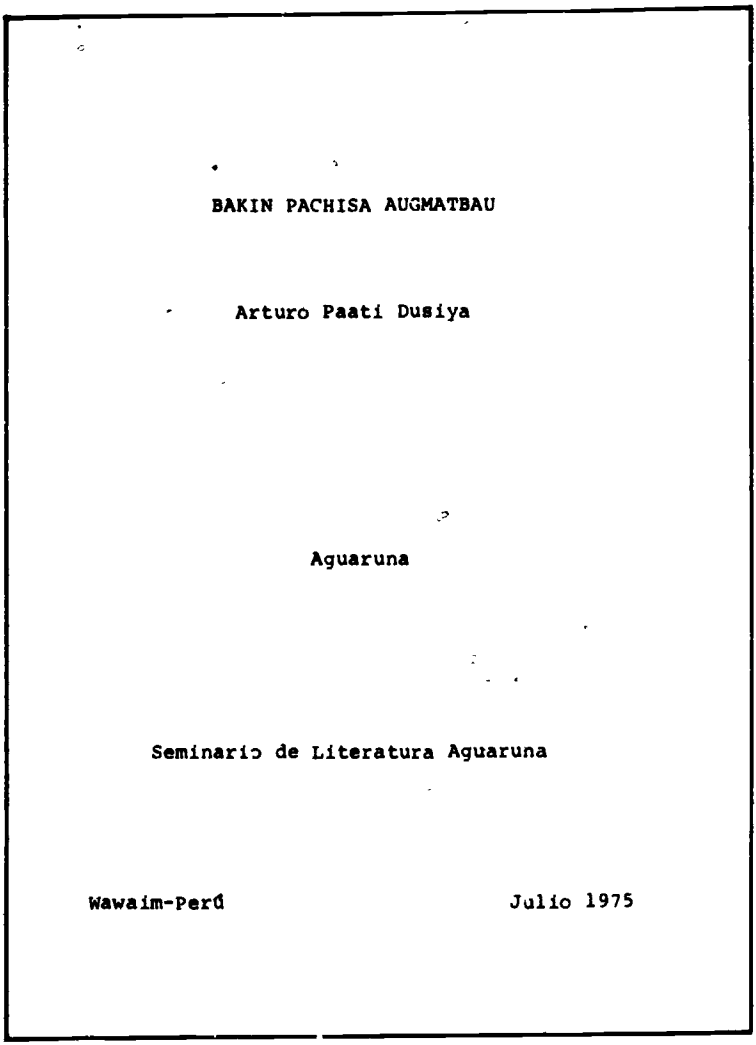


Figure 18.3. Book cover designed by a vernacular-speaking author.



BAKIN PACHISA AUGMATBAU

Arturo Paati Dusiya

Aguaruna

Seminario de Literatura Aguaruna

Wawaim-Perú Julio 1975

Figure 18.4. Title page of a story by an Aguaruna author.

nunik jegamtai shushui nuwan tau:--Yuwaju jui pujusta, tusa tima dui pujau timayi. Nunui pujuttaman shushui tau nuwan:--Yuwaju wika kaim kegken yujai, uchijum chichagkata kaim kegken chuchuken yuwawai tau, tutai dukujishkam uchijin tau:--Uchuchi yuwawaipa auk kiiwiyai tau, tama uchishkam yabaikik ayu tau timayi.

Shushuishkam nuna tii idaiyak, nuna nuwan tau:--Yuwaju, iish inak juka yuwami, ame yuwaju katsujam juwatmin wii chuyaimasuchin jumaktajai tau, wika yuwaju katsumainak yuchaujai tau. Tusa we wenakua jegantaju inak wajamunum.

-12-

Figure 18.5. Sample page of a reader produced at a writers' workshop.

prepare blowgun poison for killing birds and animals; how to prepare paint for the face and teeth; some beliefs concerning natural phenomena (lightning, thunder, rainbows); descriptions of animals from distant places; bird and animal stories; and legends and folk tales such as "How the Marañon River Got Its Name," and "A Man Who Ate an Egg from the Magic Bird."

Aside from the production of books, there were also some intangible results of the writers' workshops. As the Quechua workshop drew to a close, a new, positive attitude toward their language and culture replaced the old, negative one. The Aguarunas were proud to leave their workshop with a quantity of books dealing with various aspects of their changing culture, which would now be preserved for posterity. The books produced in one of the Campa workshops presented a new alphabet to their readers, who were accustomed to reading Spanish and perhaps some of the Asháninca Campa dialect, but not their own dialect.

Many more books have been produced by the vernacular writers since their workshops closed. When the trainees have become even more experienced in producing the freer type of literature, it is hoped that at least some of them will go on to master primer construction techniques and translation techniques to the degree that they can produce their own primers, school materials, and translated materials with little or no consultant help.

Materials for the Aguaruna Workshop

15 typewriters (a brand which makes good stencils)
15 large plastic bags for storing typewriters
11 silk screen sets, one for each region represented
20 packages of 48 stencils each
250 sheets of poster board for book covers (4 times legal size; newsprint can be used to cut down on expenses)
20,000 sheets legal size newsprint for typing dummies and printing books

15 100-page notebooks for writing stories
15 bottles of stencil correction fluid
15 tin cans to act as backing for cutting pictures on stencils (these can be cut with tin snips and flattened)
15 dry ballpoint pens for cutting pictures on stencils
15 pencil sharpeners
15 instructional manuals in typing (a book of exercises in the vernacular is ideal and can be made quite easily)
15 used toothbrushes for cleaning typewriters
15 bottles of alcohol (4 oz. each) and cotton for cleaning typewriter keys
15 rulers
15 razor blades
15 boxes of paper clips
15 typewriter ribbons
2 gallons of gasoline for cleaning silk screen sets
1 package of carbon paper
15 rolls of Scotch tape for putting together stencils and dummies
40 tubes of printer's ink
15 needles and *chambira* string for sewing books together
6 rolls of masking tape
15 pencils
15 erasers
1 package of chalk
15 manila folders, one for each writer to keep his materials
15 certificates (display 18.1)
1 Spanish dictionary
1 Spanish-Aguaruna dictionary
Assorted resource books in Spanish for writing stage 3 and 4 materials

19
CREATIVE WRITING IN AMUESHA BILINGUAL SCHOOLS[1]

Martha Duff Tripp

In the few years since the Amuesha[2] language has been given an alphabet, the people have become ardent fans of pencil and paper. To the Amuesha children in the bilingual schools writing is a most fascinating game, and each child has one notebook especially for his own creative writings. In their spare time, as well as during regular writing periods, they are eagerly writing down the things that they experience in their own world.

The child may be recording a recent fishing trip, a recent trip out to where the white people live, a turnover in the rapids, or a trip to cut down a bird's nest high up in a tree. He may be describing the jungle world he knows so well--birds and animals, trees and plants, and their domestic or medicinal uses. Or he may be recording a legend that he knows well from having heard the older people in the community tell it over and over, stories that each generation has passed on to the next orally, and now, as he records it in his little school notebook, the familiar words of the legend take on a strange new form—for the first time they are written!

---

1 Revised edition of an article entitled "El grabado en papel," which appeared in *Perú Indígena* 10, No. 24-25. p. 79-81, 1963.

2 The Amuesha, who number some four to five thousand, live in the foothills of the Andes in the states of Pasco and Junín. Their language is Arawakan. There are currently 13 Amuesha schools (the oldest of which is 25 years old) with 21 native bilingual teachers.

On the other hand, it may be just a simple essay such as one little boy wrote on the use of fire:

> Fire very much serves us. There we boil our bananas, our manioc, our fish, our birds. It also serves to burn our fields. Fire very much serves all people. There are no people anywhere who can say fire does not serve them.

The Amuesha like to write their thoughts and feelings, as is illustrated by the boy who wrote with great love concerning the new school:

> Now I enter there. There my teacher teaches me. The words that I learn in this school are very good. If there had been no school, even now I would not know anything.... But already I have learned what our teacher teaches us. That's why I pray to God for our teacher. Now I am sad because the time has come to part from my companions [vacation]. When I think of my school after the classes have ended I become very sad having parted from my companions. I leave crying.

The linguists who work with the Amuesha have scores of notebooks filled with the writings[3] and drawings that the children have proudly presented to them. Subject matter is as varied and interesting as the individual children who write them. Many of the compositions have been used, with some minor editing, to make new intermediate primers and extra reading materials. The child's name is printed along with the story. For this reason, whenever the children have presented written stories to the linguists they have written on them very prominently, "written by the student so-and-so," hoping that their stories, too, will be made into a book and sent to all the other Amuesha schools (see figures 19.1 and 19.2).

In order to take advantage of the Amuesha's urge to write, a special series of books, called *The Amuesha Library*, was initiated. The purpose of this series was to stimulate the

---

3 These writings are on file in microfiche and are available from the Instituto Nacional de Investigación y Desarrollo de la Educación in Lima, Peru.

development of indigenous creative literature, while at the same time preserving in written form many aspects of the rich heritage of this indigenous group of the Peruvian jungle.[4]

In one of the Amuesha bilingual schools where the children were just learning to write words they had never seen, a contest was conducted to see who could write the most bird names. The aim of this contest was to encourage the children to start writing creatively. The children enjoyed writing down the names of all the birds they knew, and they easily wrote all the bird names, even though they had never seen them in writing. Each child's list was well into the hundreds, but the boy with the highest total had a list of 336 different names. A linguist later correlated all the children's lists, coming up with a total of 470 different bird names. A book, entitled *A Dictionary of Birds* was made of the listing, and included drawings of many of the birds made by one of the students. Afterwards, as the book was being used in the school, the children one day, in a very scholarly manner, presented the linguist with an additional list of over 30 bird names, informing her that these names were not included in the book.

There was such interest in the bird contest that the children themselves suggested another contest on trees and plants. Although the linguists have not yet made a composite list, one boy alone wrote 661 different tree and plant names. Not only were the contests fun, but they helped the children realize they could write anything they wanted to, which further fostered their interest in creative writing.

The following is a sample of a bird description, which seems to be a favorite subject in their creative writing (see figure 19.4).

> I am the bird *morraco'quer*. I live in the jungle. I feed there in the jungle. I look for all kinds of little insects which I eat. I taste them as very good. I finish my food, I scratch out a place where I will squat down. When it is noontime I sit with my buddies (like kind). Also when it is

4 Later, when other Amazonian groups began similar series, this series was renamed *Coleccion Literaria de los Grupos Idiomaticos de la Selva*.

late in the afternoon I sit with my buddies. When it is late in the afternoon I get up on a high tree branch where I will sleep. When I have perched on the high branch, I sing there. I do thus: *Po'cro, po'cro, po'cro.* In the morning I go down. This is just the way I do. (see figure 19.4).

The bilingual teachers themselves like to write things they think will be interesting reading for their students. One teacher wrote a long tribal legend. Another wrote about his experiences when he was lost for two days in the jungle. When the same teacher later went to Lima for an eye operation, he again spent a great deal of time writing. While he waited for the operation, friends showed him things of interest in Lima. They reported to the Amuesha linguists by radio: "Pedro scarcely looks at the things we show him for being so intent on writing it all down." Talking with his linguist friend by radi he said, "I'm writing down everything I see and do. I thoug ve could make it into a book for our students and call it something like *Adventures in Lima.*"

Reading and writing have opened up a whole new mode of expression for the Amuesha people "ever since [as one boy wrote in an essay on the value of ink] we learned ink was to write with." The Amueshas have been making good use of it.

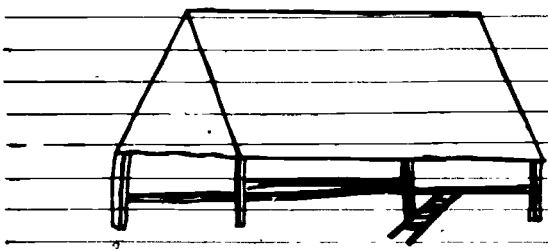
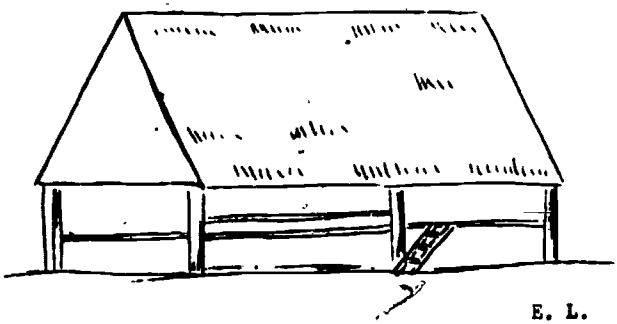


Figure 19.1. A page from a child's notebook.

21



E. L.

Yopaquëll

Añ yopaquëll ñeñ̃ t̃omaten apa. Añpa' pocollpa' mo t̃ta o'ch ya t̃omach. O'ch yeña pats o'ch ya t̃omach quellpach. Ya t̃oma'tua

Nuestra Casa

Mi papá hizo esta casa. Comenzó plantando los postes. Se cava la tierra para plantar los postes. Después de plantar los postes se cortan las hojas. para hacer la casa.

Figure 19.2. The same story in a primer.

22

quellpachpa' o'ch yetsorra
aspan o'ch yeyečhcach yopaquëll.
O'ch ẏa'tap enopa' o'ch yoch
yet̃apor, "p̃apuen aspan." O'ch
yeẏečhcat yopaquëllpa' allcha'
yeyčha, apa epuet m̃am̃a t̃o'.
Nanac t̃orrapo' añ pocoll.

Emilia López

t̃omatenan
yat̰̃omach
yat̃oma'tua

El hombre sube al techo y, desde allí, le dice a su esposa, "Alcánzame las hojas". Después de terminar la casa, vamos a vivir allí con nuestros papás y nuestros abuelos. Es muy difícil hacer una casa.

está plantando ——
la plantamos
ya hemos plantado

Figure 19.3. Continuation of the same story.

8

Morrat̄

Morra'ť ateť ñerra·m huepo.

Morra'ťp·' añeťoll, huepopa' atarr,

pa'čhnoppa· ateťñačho'.

Potsaťoña yečhena morra'ť.

Yamo'tseesha' ayateñet pochoyor.

Atarr cohuen pochoyor morra'ť

ateť ñerra'm ťopep.

Arrpa' yenteñ all rromuena.

Figure 19.4. A page from a book on birds.

PART V
BILINGUAL EDUCATION AS IT RELATES TO THE DEVELOPMENT OF INDIGENOUS COMMUNITIES

Part V
Bilingual Education As It Relates to the Development of Indigenous Communities

In this section the program of bilingual education in the Peruvian jungle is fitted into its larger framework, that of the development of the indigenous communities in which the program takes place.

The first chapter shows how an adult education program was set up and materials prepared specifically to help the adults in their efforts to cope with everyday problems arising from contact with the national society. Details of the curriculum used are given to show the relationship of class material to the needs of the people.

In the second chapter, the interrelationship of bilingual education and other aspects such as the importance of linguistic and ethnographic studies, health, economic development, and translation is discussed to show how these must all be kept in balance as a field linguist works in an indigenous community. The training of vernacular speakers to carry the responsibility in each area of the work is presented as the means by which such a complicated program can be kept going and growing until members of the indigenous community itself are the ones who are training to train.

The final chapter deals first of all with general points such as the reality of the jungle situation, the universal needs of man—physical, psychological, and sociocultural—culture change, the culture itself, and what contributes to the detriment of a culture. Secondly, the work of SIL is discussed, along with

how it relates to the above areas by linguistic and ethnographic studies, health programs, community development programs, and translation.

20
ADULT EDUCATION: EDUCATION FOR EVERYDAY LIVING[1]

Martha A. Jakway

Over the years the man's job in Aguarauna society has been fairly well defined. He clears land for gardens; hunts and fishes to provide food for his family; makes blowguns for hunting; constructs houses and furniture; makes baskets used in fishing, hunting, and gathering; cuts down firelogs; weaves clothes (or sews them); makes adornments; cares for his family; and is responsible for tribal discipline. The Aguaruna woman takes care of the children and domesticated animals (pigs, chickens, dogs). She also plants, harvests, and brings home the garden products; makes the pottery; cooks; carries water; washes clothes; and cleans the house. With this division of labor, the society of the past was self-sufficient.

As regards social structure, until recently the older Aguaruna man was the individual of prestige and respect in the society. However, as outsiders discovered natural resources in the tribal area (including land) and realized that here was a potential market, many non-Aguarunas entered the area. The Aguarunas began to feel the need for communication with the outside world, and thus for education. But since it was the youth who attended school, the previously respected older men began to lose at least part of their prestige to the young adults who could now communicate in Spanish. As the society began

---

1 An earlier version of this paper appeared in *Comunidades y culturas Peruanas* 1, No. 1:7–18, 1973.

to realize the need for, and convenience of, interdependence with the national society and to desire many of the products it had to offer, the older, respected men lost still more prestige by not being able to function actively in the processes of exchange.

In some parts of the region, merchants come to trade goods for rice, bananas, eggs, chickens, and other products. In other areas, the Aguarunas take their products to market to sell. Often the older men are exploited in these transactions because they are basically ignorant of measurement systems and they have no idea of the exact value of money nor of their products. Lumber workers come into the area and pay these tribal leaders a meager price to cut down their own logs and drag them to the river's edge.

If older adults wish to go to town to buy clothes or other necessities, they either must suffer the humiliation of asking one of the younger men to go with them or go themselves and be at the mercy of the vendors.

If an outsider comes to an Aguaruna village, the language barrier prevents the older adult from handling the public relations which in former years would have been his responsibility. Instead, with the grunts and gestures of a deaf and dumb person, he must send the visitor to a younger, educated man who can communicate with him in Spanish.

All of this is degrading for the older, wiser, previously respected man of the tribe. It also has a certain amount of damaging effect on the younger man, who then feels superior to his elder and tends to let his superiority carry over into every realm of his life, not seeking the customary counsel of the older man in problems involving home, family, and marriage.

The older adult needs to have a specialized kind of education available to him in order to regain status in his society and to become a responsible citizen of the country in which he lives. He needs to know how to count money and objects and how to manipulate weights and measures in order to buy, sell, and trade with the outside world. To do this he needs a basic knowledge of conversational Spanish. He also needs to know

something about his country and something about personal documents and how they can be obtained for himself and his family.

As the children are taught principles of good personal hygiene, sanitation, and disease prevention in their school classes, the fact that these practices cannot be instituted in the home poses the need for health training among adults. Since most medical services in the country are staffed by Spanish-speaking personnel, adults also need to know Spanish to communicate their medical needs and to read the directions and labels on the medicine. Furthermore, as the children leave their village to procure further education, the adult needs to read and write to be able to communicate with them.

To meet the above needs, a special adult education program was started in 1969 and gradually developed over several years. Prior to this some adults had been taught to read by the bilingual school teachers. However, this new venture was programmed to educate the adult sufficiently in three years so that he could handle the amount of reading, writing, arithmetic, hygiene, and Spanish necessary to be independent in everyday situations. The majority of participants in the program were expected to reach the point of being able to relate to some extent to people outside their own community and culture.

Originally adult classes were scheduled for three or four hours a day for six months. Later this was extended to seven months. The schedule was as follows:

Table 20.1 Adult Class Schedule:

Subject	First year	Second year	Third year	Taught
Reading	45 min.	45 min.	45 min.	Daily
Writing	30 min.	30 min	30 min.	4 days per week
Social Studies		30 min.	30 min.	1 day per week
Oral Spanish	45 min.	45 min.	45 min.	4 days per week
Hygiene	45 min.	45 min.	45 min.	1 day per week
Religion	15 min.	15 min.	15 min.	Daily

Over the three-year period reading instruction included one word book (reading readiness), three syllable books, three simple storybooks, a health book, a manual about cattle raising, and a manual about chicken raising—all in the vernacular.

A special oral Spanish course was written, built around conversations the adults needed in greeting and entertaining visitors in their communities, as well as in buying, selling, and trading. In 1970, cassette tapes and players were introduced in this Spanish course as teaching aids.

Upon comparing those who had learned the Spanish dialogues through cassette recordings with those who had learned only from the teacher, it was found that the adults participated better when they used cassettes. It would seem that they developed more self-confidence by using the inanimate tape. It was especially helpful for the women, who find it hard, because of cultural norms, to converse with the male teacher in an audible voice. Pronunciation was also better for those who learned through cassettes.

In the first year hygiene course, a book entitled *Health Education*[2] was used as a text. The lessons taught subjects such as nutrition, origins of disease, the necessity of boiling water, building latrines, and burning garbage, as well as personal cleanliness. In the second and third years the hygiene class included the study of common diseases, their prevention, their causes, and their treatment. Although it was not specifically programmed, the adult teacher checked community health and sanitation conditions along with his students and instituted reforms. In one village the hygiene students cleaned out a contaminated water hole and set up rules to keep it from becoming recontaminated.

During the first year of the writing course, students were taught all the printed letters—capital and lower case—through their use in syllables and words. The lessons paralleled those of the reading book. Dictation was stressed as soon as the

2 The names of textbooks have been translated from the original Spanish for the convenience of the reader.

students could write a word with sufficient ease, with the goal that the adult student would begin to express himself creatively as soon as possible. Cursive writing was taught in the second year, and in the third year the student learned to write Aguaruna words with their Spanish equivalents.

In first year arithmetic, the teachers had supplementary lessons to accompany *Let's Count* and the other arithmetic books used in the bilingual schools. The emphasis was placed on teaching number facts through meaningful situations, such as buying and selling and preparing produce for markets. Each lesson was presented concretely, graphically, and abstractly. Reading, writing, and understanding numbers were taught concurrently with counting. Each addition and subtraction fact was taught in a problem situation, not in isolation.

Arithmetic in second and third year included materials used in the bilingual schools as well as the following supplementary subject matter: counting and reading of numbers to 100, using page numbers as a teaching device, using subtraction for giving change for various bills, and using all the weights and measures common to the Marañon area (*arroba*, *fanega*, *quintal* kilogram, ½ kilogram, liter, pound, gallon, *botella*, meter, etc.).[3] The emphasis was on the everyday situation. Role playing was used in the classroom as practice for real-life situations. Additionally, although it couldn't be programmed specifically, the adult teachers helped their students actually weigh products for market and went with them to sell them.

A course in social science was added in 1971. It included the following lessons: (1) location of Peru in South America; (2) the three regions of Peru and their characteristics; (3) departments of Peru; (4) province of Bagua and its capital; (5) the district, community and family; (6) symbols of Peru (shield, flag and national anthem); (7) why we celebrate July 28 (Independence Day); (8) president and ministers of the nation; (9) Lima, the capital; and (10) personal documents for citizens, including how, where, and when they can be obtained: Birth Certificate,

3 An *arroba* equals 25 pounds, a *fanega* about 2½ bushels, a *quintal* 100 pounds, and a *botella* is a standard-size bottle used for kerosene.

Marriage Certificate, Death Certificate, Military Registration, and Voter Registration.

The first Aguaruna adult teacher-training course was held in the community of Temashnum in June of 1969. Four teacher candidates attended; two had completed their fifth year of elementary school, one had completed third year, and one had finished the first year of high school. All but one of the prospective teachers were married men.

The courses lasted for one month, and were taught eight hours a day, five days a week. The mornings were spent in learning the methods and administration necessary for teaching the first-year class in the adult school. Emphasis was on teacher candidate participation. The afternoons were spent practice teaching a class of adults. Each candidate taught one subject for a week, and a different subject the following weeks. Each candidate had to observe and evaluate the others as they taught. Evenings were devoted to studying the material learned in the morning during the methods classes, as well as to making teaching aids and preparing for the courses to be taught in the adult class the next afternoon. Time was spent each morning evaluating the courses taught by the candidates the previous afternoon and giving both suggestions for improvement and compliments.

Four first-level adult teacher-training courses were held over a three-year period between 1969 and 1971 in which thirteen adult teachers were trained in locations within and outside the tribal area.

In 1970, a second-level course was introduced in the tribal ar for those who had completed the first-level course, in o r to train them to handle second- and third-year classes. (This had not been included in the first-level course). The basic method of teaching—theory and evaluation in the morning with practice teaching in the afternoon and study and preparation in the evening—was the same as for the first-level course.

In 1973, seven adult classes were functioning. (Six others had functioned for their allotted three years and were no longer needed.) The following information was gleaned on a visit to

three of the functioning adult classes by testing the students in reading and arithmetic, chatting with them in Spanish, and observing them in community life. The students in all the communities mentioned could carry on a conversation in Spanish based on the vocabulary learned in their courses.

COMMUNITY OF SHUSHUG AFTER TWO YEARS OF CLASS
- 83% slow, but independent readers
- 17% not yet independent readers
- 69% had mastered counting, addition, and subtraction
- 31% had mastered counting only

COMMUNITY OF TEMASHNUM AFTER TWO YEARS OF CLASS:
- 60% slow, but independent readers
- 40% not yet independent
- 80% had mastered counting, addition, and subtraction
- 20% had mastered counting only

One member of the class at Temashnum had bought his own scale, asked prices of the buyers, weighed his own produce, and helped his fellow villagers weigh theirs. He could calculate how much he should receive for produce and had gained the self-confidence necessary to communicate that information to the buyer. The effectiveness of his training is immediately evident: in this community the outside buyer gives the members exactly what they ask for.

COMMUNITY OF YUTUPIS AFTER TEN MONTHS OF CLASS:
- 44% slow, but independent readers
- 56% know open syllables, but had not mastered closed syllables
- 44% had mastered counting, addition and subtraction
- 56% had mastered counting only

The adult program functioned for five years. For part of this period, teachers were hired and paid by the government, which also provided textbooks and school materials. For the remainder of the time, teachers were hired and paid by a private institution, which provided additional school materials.

Because of a change in national policy, the adult program was discontinued in 1974.[4] Enough testing of the program was done, however, to demonstrate its effectiveness as a means of helping the Aguaruna adult participate independently and creatively in the life of the nation while maintaining the dignity which his own language and culture have provided for him through the centuries.

4 If the Aguaruna adult education program were to be continued, the following additional materials are proposed: (1) A second Spanish course in which vocabulary and conversations for the following situations are planned: a trip to the doctor; a trip to a Spanish-speaking town to sell produce and buy tools, medicines, sprays, and insecticides, as well as agricultural supplies (e.g., fencing for animals); procurement of various personal documents; buying animals (pigs, cows, guinea pigs, and rabbits);talking about the care of tools; asking about plant and animal disease. (2) A language book to include instruction in writing receipts, bills, shopping lists, personal letters, business letters, etc. (3) Two arithmetic books for adults which combine material from the books used in the bilingual schools and the supplementary materials mentioned earlier in this report.

21
TRAINING TO TRAIN: THE KEY TO AN ONGOING PROGRAM

Mildred L. Larson

The role of SIL in the Peruvian bilingual education program has been mentioned at various points in this book. A basic premise followed by SIL is the principle that a program should not only train people to perform a certain task but should also train them to train others. For example, vernacular speakers are trained to teach in bilingual schools, but more than that, at least some of them are prepared to train others to teach. Only with this added step does the program become self-propagating. In the area of agriculture, for example, people are trained both to raise chickens and to teach the members of their community how to raise them. This training may be by direct instruction or by example, but the key is that the process is dynamic and leads to an ongoing and developing program. (Chapter 8 describes in some detail how training to train was carried out in the area of school supervision.)

Perhaps one of the more difficult problems facing a person working in a program such as the one presented in this volume is how to keep a balance between the many aspects of the work as he moves towards turning each aspect completely over to others who are permanent in the situation. But it is by doing exactly this that he hopes to advance all aspects of the program simultaneously to completion.

In describing the Vicos model of social change, or more particularly the relationship between enlightenment and skill,

the author, Dobyns,[1] concludes by saying that there is a "strong functional linkage between change in (1) economics and technology, (2) education, (3) nutrition and health, and especially (4) social organization." (Dobyns also points out the interrelation of these various aspects.) His list is similar to that given in chapter 22 of this volume where, in addition to ethnolinguistic studies, other SIL activities and concerns are discussed, among them (1) the objectives of the ethnic group, (2) health, (3) community development, (4) education and contact with state authorities, and (5) spiritual values.[2]

Most of this book describes the educational aspect; however, other aspects of the total program are closely tied in to education. The Peruvian government has asked SIL to work not only in linguistic investigation and bilingual education, but also in matters of health and community development. The training of vernacular speakers to train others applies in these areas as well.

Such a varied and yet integrated program can be very demanding on the SIL worker's time. In fact, any one aspect could take up all of his time. It has been important, therefore, to follow a gradual development in each of the areas of SIL responsibility so that all advance simultaneously and complement one another. Although often two linguists are assigned to do the work with a single group, in some of the larger groups it has been necessary to use more personnel. However, even with more personnel, and with a gradual development in each area of the work, there is yet another way in which the work load is reduced to a reasonable size, that is, by training the vernacular speakers to carry certain responsibilities. For example, in bilingual education, it has been pointed out already that the program is one of training vernacular speakers to do

---

1 Henry F. Dobyns, Paul L. Doughty, and Harold D. Lasswell, *Peasants, Power, and Applied Social Change Vicos as a Model* (Beverly Hills: Sage Publications, 1964), p. 163.

2 We recognize that health, education, and economic development are all integral parts of "community development." However, for convenience, health and education are discussed separately and "community development" is used for what might be more accurately termed "economic development."

not only the teaching, but eventually the supervision and preparation of materials. When all of this is finished, the work of SIL in bilingual education is completed for that group.

The charts on the following pages provide a historical synopsis of the work of SIL among the Aguarunas as an example of how the various responsibilities were actually carried out year by year for this language group. There are, of course, other ways it might have been done. Details would be different for other language groups, but the general plan of keeping a balance between linguistic investigation, ethnographic investigation, the education program, the preparation of materials for the schools, the health program, the community development program, and the translation of literature is shown by this synopsis.

The charts also show how the training began with a few and grew until even this training and also the supervision was done by vernacular speakers themselves. A plus sign occurs before those items in which a vernacular speaker worked more or less equally with the SIL worker. An asterisk occurs before those items in which the vernacular speaker took the major responsibility or complete responsibility for carrying out the work. For example, +Cartilla 6 would indicate that that book was prepared by an Aguaruna and SIL worker working together, making approximately equal contributions. Cartilla 10 would indicate that the book was prepared by an Aguaruna speaker who had been trained by the SIL worker. Supervision, without an asterisk, indicates that the SIL worker did the supervision, but with an asterisk it means that an Aguaruna did it. These symbols help to show how the work was gradually put into the hands of the Aguarunas, who, in turn often trained others. Thus, the day has come when SIL workers are no longer needed, but the programs continue in an indigenous manner. Bilingual school teachers, health promoters, and community development promoters are not marked by an asterisk, but the number working each year is given. In these cases the teacher or promoter is, of course, the one doing the work, having received training in his field of endeavor.

Because the Aguaruna group is one of the larger groups in

TABLE 21.1. SYNOPSIS OF SIL WORK AMONG THE AGUARUNAS.

	PERSONNEL	LINGUISTIC INVESTIGATION	ETHNOGRAPHIC INVESTIGATION	TEACHING MATERIALS	BILINGUAL EDUCATION SCHOOLS	BILINGUAL EDUCATION COURSES, CONF	HEALTH	COMMUNITY DEVELOPMENT	TRANSLATION
'47 to '49	2 linguists (first team)	Beginning studies of the phonology & morphology.	Ethnographic observation				Treatment of sick.		
'51 to '53	2 linguists (second team)	Phonological analysis. Provisional practical orthography Continuing lexical and grammatical studies.	Ethnographic observations	Primers 1,2, & 3 (tentative)	1 teacher supervision	Teacher Training Course (TTC)	Treatment of sick Visit of SIL doctor		
'54	1 linguist 1 nurse (third team, permanent until 1977)	Continuing lexical and grammatical studies Review of phonological analysis	Recording of legends and songs Ethnographic observations	Math 4 & 5	7 teachers Supervisir	TTC	Treatment of sick	Citrus plants.	
'55	1 linguist 1 nurse	Phonological analysis & practical orthography approved Comparison of Aguaruna and Huambisa vocabulary	Study of kinship Recording more legends and songs	Revision of Primers 1 & 2 Primers 4 & 5, Math 6, 7, & 8 Soc Studies 1, 2, & 3	9 teachers Supervision	TTC	Treatment of sick	Citrus plants, new breeds of chickens introduced	Stories from the life of christ
'56	2 linguists 1 nurse 1 secretary	Morphology of the noun and pronoun systems written. Study of the morphology of the verb system Beginning of pedagogical grammar	Study of the religious system. Study of the political system	Primer 6 Writing Books 1, 2, & 3	11 teachers Supervision.	TTC	Treatment of sick	Citrus plants, Chickens	Book of stories from the life of Christ
'57	2 linguists 1 nurse	Morphology of the independent verb system written Text analysis	Article on the socio-political system	Math 9 & 10 Revision of Primer 3	15 teachers Supervision	TTC	Treatment of sick	Help with work on land papers, 8 villages	
'58	3 linguists 2 nurses	Publication of small dictionary Clause analysis begun Text analysis	Article on the revenge system Demographic data of ten communities	+Primer 7 (Hygiene)	17 teachers in 9 communities Supervision	TTC Teachers' Conference.	Treatment of sick Visit of Doctor 1 Health Promotor.	+Organisation of cooperative (by Coord. of Biling Ed Cocos needs.	+Genesis 1-3

	PERSONNEL	LINGUISTIC INVESTIGATION	ETHNOGRAPHIC INVESTIGATION	TEACHING MATERIALS	BILINGUAL EDUCATION		HEALTH	COMMUNITY DEVELOPMENT	TRANSLATION
					SCHOOLS	COURSES, CONF.			
'59	2 linguists 1 nurse	Text analysis. Study of dependent verbs begun Pedagogical grammar lessons (20). Work on texts for IBM Concordance	+Transcription of legends and songs	+Revision of *Social Studies 1*	22 teachers in 13 communities. Supervision	TTC Teachers' Conference	+Treatment of sick 3 Promotors	Rubber plants co village of Tamashnum	
'60	2 linguists 1 nurse	+Work on texts for IBM Concordance Continuation of work on pedagogical lessons		+Revision of *Social Studies 2 & 3*	28 teachers in 22 communities. Supervision	TTC Teachers' Conference	+Treatment of sick 5 Promotors Two month visit of doctor	1 Community Promotor trained	Passages from the Life of Christ
'61	1 linguist 1 nurse	+Work on texts for IBM Concordance. +Filing of vocabulary		+Primer 4	35 teachers in 28 communities. Supervision	TTC "eachers' Conference	+Treatment of sick 7 Promotors 200 vaccinations, whooping cough	Rice project at the village of Tamashnum	Publication of *Life of Christ*
'62	1 linguist 1 nurse	Preparation of *Vocabulario Aguaruna* (Aguaruna-Spanish dictionary).	"Aguaruna Humor"		46 teachers in 34 communities. Supervision.	TTC Teachers' Conference.	+Treatment of sick 8 Promotors *Medical Manual*	1 Community Promotors trained (Numbers are accumulative)	+*Gospel of Mark*
'63	1 linguist 1 nurse	KISTIAN CHUMAM UNUMATAI (Beginning Spanish grammar in Aguaruna) "How time is described in Aguaruna"	"How the Bilingual Schools have changed the Aguaruna culture"		48 teachers in 35 communities Supervision	TTC Teachers' Conference	+Treatment of sick 8 Promotors Study of Leishmaniasis	16 Community promotors. 2 carpenters, 2 mechanics trained	+*Gospel of John*
'64	1 linguist 1 nurse 1 educator	Phonology published. Study of the syntax begun +More work on IBM Concordance texts.	Demographic data of the community of Nazaret	+Primers 7 A	56 teachers in 36 communities, 1,445 students Supervision 6 part-time supervisors	TTC Teachers' Conference	+Treatment of sick 9 Pro 300 vaccinations for whooping cough	25 Com Pro 3 carpenters, 3 mechanics 1 storekeeper +CD Conference	+*Titus, 1 John*
'65	1 linguist 1 nurse 1 educator	+Completion of work on IBM Concordance. Vocabulary study -birds		+Primers 8-A and 9 A	64 teachers in 38 communities, 1,587 students Supervision	TTC +Teachers' Conference	+"Treatment of sick. 10 Promotors	34 Com Pro 3 carpenters 4 mechanics, 2 storekeepers 4 home econo +CD Conferences	

	PERSONNEL	LINGUISTIC INVESTIGATION	LINGUISTIC INVESTIGATION	TEACHING MATERIALS	BILINGUAL EDUCATION SCHOOLS	BILINGUAL EDUCATION COURSES, CONF.	HEALTH	COMMUNITY DEVELOPMENT	TRANSLATION
'66	1 linguist 1 nurse 1 educator	Publication of *Vocabulario Aguaruna de Amazonas.*		+*Primer 9* (Hygiene book)	74 teachers in 38 communities, 1,764 students. 3 teachers of adults, 25 students.	TTC +Teachers' Conference. Training of Teachers of Adults (TTA)	+Treatment of sick. 11 Pro. Health Promotors Conference Supervision.	66 Promotors CD Conference.	+*Acts of the Apostles*
'67	1 linguist 1 nurse 1 educator				88 teachers in 42 communities, 1,976 students. 10 part-time supervisors +Supervision 5 teachers of adults, 101 students.	TTC +Teachers' Conference TTA	+Treatment of sick 12 Pro Health Promotors Conf. Health Pro Course (HPC) in tribe.	31 Promotors CD Conference Occupational Training Course (OTC) in tribe	+*I & II Thessalonians* +*I & II Timothy*
'68	1 linguist 1 nurse 1 educator		Observations of culture	+*Dictation* (Writing exercises)	96 teachers in 46 communities 2223 students 4 full-time sup. 7 part-time sup. 5 teachers of adults, 100 students. Girls' school planned	TTC +Teachers' Conference. Training Course for Supervisors (TCS)	+Treatment of sick 12 Pro Health Promotors Conference Supervision	67 Promotors 1 Promotor trained in cattle CD Conference	+*Gospel of Luke* *65 O T Stories
'69	1 linguist 2 nurses 1 educator 1 anthrop 1 lab tech.		Study of the Shaman "How Aguarunas Show Affection"	+*Vehicles* (literature collection) +Revision of *Math 4 & 5*	104 teachers in 51 communities, 2,528 students 4 full-time sup 3 part-time sup 11 teachers of adults, 109 students Girls school started, 90 girls, 9 teachers from Huambisa dialect added to the supervision.	+TTC +Teachers' Conference TCs (at center) Supervisors Orientation Course (OC) in tribe 2 TTA (one at center, one in tribe) +5 Area Pedagogy Workshops	+Treatment of [illegible] vaccinated for [illegible] [illegible] Health Promotors' Conference Supervision	[illegible] Promotors [illegible] Conference [illegible] trained in cattle +[illegible] project at [illegible] (project written up)	+[illegible] +*Galatians* +*Ephesians* +[illegible] +[illegible]

	PERSONNEL	LINGUISTIC INVESTIGATION	ETHNOGRAPHIC INVESTIGATION	TEACHING MATERIALS	BILINGUAL EDUCATION: SCHOOLS	BILINGUAL EDUCATION: COURSES, CONF.	HEALTH	COMMUNITY DEVELOPMENT	TRANSLATION
'70	1 linguist 1 nurse 1 educator 1 anthrop. 1 lab tech (dentist & doctor for 1 month)	**Pedagogical grammar finalized for publication.**		+*Boa Stories* (literature collection). +Teaching guide for 4 Spanish primers. +Revision of *Math 6 & 7.* +Revision of Soc. *Studies 3.* *Oral Spanish* (for adults)	121 teachers in 60 communities. 3,019 students. 5 full-time sup. 1 part-time sup. 9 teachers of adults, 135 students. +Supervision. +Supervision of Girls' School.	+TTC +3 Teachers' Conferences (3 locations) SOC in tribe. TTA (2 in tribe).	+Treatment of sick. 12 Pro. Vaccinations 200 whooping c. 500 measles 500 TB. 2 Pro. trained in tooth extraction. Supervision. HP Conference. HP Training Course (tribe)	117 CD Pro. 4 trained in cattle. Cattle project at Urakusa. +Planning for Occupational Training Course (OTC) CD Conference	+*Gospel of Matthew*
'71	1 linguist 1 nurse 1 educator 1 anthrop. 1 lab tech		+Work on legends. "Aguaruna Land (se"	+*Oral Spanish Course 1.* *Pedagogy Course (Spanish and Aguaruna).* *Civic Education* (for adults) *What we know about the city* (adv. primer).	128 teachers in 60 communities, 3,204 students. 6 full-time sup. 10 Teachers of adults, 136 students. On-the-job training of Supervisors.	*TTC *SOC *Teachers' Conferences (3 locations) 3 TTA +Supervisor at National Seminar on Biling. Ed	+Treatment of sick. 12 Pro Vaccinations: whooping c measles 2 Dentistry Pro Supervision.	+Continued training of CD Promotors in tribe. OTC at Urakusa. Plans for technical school begun. 3 store pro-projects begun CD Conference.	+*Revelation* +*Hebrews* +*Jude* +*II & III John*
'72	1 linguist 2 nurses 1 educator 1 anthrop 1 lab tech		Transcription of songs Study of species of edible plants. Work on cultural outline	+*Cattle Manual*	131 teachers in 65 communities 3,320 students 11 teachers of adults, 93 students. "Education for Daily Living"	*TTC *SOC *Regional Teachers' Conferences 2 Supervisors attended Administration Seminar.	+Treatment of sick 12 Promotors Supervision	+Continued on-the-spot training of Promotors *CD Cont Revolving Fund for CD begun +Supervision +Carpentry Course	+Polishing of *New Testament*
'73	1 linguist 2 nurses 1 educator 1 anthrop. 1 lab tech	"Phonological Contrast between Spanish and Aguaruna" (small article)	+Cultural outline (Social organization & value system). [illegible] on legends, "[illegible] in Aguaruna Culture"	Reading Readiness Books [illegible] 2 for adults Helped in preparation of [illegible]	131 teachers in 65 communities 3,399 students [illegible] teachers of adults, [illegible] students + Supervision	*Supervisor in [illegible] course in Lima + [illegible] + [illegible] in course on [illegible] Education [illegible] +[illegible] special course	+Treatment of sick. 12 Pro [illegible] pro. trained [illegible] region [illegible] hospital) +Supervision +Vaccinations Health Pro. [illegible] refresher course	*CD supervision *CD Conference + evolving fund training [illegible] for Project transportation Project begun *Translation of *Declaration on Human Rights*	Proofreading of *New Testament*

	PERSONNEL	LINGUISTIC INVESTIGATION	ETHNOGRAPHIC INVESTIGATION	TEACHING MATERIALS	BILINGUAL EDUCATION		HEALTH	COMMUNITY DEVELOPMENT	TRANSLATION
					SCHOOLS	COURSES, CONF.			
'74	2 linguists 1 nurse 1 educator 1 anthrop. 1 lab tech.	M.A. Thesis: *Nasality in Aguaruna.* +Recording of autobiographical materiel.	+Work on legends. Aguaruna Cultural Outline (witchcraft, training of young people). *The Aguaruna of the Alto Marañon.* *Illustrations for legends.	+*Chicken Manual* +Adult reader +Adult Writing book. +Oral Spanish 2 (for adults) +Math (for adults).	131 teachers in 64 communities. 3 Supervisors in newly formed Educ Centers *Supervision by Educ Center *2 Supervisors in other areas. "Culturally Adapted Education".	*Regional Teachers' Conferences. *5 teachers attend special Educ course in Lima	*Treatment of sick. 10 Pro +Supervision Vaccination in 2 communities. *Leishmaniasis treatment, 2 communities. +Refresher Course (center) coordination with Area Ofs *1 studying at [illegible] as Lab Tech	+Revolving Fund +Supervision +Heifer Proj (distribution to 3 communities). +Rice and chicken projects, down-river area.	Ne. [illegible] printing
'75	2 linguists 2 nurses 1 educator 1 anthrop. 1 lab tech.	+Study of discourse structure. Article on Jivaro Reconstruction.	+Work on legends. (First vol prepared with diglot in Spanish). Picture proj.	*Booklets printed by local authors.	133 teachers in 67 communities. *10 Supervisors in Ed. Centers. *1 supervisor in other area.	ITC for Writers' Workshop(?) +Writers' Workshop	*Treatment of [illegible]k. 10 Pro [illegible]ordination wit[illegible] area office. +Promotors' supervisors to hospital for more training	+Revolving Fund +Supervision +Distribution Center const Airstrip planning +CD begun in new area Transportation	+New [illegible] distribution
'76	2 linguists 2 nurses 1 educator 1 anthrop. 1 lab tech.	+Study of discourse *Editing of text material. Morphology & Morphophonemic studies	+Work on legends.	*15 reading readiness charts, etc. +Primer for first level reading and writing (mimeo). *Draft of 2nd level of same *Booklets publ by local authors.	(No report to SIL on numbers) *Supervision in Educ. Centers. "Development of School Supervisors [illegible] Aguarunas"	+Writers' Workshop 1 Supervis. trained in Primer writing.	*Treatment of sick. 10 Pro Coordination with Area Ofs	Cattle distribution CD supervision down-river. +Revolving Fund. Transportation	
'77	2 linguists 2 nurses 1 educator 1 anthrop. 1 lab tech.	Study of discourse. Dissertation *The Function of Reported Speech in Aguaruna.* Morphology studies.	+2 volumes of legends published. +3 volumes of legends prepared for publication.	*Primer for first level approved printed. *Teaching Guides for Reading & Writing. *Reading Readiness book printed.	(No report to SIL on numbers) *Supervision in Educ. Centers. "Writers' Workshops".		*Treatment of sick. 10 Pro. *Health Pro organized. *Plans for clinic. *New trainees at hospital.	+Revolving Fund +Supervision. +Truck Project. +Transportation project down-river area. *Aguaruna Council	

the Peruvian jungle, it has been necessary to have more SIL personnel assigned than was necessary for smaller groups. With the additional personnel it has been possible for each SIL worker to specialize somewhat.

At the far left the chart is broken up by years, and the personnel available are listed for each year. These are people who were directly involved out in the tribal area for part of the year.[3] (The work could not have been accomplished without the help of the total SIL team—pilots, mechanics, radio men, secretaries, typists, printers, etc.) Next the linguistic and ethnographic investigation carried on that year is noted, then the school materials which were prepared, and details concerning bilingual education. This is followed by the work in the health and other community development programs. The last column gives the progress made in translation.

The chart is set up to show the actual history of the Aguaruna work: it indicates what, in fact, was done each year. To see the work done in a particular year, the reader should read horizontally across the relevant page. To follow the work done throughout the thirty years of SIL involvement in one phase of the work, the reader should read down the same column to the end of the chart. Items in quotation marks are the names of articles written; books are indicated in italics.

Each linguistic situation has many factors which result in a unique development of the work for that language group. The details will depend on the specific interests and abilities of the SIL workers involved, as well as on the availability of speakers of the language to become involved in the program. Although the information being presented has to do with the work being carried on by an SIL worker, it must be pointed out that in each of these responsibilities the assistance of speakers of the language is a vital ingredient. For example, no linguistic investigation or primer making could be carried out without the cooperation of a native speaker.

---

3 In the years 1947–49 two linguists began the work, but in 1951 two different linguists replaced them. They worked until early 1954. The linguist and nurse who began working in 1954 continued until 1977.

. Also, the rate of development in bilingual education will vary according to the availability of educated bilinguals to become teachers. For example, the Aguaruna program developed rapidly because: (1) there were a number of bilingual men who already were able to read and write and who were eager to teach these skills to their own people, and (2) there was high motivation for bilingual education in the tribe as a whole because they had seen that knowledge of arithmetic and Spanish were the best defense against exploitation by the *patrones;* parents wanted their children to go to school (see chapter 5). The group as a whole was almost 100 percent monolingual, but with these two assets the program moved ahead very quickly.

Although the various aspects of SIL responsibility are listed on the chart in separate columns, there is an interrelationship between these various aspects which needs to be emphasized. Linguistics is listed first. The study of the vernacular underlies all the rest of the work. A good phonological analysis is necessary as a basis for determining the alphabet to be used in materials for the other aspects, since an inadequate analysis of the sound system will result in problems in reading and writing. Studies of the grammar and semantics are crucial to good vernacular primers and to effective translation of materials from Spanish.

Linguistics underlies ethnographic studies inasmuch as these are more accurate when done in the language, which itself is an important part of culture. An understanding of the social and political structure, leadership patterns, the native educational system, etc., is basic to an appropriate selection of prospective teachers. The health program is closely related to beliefs about sickness and curing. Community development is effective only in the matrix of native leadership and work patterns. Therefore, the field worker attempts to understand as much of the culture as possible.

We have already related the education program to linguistics and ethnography. Health and other community development aspects are, of course, also closely related to education. The bilingual school teacher is often the only one available to teach

health principles and administer medicines. Without proper teaching and sufficient medical help, the school might have difficulty functioning because of sickness in the community. At the same time, the development of health promoters is dependent on their advancement in education to the point where they can read instructions and keep records. Lee[4] claims that the process of acceptance of a health program is much more rapid in a community which also has bilingual education.

The education program, on the other hand, is dependent on the total community development program. In order to have an effective school, the community must take responsibility for school construction, teacher selection, food for the students, money for materials, and the improvement of health by better food and facilities. But at the same time the community development program depends on basic literacy and knowledge of arithmetic and on good health if people are to work.

The translation of materials from Spanish will be accurate and effective only if based on linguistic analysis and knowledge of the culture, including belief systems, and if checked for accuracy and effectiveness with vernacular speakers who can read their own language well. Translation is involved in the preparation of advanced school materials, health education materials, and "how to" manuals for community development. The translation of Scripture is also related to community development in that the material translated provides standards of conduct which lead to cooperation and working together, replacing the feuding of the past.

Thus, all aspects must progress together in order to meet the needs of the whole man, the whole community, and the whole language group.

Carrying out such a program is far beyond the ability of two or four or even six SIL members working in a given language. The solution comes in keeping a balanced pace, as mentioned

4 Wilma Lee, "A Comparative Study of Health Indices of Two Chayahuita Communities One with a Health Promoter and the Other without" (Paper presented at the Annual Meeting of the Society of Applied Anthropology, held April 2-9, 1978 in Mérida, Mexico).

above, but even more important, in preparing vernacular speakers to do the work themselves and by their training others who in turn can train still others. The program must be both dynamic and self-propagating, since the SIL worker considers himself temporary. In the example of the Aguaruna project which is used here, almost all phases of the work are now being carried on by vernacular speakers. Indeed, as of 1978 SIL no longer had members working full time with this group.

In regard to linguistic investigation, in the early years the vernacular speakers were involved by giving information in response to specific elicitation of material and by being willing to tell stories and experiences into a tape recorder. As soon as possible several were taught to transcribe the recorded material and type it up. For example, much of the material appearing in the 1965 IBM computer text project[5] was transcribed and typed by Aguarunas. Of the linguistic material produced in the 1970s, all the discourse material was written, edited, and typed by Aguaruna speakers. In the phonological project, vernacular speakers were able to help in classification of phonological data. During 1978, five Aguarunas participated in a course entitled "Introduction to Linguistics," which was given during the teacher-training course. In this course they were given a preliminary introduction to phonetics and phonology and shown how these are related to the formation of alphabets. It is hoped that these courses will continue and be amplified until Aguarunas and other vernacular speakers of the Peruvian jungle will have enough linguistic background to write semi-technical descriptions of various aspects of their respective languages.

In ethnography the work also began with elicitation of information from vernacular speakers and observations made by the linguist. During the seventies much more of the work was done by Aguarunas, who wrote their legends, often

5 *Concordance of Aguaruna Texts* (Produced by the Joint Linguistic Information Retrieval Project of the Summer Institute of Linguistics and the University of Oklahoma Research Institute, under Grant GS-270, National Science Foundation, 1968).

consulting with older men for accuracy, and who also did a great deal of work on the translation of these legends into Spanish. The first two volumes are printed, and three other volumes have gone to press. Through the writers' workshops, material has also been put in book form by authors writing on the customs of the Aguarunas, the making of various cultural items, and on the stories and legends told them by their parents. The way is open for some of them to continue to produce ethnographic material since a number of them have learned a few of the essentials for collecting and organizing data (see chapter 18).

In the production of school materials, the role of the vernacular speaker as a co-worker on all materials is always essential, but during the early years of the schools, the responsibility for the books was primarily the linguist's. Subsequently, various bilingual teachers were largely responsible for several advanced reading books. In 1976 an Aguaruna supervisor requested instruction in the details of primer making and began carrying this part of the work. In 1977 he not only prepared the materials but personally presented and defended them to those in charge of the pedagogy of school materials in the area education office and also in Lima. These materials are now printed and are being used as the basic primer for first level in the Aguaruna schools. Additionally, this supervisor has received further instruction and continues to prepare materials.

Chapter 8 of this book shows the development of the education program from the time when the SIL worker did much of the training of teachers and supervision of the schools until the present when both are in the hands of the Aguaruna and local education officials. A number of Aguarunas now hold key positions in school districts throughout the Aguaruna area.

As to training courses and conferences, the responsibility has also gradually been delegated to Aguaruna teachers. Some of these are government-sponsored courses, like the teacher-training course held each year at Yarinacocha. During this course the SIL worker taught the Aguaruna pedagogy class (see chapter 6); however, beginning in 1970 this responsibility

was also gradually turned over to Aguaruna supervisors (see chapter 8). The teachers' conferences are described in chapter 9. These were coordinated by the SIL worker during the early years, with the teachers themselves gradually doing more of the planning and carrying out of details. From the beginning, each conference was led by an Aguaruna director and secretary, and the SIL worker was just one of the group and could make suggestions. The conferences fostered a great deal of communication, and during the 1970s they also began to be completely coordinated by the supervisors. Health promoter conferences followed the same pattern as did the community development conferences which had been started. Although the teachers' conferences have not been held in recent years, the pattern is there, and Aguaruna leaders have, in the last few years, used this pattern to organize the Aguaruna Council. Health promoter conferences and church-related conferences have also been held recently, initiated by the Aguaruna leaders themselves.

During the first years that they worked among the Aguaruna, the SIL field workers spent much of their time treating the sick, caring for people during measles and other epidemics. As with other aspects, this was gradually taken over by the community. First, the teachers learned to help in the health program, then health promoters[6] were trained a few at a time in special courses first held at the clinic at Yarinacocha and later in various communities. Finally supervisors were trained to work with the health promoters in order to free the field worker from this responsibility. The SIL workers next helped to incorporate the health program into the government program so that it would be ongoing and free from SIL involvement. At present an Aguaruna man who has studied at a national univer-

6 Ralph W. Eichenberger. "La ciencia médica al servicio del hombre selvático." *Peru indígena* 3:221–27. 1952. See also Ralph W. Eichenberger. "How Medicine, Dentistry, and Linguistics Work Together." *Christian Medical Society Journal* 1964; Ralph W. Eichenberger. "Una filosofía de salud pública para las tribus indígenas amazónicas." *América Indígena* 26:119–41. 1966. and Wilma Lee and Joy Congdon. *Programa de servicio de sanidad para las comunidades nativas de la selva* (Lima, Perú: Ministerio de Educación, 1971).

sity has helped organize the health promoters and is preparing to set up a clinic or medical center in the tribal area. He has also done much to procure medicine for the health promoters to use in their work, and has made arrangements for the training of additional personnel at a hospital in Trujillo, on the coast.

At first SIL workers helped in community development by making available better grades of chickens and by introducing new plants. Assistance was also given in the preparation of land requests. A cooperative was organized to help the communities in marketing. During the sixties, emphasis was placed on the preparation of community promotors in the occupational courses given by the government at the Yarinacocha center. Many community leaders studied agriculture, mechanics, carpentry, etc. They then set up projects in their communities. Help was given in cattle and rice projects, both new ventures for the communities. In 1971, an occupational training course was held in the Aguaruna area.

During the seventies the goals of training Aguarunas continued in a broader fashion which was intercommunity in scope. These included finding solutions to problems of transportation and setting up a sizeable revolving fund for community projects to be administered by Aguarunas. The transportation system now includes several large boats and a truck which goes from the Aguaruna area to the coast with produce and then brings back supplies. It is an indigenous venture and at the moment seems to be very successful.

In 1977 the Aguaruna Council was organized under the direction of Evaristo Nuncuan. It consists of four delegates from each of the five main geographical regions, and its goal is to study and find solutions to problems facing the Aguarunas as a group. So far the delegates have been concerned primarily with matters of organization, training, health promotion, and agricultural production. The Council has helped to provide more training for community promoters. In the area of health they are currently building a central clinic and have established ways of providing medicines for the health promoters.

The Council meets with the Aguaruna General Assembly to

help with sociopolitical organization, to give orientation, and to make plans for development. Most of those who attend the General Assembly have been trained in some aspect of community development or education. By working together in this way the Aguaruna are accomplishing much despite the problems they face.

Translation work has always involved both the linguist and the vernacular speaker, with the linguist being responsible for communicating the meaning of the material to be translated and the vernacular speaker being responsible for how the material is to be said in Aguaruna. In the process of translation, the vernacular speakers have learned translation principles which they have later put into practice by doing translation on their own. One person trained in this way translated some sixty-five stories from the Old Testament without the help of the linguist, all of which were well done and well received by the Aguaruna. The man who worked most on the translation of the New Testament is now continuing translation of the Old Testament by himself.

Much of the satisfaction for the SIL worker comes from seeing the vernacular speakers completely and confidently handling the various aspects of the work which he once handled, and knowing that these men will also train others. The dynamic has been activated, and the future direction it takes will depend on the desires of the indigenous peoples and on the resources available for them to fulfill these desires.

22

CULTURAL CHANGE AND THE DEVELOPMENT OF THE WHOLE PERSON: AN EXPOSITION OF THE PHILOSOPHY AND METHODS OF THE SUMMER INSTITUTE OF LINGUISTICS[1]

Eugene E. Loos, Patricia M. Davis and Mary Ruth Wise

Introduction

This chapter is a description of the philosophy and anthropological methodology underlying the work of SIL in Peru, especially those aspects pertaining to human relations and cultural change.[2]

The first section discusses the reality of the Peruvian jungle where the long history of contact between the ethnolinguistic groups and the Spaniards and mestizos have resulted in many cultural changes. Secondly, universal human needs and other basic concepts are considered. In the third section a general account is given of the founding of SIL, its basic principles, and its methods of operation. The report concludes with specific examples of the activities of SIL in the Peruvian jungle and some of their results.

---

1 A previous version of this article was published in *Actes du XLIIe Congrès International des Americanistes, Paris, 2/9 septembre de 1976* Vol. 2 (Paris: Societé des Americanistes, 1978) pp. 499–525. It is reprinted in its revised form by permission of the authors and of the Society of Americanists.

2 The authors would like to express their gratitude to Fernando Fuenzalida, Alberto Escobar, Alejandro Ortiz, Aída Vadillo, Darcy Ribeiro, Sergio Tapia, Rubén Paredes, Allen Johnson, David Coombs, and Donald Lindholm, who read the first drafts of this work and made valuable suggestions.

The reality of the jungle and cultural change

The ethnic groups of the Peruvian jungle have been in contact with Western society for many years (in many cases since the arrival of the first explorers and missionaries in the seventeenth century). According to Varese (1972:82): "More than 70% of these minorities maintain permanent relations of interaction with members of the rest of the country... 35% [which includes some local groups of those already mentioned] maintain sporadic relations: but directly or indirectly, and to a greater or lesser degree, *all of the native societies are linked to the Peruvian economic system* [italics added]."

This long history of contact has not only affected the native economy but has also resulted in changes in many aspects of the culture. For example, the religion of the Amuesha, like that of many jungle groups, has an animistic base. They believe that the shaman can transform himself into a jaguar, and they are afraid of the boa, which is the mother of all the water demons. But we also find the Inca concept of the deity of the sun, whose worship is a vital part of the Amuesha's festivities. One discovers, along with the native beliefs and those which are the result of the influence of the Inca empire, a syncretism with themes such as the cross and the virgin mother of "our father." These themes have obviously been incorporated into the Amuesha religion from the teachings of the first missionaries, who established themselves in the area in 1635.

In the light of this it would be nothing more than romanticism to state that no possibility of cultural change should be introduced, especially with regard to the native religion, but rather that the natives should be left in their original state. The concept which many have of the "pure native" and the "happy savage" is a myth. The authors of this work agree with the following affirmation of the Unit for Assistance to Native Communities:

> Those who consider the native communities totally isolated from the social and economic structures which affect the rest of the country are certainly mistaken. This can only

be blamed on ignorance or on the manipulation of that concept for the benefit of those who believe it. In any case, an analysis of the native societies which does not consider said relations will be based on a false premise" (Chirif Tirado et al. 1975:258).

Today the native groups are confronting, in ever-increasing intensity, waves of people from different cultures: those searching for oil, lumbermen, hunters, colonists, missionaries, traders, travelers, tourists, students, and others throughout the jungle. The contacts and changes which result are intense and can be destructive. Furthermore, they tend to disturb the equilibrium and weaken the behavioral norms of the native culture. For instance, the Amueshas abandoned their traditional marriage ceremonies when the mestizos ridiculed them, saying, "These marriages are not legal." This appears to be one of the factors that contribute to the instability of marriage among the Amuesha today.

Furthermore, the material base of the group is now very precarious. Game animals are much farther away (and are almost extinct in some areas); consequently, it is more work to supply basic needs, and there is less and less time in which to do so because the natives are obliged to work for their *patrones* to pay off debts.

Another serious problem is that the colonists have taken possession of the land that has belonged to the Indians for many generations. Since they had little or no access to legal help, the only recourse for the Amueshas and some other groups has been to emigrate to less desirable areas where they could preserve their cultural integrity even though these places would offer fewer possibilities for subsistence. The price they have had to pay for this has been great physical hardship and psychological damage to the members of the group. Unless the territory proved to be of no value to the dominating society, in

time "civilization" would, without doubt, encompass it.[3] Thus, in many cases, the native must not only contend with tensions within his own culture, but also must combat upheavals caused by contact with the outside world.

Some cultural traits favor survival in the face of contact with a dominant, larger cultural group, and others do not. For example, Ribeiro (1973:27), using as a basis his study of the history of the contact with indigenous groups in Brazil, proposes that groups which have unilinear structures, such as exogamous clans, seem to be more resistant to external, destructive factors than those with extended family structures as the largest organized social unit. For an isolated group, organization into small communities, that is to say, in extended families, is a good adaptation to the jungle environment. Nevertheless, this feature, added to a predisposition to change, could lead to the disintegration of the native society in the face of intensified exploitative contacts.

Another aspect to be considered is that within the limits of a given society, differences of behavior are not only allowed but in some cases, are even encouraged. The degree of liberty to choose alternatives varies as much within a culture as between cultures. Also, tolerance to change varies from one institution to another both within a culture and between cultures. If the pressures to change key institutions exceed the tolerance of the cultural system, the result will be individual disorientation and cultural disintegration. In the preface to "Culina Texts" Mendizábal Losack (1962:92) observes: "One of the questions which is raised while reading the following texts is, *does the Culina culture condition in those who are a part of it, an adaptable personality, capable of confronting the social and cultural changes provoked by acculturation?*—a question which Peruvian ethnologists should ask concerning every ethnic group... [italics added]."

---

3 The authors recognize that over the past years the situation of the ethnic groups has improved through the implementation of the Law of Native Communities, the Educational Reform, and other government programs which provide favorable external conditions for the Indians' community and personal development.

An additional aspect of the reality is that once contact has been established with the outside world, many natives desire change. In the Yurúa and Purus River basins, a number of Culina and Cashinahua communities are found. These groups were subjected to intensive and abusive contacts during the time of the rubber boom and fled to the headwaters, where they stayed without contact until the 1930s in the case of the Culina and more or less 1945 in the case of the Cashinahua. However, when their axes and machetes were completely worn out, they decided to again make contact with the whites who asked rubber of them in exchange for merchandise. Consider also, the case of the Candoshi. When counselled not to abandon their customs, they responded: "You want us to continue cutting off each other's heads in revenge killings? No thank you. We do not want to live like that."

We must also acknowledge that groups that have been pushed aside are eager to know the outside world, a need which is legitimately satisfied by printed literature (since radios are still scarce in the native communities and there are no programs transmitted in the vernacular). For example, an Aguaruna who had traveled to Lima, recognizing this desire in his community, wrote a book in his own language about what he had experienced during his visit When he was asked about the matter, he replied, "We want to learn new things as well as things in our own culture. That is why I wrote this book."

The truth of the matter is, then, that the ethnic groups have had contact with the Western world for a long time, in many cases dating from the arrival of the Spaniards, and since then have been in the process of change. Change is normal and inevitable since it is the basic mechanism for cultural adaptation. Every culture is dynamic and is in a constant state of change and development: this can be positive and beneficial when the changes arise from the free choice of the society, which has had various alternatives from which to choose.

Therefore, using force to prevent a change can be simply a form of repression. On the other hand, the desire neither to force members of an ethnic group to adjust to other patterns, nor to oblige them to maintain the *status quo* (if that were

possible), necessitates helping them find alternatives in order to retain their identity within a viable, strong, united, and just society whose values can survive in the face of extracultural contact.

BASIC CONCEPTS

In every culture the values, social groupings, and activities (Pike 1967) are interrelated in such a way that it is impossible to change one part without varying the whole. Furthermore, the presence of an outsider (e.g., a field worker) in a native group inevitably produces change. For these and many other reasons, it is important that the field linguist have a knowledge of the basic principles of general anthropology. The principles discussed in this section are based on the following psychocultural considerations:

- that man has diverse needs that should be satisfied for his development as a whole person
- that culture is dynamic, not static
- that certain aspects of a culture lead to the well-being of the group and its members, while others are to their detriment
- that the mother tongue is a key to maintaining cultural identity and taking advantage of new information.

Universal needs

In the heart of every human being there are material and psychological needs and traits which are common to all men. These are inherent in the human personality and are interwoven with sociocultural needs. Some of the most important ones are discussed below.[4]

Physical needs. Man has certain basic physical needs for maintaining life: he needs a geographical area designated as his

4 Since the theoretical orientations of SIL anthropologists vary considerably, we neither attempt to delineate here a complete list of universal needs, nor to follow specific lists, as for example those to be found in the works of Malinowski (1944) and Aberle *et al.* (1950).

sphere of life—even nomadic groups have a certain territory within which they tend to move about. He also needs food, certain health safeguards (adequate medicines and hygiene), and protection from hostile natural elements.

Psychological needs. Each individual needs a feeling of security within a social context (this varies from culture to culture) and a sense of his own identity. There are various factors which contribute to a healthy concept of personal identity; among them are: to be esteemed and accepted by others; to have a feeling of personal dignity and esteem; to be aware of the value of his cultural heritage; to know that he loves and is loved; to know the satisfaction of being able to express himself in creative ways through language, art, handcrafts, work, and music; to have the satisfaction of having succeeded in something; to have hope and courage; and to hold to a moral code.

Sociocultural needs. Among sociocultural universal needs are the following: differentiation of social roles and criteria to assign roles to the members of the community, means of communication shared by the members (language), common objectives and values, norms for regulating the expression of the emotions, socialization of the members, and negative and positive sanctions for the control of conduct which are put into effect for the well-being of all.

Although one can enumerate these necessities among cultural universals, the ways in which they are satisfied vary from one society to another.

Traits which lead to the well-being or detriment of the society

All societies, like the people who constitute them, have tendencies and traits which lead to their well-being or viability in the face of contacts with the outside world, while others become a detriment to them or may even lead to their extinction. According to the values held by the authors of this work, aspects of the first type can be considered positive; those of the second, negative. As far as negative aspects are concerned, it is not a case of the culture of a minority social

group being inferior or "bad" in comparison with a "good" majority or with a dominant Western culture. Rather it involves aspects which lead to the *self-destruction of the culture* and/or *the physical or psychosocial detriment of its people* or that lead to *injustices to individuals within or outside the culture.* Injustices are defined, in general, by commonly recognized values, such as those stipulated in the United Nation's "Universal Declaration of Human Rights." Traits that can be classified as *positive* are those which lead to well-being and include all the traits that are not negative. They cover the whole gamut of the social, material, and spiritual reality of a people: norms concerning marriage, family structure, kinship system, social structure of the community, social controls, world view, language, oral traditions (legends) and history, division of labor, art, music, dress, type of housing, etc.

Examples of traits which lead to well-being. The pattern of matrilocal residence with cross-cousin marriage in a jungle society, for example, is a well-adapted response to the situation and might include the following beneficial factors:

- Security for the husband when he must be away from home for whatever reason, such as to hunt or to do special work for his *patrón* (for example, extraction of rubber and wood); he can leave knowing his wife will be in good hands (those of her parents).
- Security for the wife: her parents do not allow her husband to mistreat her, which is of special importance in a society where the woman occupies an inferior position to the man.
- Security in old age for the parents of the woman: the son-in-law continues to support them.
- Social security: each member of the family has at least one group of relatives (extended family) to which he feels he belongs.
- The activities of the group are automatically structured according to a pattern of established categories along with an understanding of the functions of each. That is to say, each member of the extended family has a definite function.

- This model often provides a reciprocal redistribution of excess goods obtained by individuals.

There are countless examples of such positive aspects in each ethnic group in Peru. In fact, many scholars believe that tribal life is frequently much more significant and satisfactory for the members of a group than "civilization" is for those who work many hours a day at jobs in which they find neither satisfaction or the fulfillment of their ambitions (Sapir 1964).

Members of the ethnic groups of the Peruvian jungle evidence an extraordinary knowledge of their environment. They distinguish between plants which are edible, those which are medicinal, and those which can be used for other purposes (in construction, for example). Their adaptation to the natural resources of the jungle is complicated and promotes the maintenance of ecological balance. Their system of slash-and-burn agriculture is obviously convenient for the tropics. The cultivated areas which are later left to return to jungle are not lost, but rather slowly recuperate fertility for future cultivation (Meggers 1971). The following are two examples which serve to illustrate this adaptation to their environment:

> The Mayoruna live on hilly land near the headwaters of small rivers. There, "... as soon as the trees are cut, erosion begins. They have seen that it is best to cut the trees parallel to the hill using the trunks as terraces to hold the top soil which would be carried downhill by the rain" (Vivar A. 1975:345).

Ground satisfactorily cleared by the Aguaruna would not impress the outside observer because it has uneven borders and because some trees have been left here and there. But the fact of the matter is that these trees are often species whose fruit attract certain varieties of birds that can be hunted with the blow gun and serve to augment the meat supply for the family (Grover 1971:1).

Other customs which might appear detrimental at first glance actually show a good adaptation of the native to his environment and are adequate means to protect the rights of all the members of a society. For example, the very popular use

of nettles to discipline children might seem severe, but among the Amuesha and some other groups, a single nettling is normally sufficient to teach the child to obey his parents. Afterwards, the mere threat of such a punishment is sufficient to quell misbehavior. There is no danger of permanent damage to the child,[5] and it is unnecessary to look for other, potentially harmful forms of punishments. They severely criticize parents from another culture who spank their children, but the use of nettles is always approved.

Examples of traits that are detrimental to the individual or the society. In one of the native communities, a young couple was in anguish seeing their four-month-old become gravely ill with a respiratory infection. The people, who attributed the disease to supernatural causes, counselled the parents to bathe the child in urine, feed it with the same, and put powdered tobacco into its nostrils. The anguish caused by the death of the child was felt no less intensely by its parents than that experienced by parents in other cultures; and, in all probability the "treatment" contributed to the child's death. It is evident that in such cases other means of treating the sick are needed, as well as hope and spiritual comfort.

For an example of a trait which does not favor the survival of the group, see the case of revenge killings among the Candoshi (pp. 386–87).

Examples of traits that could result in well-being or detriment. Some traits embrace both positive and negative values. That is to say, they could turn out to be both beneficial and detrimental to the society or the individual. If one were to study the pros and cons of female infanticide—as well as the infanticide of deformed males—among the Mayoruna, a custom related to that of raiding other groups or mestizo settlements to provide themselves with women and servants, it would include at least the following:

---

5 We refer to the varieties of nettles which cause stinging and itching for approximately a half hour. There are other varieties which can cause inflammation and other longer lasting discomfort.

Positive	Negative
• Furnishes a more varied genetic source for a small community, bringing genetic benefit.	• The women are taken by force, subjugated and intimidated. They often never become linguistically or socially adapted and so are destined to live in cultural isolation and on an inferior level.
• Permits the expression of aggression, needed by every human being, within the normative standards of the culture.	• The captured children are raised as slaves and sometimes do not gain the same level of acceptance as the authentic Mayorunas.
• Frees the woman from the responsibility for unwanted daughters and avoids the tragedy of deformities.	• Children are exterminated by their own parents (infanticide).
• Some terrorized neighbors are careful not to make incursions into Mayorana territory, thus slowing down the rate of acculturation and enhancing the prospects for survival of the group.	• The innocent husbands, children, and brothers of the captured women are assassinated.
• They procure implements for hunting and farming.	• The Mayorunas as well as neighboring groups live in constant fear, apprehension, and suffering realizing their inability to maintain a constant state of alertness in order to defend themselves.
• It strengthens the cultural control over the members of the native society.	• The communities of the victims organize expeditions for revenge.
• The fulfillment of their objectives gives a basis for a feeling of self-identity and security.	• A considerable portion of the Mayorunas are preoccupied with getting to the outside world: the captives, their children, and others unite in a desire to escape the terror of reprisals and internal violence; some not only flee but take others with them.

Since at one time or another all cultures manifest characteristics which act in opposition to the well-being of their members, collective as well as individual solutions are needed. Often, the solutions take the form of cultural sanctions against the offenses and injustices perpetrated in favor of one individual at the cost of his colleagues. Not all of these sanctions are successful, and when they are not, frustration and social disintegration may result.

In other cases the question is not a matter of success or the lack of it, but rather of different anthropological interpretations. For example, Mendizábal Losack (1962:91) observes how the Culina resort to magic to satisfy their needs: "While the Culina are obviously in a state of anxiety, their culture offers relief through magic, a practice constantly referred to in the texts. For example, in La Rana 'Dsaphua' (text 25) the informant says: 'like we do in our ceremonies to obtain food'." On the other hand, Siskind (1970), later analyzing the Culina's frequent recourse to magic, showed that it is precisely this trait which impedes their making a satisfactory adaptation to their environment, since their movements are restricted by their suspicion of the motives behind every act.

Extreme manifestations of backbiting, egotism, hate, jealousy, hostility, etc., are traits which, if not brought under control, can destroy personalities and cultures. Love, joy, harmony, unity, common objectives, and mutual help build up and fortify individuals as well as cultures. But these qualities cannot be produced by imposition. They must spring from within by personal or group option.

What each individual needs is an opportunity for personal fulfillment, freely and conscientiously exercising his right to a personal decision in the face of various alternatives. As far as society as a whole is concerned, the ideal is a culture that offers its members the very best conditions for its well-being, but there is no culture completely adequate to fulfill this function. Internal and external factors at times cause pressures with which the existing cultural mechanisms cannot contend.

The attitude of a field investigator. As has already been mentioned, every human being needs to adhere to a moral

code, and all cultures have such codes, although these vary a great deal both outside and even within the same culture. As Herskovits (1948:76) has said: "morality is universal." The anthropologist is no exception: he needs and has a professional code of ethics, and one aspect of his system of beliefs might well be the doctrine of cultural relativism. Following this relativism to its logical conclusion, one sees it as a system which favors the *status quo*. Evaluating relatively a cultural structure which foments exploitation or which results in the extinction of one group in favor of another, one would come to the conclusion that it is neither better nor worse than another system.

Nevertheless, even though he may try not to evaluate the cultures he studies or to judge between the "good" and the "bad," the anthropologist, the linguist, or other investigator in the field, as a human being, must recognize in all cultures the existence of injustice and suffering with regards to the individual, as well as to the group to which he belongs. Furthermore, although he may not admit it, he believes that his own rights should be respected. That is to say, although his dogma is actually relativism, not all of his actions and expectations are in agreement with that doctrine.

During the seventeenth and eighteenth centuries, epidemics of smallpox and other foreign diseases decimated the population of many groups and completely exterminated others. Those who survived became victims of extreme cruelties during the height of the rubber boom and were later exploited by *patrones* and merchants who did not pay just prices for their lumber and other products, and who at the same time charged exorbitant prices for their merchandise. In the face of individual cases of suffering and the precarious situation of the ethnolinguistic groups which survive, the field worker must make an effort to help in accordance with the available possibilities and the desires of the native community—making medicines and seeds available, helping in the organization of cooperatives, cooperating in bilingual education programs and other development projects. While such help might result in a temporary dependence, it is

expected that care will be taken not to allow the dependence to become permanent. This was expressed by a leader of the Piro group: "We needed the help of the Summer Institute of Linguistics at the beginning [of the bilingual school program and community development projects], but now we can go along independently." In order to gain this confidence and independence, *the form of assistance should not destroy the traditional system of social organization, beliefs, etc., but rather should function within these systems with discernment and by means of the participation of the members of the group itself.*

The importance of the mother tongue

One of the consequences of contacts between a majority culture which has had access to reading and writing and the other benefits of education and a minority culture which as yet has not had these benefits is that the member of the latter has a tendency to feel inferior and discouraged. This is partly due to the fact that he does not recognize the positive elements of his own culture and partly because he knows that others do not acknowledge them as being positive.

Language is one of the extremely important and positive elements of a culture since it constitutes a means of communication as well as of reflecting a substantial part of the culture. It is a key trait for the preservation of group unity and sense of identity for the individual. Therefore, the fact that his language is considered worthy to be used in education and his oral cultural heritage is worthy of being preserved and propagated through the written word contributes to his expectations, his personal dignity, and his self-esteem. When those who have just become literate discover they can express themselves in writing, they not only have a means of achieving fulfillment and self-identification, but they also have the satisfaction of contributing to the preservation of their cultural values by putting their stories and traditions into written form.

The literate person who speaks a vernacular tongue also has the advantage of being able to obtain the necessary information

to maintain good health through pamphlets printed in his language on hygiene and prevention of disease. Also, to give him confidence and courage, he has at his disposal, among other things, laws concerning his rights, collections of his own people's folklore, portions of the Bible, etc. To adapt himself to changes in his environment and free himself from his *patrón*, if he wishes, he has manuals of instruction for agriculture and cattle and chicken raising. An indication of the self-esteem he has once he is literate is that he now considers himself capable, like any other individual, to take advantage of the information available *in his language*, using it for his own development and defense.

On the other hand, he also needs the benefits of bilingualism. One of the conclusions of a workshop held in January, 1978, reads as follows: "Almost all groups that speak an indigenous language are found on the lowest level of society and generally are also on the fringes of the national economic life. Those speaking the vernacular do not have the same opportunities to participate in national life as do Spanish-speaking groups" (Solá and Weber 1978:9).

When an Indian lives in contact with the dominant culture, but does not speak the national language, he feels cut off and isolated. But if he is able to communicate with Spanish speakers, his social and cultural sphere is expanded, and he need not feel dominated. Bilingualism is not necessarily a manifestation of alienation, but rather can contribute to a feeling of dignity and self-esteem. An Aguaruna expressed it very well when he said, "We, the Aguaruna, are intelligent. We can learn two languages."

The use of the mother tongue in daily life contributes to the unity of a group and strengthens the local social units, preventing them from being dominated by Spanish speakers. On the other hand, bilingualism opens new doors of communication and interchange among those who speak different languages. Taking the latter into account along with the other basic concepts considered in this section, we turn now to an exposition of the philosophy and methods of the Summer Institute of Linguistics.

WHAT IS THE SUMMER INSTITUTE OF LINGUISTICS AND WHO ARE ITS MEMBERS?

Origin

The SIL was founded in 1934 by William Cameron Townsend with the desire to give practical help to the world's minority groups. Fourteen years of experience among native groups in Guatemala, especially with the Cakchiquel, had convinced him of various important principles which are presented below.

Townsend's basic principles.

(1) That the Scriptures offer to the man who accepts them a moral basis and a hope which can transform his life, giving him the necessary motivation and spiritual strength to fulfill his own deep desires as well as those of the society of which he is a member.

(2) That, although it is necessary to respect the indigenous cultures and their right to fulfillment and to reject the domination and imposition by force of foreign values, it is also necessary to make it possible for these societies to have a knowledge of the Biblical message so that they might enjoy its benefits if they so desire.

(3) That, totally apart from the spiritual motivation, the privileged of the world are obligated to help the needy and oppressed in any way they can, for they, too, have the right to develop as free people and choose their own future with an understanding of what the consequences of such decisions might be.

(4) That, since the available resources are few and provision for all the needs of the indigenous societies is impossible, it is necessary to limit ourselves to what is most important:

- translate portions of the Bible so that the ethnic groups can take advantage of their teachings if they so desire.
- promote the study and appreciation of the worth of the vernacular tongues;
- open channels of communication and cultural interchange, principally through bilingual education, always respecting to the fullest the dignity of the Indian and his culture;

- serve without discrimination by humanitarian and practical works within the scope of the existing resources; and
- cooperate, in a nonsectarian way and without participating in political movements, with academic, government, and other entities that request collaboration.

(5) That, in order to carry out this work, it is imperative that scientific methods be used (descriptive linguistics along with other disciplines—anthropology and education, for example) in order to assure that the field worker do his work effectively and well.

The founding of the twin organizations: SIL and WBT. With the vision of preparing young people for a difficult task, a course in descriptive linguistics was organized in the summer of 1934. After attending the second course in the summer of 1935 and having been approved, following an appropriate process of selection, the first researchers were appointed to Mexico.

In 1942, eight years after having begun work, SIL was incorporated in the state of California to facilitate the negotiation of agreements and contracts with academic and governmental agencies. At the same time the twin organization, Wycliffe Bible Translators (WBT), was founded. It is significant that SIL was not established in an attempt to mask the activities of WBT, but that WBT was founded to solve a problem which in time became more and more apparent: those who were enthusiastic about the work of SIL and wanted to support it experienced difficulties in understanding how it was possible that representatives of a scientific organization should also be interested in translating the Bible. At the same time, other individuals and entities enthusiastic about supporting the work of translation had difficulty in comprehending the need for a strong emphasis on the scientific aspect. The solution was to establish two organizations which together reflect the dual motivation of the members. From the beginning the public has been adequately informed about the functions of both.[6]

---

6 See for example, *Who Brought the Word*, 1963 and *Language and Faith*, 1972 (Wycliffe Bible Translators, Inc., in cooperation with the Summer Institute of Linguistics).

Financial policies. The financial policies which evolved during those first years and have since been established are as follows:

- The greatest amount of support for SIL and WBT activities, like that of its members, is provided by private donations. Each individual is responsible for his own expenses. He is supported by relatives and friends and by churches or other private groups who are interested in the work. There is no fixed budget, and salaries are not guaranteed.
- Apart from private donations, certain public institutions have contributed generously, e.g., subsidies for gasoline and printing material. It is important to note that these contributions are received sporadically and are designated for specific local projects. They are also the exception rather than the rule.

In addition to this, the members of SIL share their material possessions and intellectual capacity in a brotherly fashion. Concerning this a visiting anthropologist remarked: "I am amazed that you being from capitalistic countries are true communists in your life-style."

Methods of operation

Philosophy. SIL began with the conviction that every human being has the need and the right to fulfillment as a whole person and that he needs that which will help him maintain with dignity his cultural identity and his own personality traits. On the other hand, he must be free to adapt positively to the continuous flow of new situations which he encounters, in order to retain or recover his security and self-respect as a member of a culture which is valuable in itself and is recognized as such by others. Since contact with Western societies is an unavoidable reality for the great majority of aboriginal groups, a major function of the field worker at present is necessarily to help lessen the shock of cultural clashes as wisely and as appropriately as possible, in the face of extremely varied and complex circumstances.

Members of SIL try not to work with a paternalistic attitude which could foster dependency or domination. Their objective is to complete their task as quickly as possible, leaving behind "tools" with which the native groups can adapt themselves as they see fit to new sociological realities. The linguist must also make an effort to avoid the errors of his own society—materialism in its diverse forms, ethnocentrism, and the possible disadvantages of its economic system, among others. That is to say, he must bear in mind that a clear distinction exists between cultural domination and a fruitful cultural exchange.

In addition, SIL holds the conviction that every language has inherent value; that even in the case of those that seem destined to extinction, as a scientific organization it is obligated to make an effort to preserve data from them. This interest can be documented by the fact that time and personnel have been dedicated not only to relatively large ethnic groups but also to groups with very few speakers. In Brazil Dr. Sarah Gudschinsky worked several months with the last survivor of the Ofaié-Xavante group who suffered with tuberculosis. In Peru, studies of three languages which are about to become extinct--Andoa, Taushiro, and Resígaro—have been published.

Scientific basis. Members of SIL form a team which is organized and trained in the following manner. Young people with college degrees are trained in the basics of linguistics, anthropology, and literacy in ten summer courses held every year in six different countries. The attendance of new candidates at the course also serves as a trial period. In accordance with SIL regulations, the training is available to all who wish to take advantage of it. After being accepted as a member of SIL, the applicant is required to attend orientation and survival courses that will help him to adapt to new cultural and ecological environments. It is important that at all times he show an altruistic spirit.

After being trained and assigned to work with a certain ethnic group, the new researcher is counselled and supervised by a team of experienced specialists who act as advisers for the linguistic, anthropological, and educational work done. This consultant system, in which all the field workers are included,

accelerates the work, helps to control the quality of the research, and fosters encouragement and understanding among the members of the team. Seminars on a variety of topics help keep linguists up to date on new theories and methods. Many members do advanced studies in their speciality during their sabbatical leaves.

As a result of this program, SIL offers in its 1935-1975 *Bibliography* the titles of research studies carried out on 638 languages in 30 countries; these have been published in some 190 linguistic and anthropological journals and monographs. Plans are to continue to make data obtained available to the academic world, as well as to the general public, as quickly as experienced consultants can supervise their preparation.

The majority of works published by SIL comprise descriptions of phonological and morphological systems, sentence structures, and aspects of the culture and social organization; dictionaries; compilations of folklore; and in more recent years, paragraph and discourse analyses. Nearly all of these studies concern ethnolinguistic groups which did not have alphabets in common use before the studies began. Since the majority of scientific journals do not publish data compilations and descriptive studies without theoretical conclusions, even though such publications are part of SIL's objectives, microfiche reproductions are beginning to be used to make the materials available at a reasonable cost to those scholars who need them.

As an example of SIL's scientific production, including applied linguistics—translations and contributions to the Bilingual Education Program—a detailed list is included here which was presented to the Minister of Education of Peru in a General Report pertaining to the year 1975:

Statistics of Works Published on 41 Peruvian Vernacular Languages
June 1946 - Deeember 1975

No. of Works	Type of Work
38	Phonology: studies of the sound system of each language, one of the principal bases for establishing an alphabet.
90	Grammar: studies of word structure (meaning and order of each affix) and the syntax of each language. The studies are based on various linguistic theories, such as structural linguistics, tagmemics, generative semantics. Various theoretical papers are also included.
7	Pedagogical grammars.
18	Vocabularies and dictionaries (one publication includes lists of words in 20 languages, and another includes useful phrases in 25).
27	Comparative linguistics: studies comparing phonological, grammatical, and lexical features of various languages. These contribute to the classification of each language within a family and to hypotheses regarding prehistoric demographic movements of indigenous communities.
37	Anthropology: ethnological studies of social organization, material culture, world view, etc.
29	Legends and other folklore (there are another 24 included in educational materials).
673	Educational material: prepared in 30 languages for Bilingual Education Centers of the Ministry of Education. The breakdown is as follows: 443 Language arts: Reading, writing, and grammar. 81 Mathematics. 48 Social sciences and natural science. 21 Religious education. 41 Native literature collections. 39 Practical manuals and teaching guides.

314	Translation: Universal Declaration of Human Rights; New Testament books; summaries of portions of the Old Testament; topics covering hygiene, cattle, and poultry raising, etc.
31	Topics covering education and community development.
33	Reports and general topics.
1,297	(Grand total)

Environment for research. It should be made clear that the linguist must learn the language within the context of the indigenous life-style. To do this, he must travel to a tribal community which, in the majority of cases, is isolated and far from urban centers, without communication systems or nearby centers of supply, and which offers very few conveniences. He requires a considerable period to adapt to the environment and the sociocultural reality in which he will live and work. The linguist who masters the language has a means of communication whereby the people feel free to express themselves. Consequently, he must devote much time to interpersonal relations, attend to the sick, and lend his services in emergencies such as floods and epidemics.

The manner in which the linguist's basic plan is carried out varies considerably due to a great diversity of cultural, geographic, sociopolitical, and other factors. For example, in South America's Amazon region, particularly during the first years of the work, the isolation and difficulties in transportation required the establishment of various centers to provide the field workers with transportation and supplies, medical care, education for their children, permanent housing, supervision of studies, publication of compiled data, and other help. We are grateful to the governments which have authorized the use of such facilities without which it would have been almost impossible to reach the majority of jungle groups. In other countries such as Mexico, the linguists are assigned from a

central office located in the capital and depend on supplies obtained locally. In some countries SIL cooperates with government entities in literacy, bilingual education, and community development projects. In others the work is oriented almost exclusively towards ethnolinguistic studies and translation.

The length of time a linguist needs to complete his task depends on such varied factors as the degree of difficulty of the language, the amount of time which native speakers who are capable and desirous of helping with the studies may have at their disposal, the degree of confidence established with the ethnic group, health, facilities available, and interruptions. The time invested may be as much as twenty years. However, this period may be shorter if conditions are optimum or objectives reduced.

In any event, the linguist is responsible for his expenses, including paying an adequate salary to the vernacular language helpers who assist him in his studies or render other services. In addition, he must adjust his way of living to avoid unfavorable socioeconomic contrasts as much as possible.

Identification with the ethnic group in which they work, the aspiration of every field researcher, was confirmed in the case of two young female linguists one day as they arrived at an Amuesha community. The dogs ran out as usual to chase them off, but the Amueshas assured them that there was nothing to fear as the dogs bit only "white people."

Services. SIL is dedicated to serving people to the fullest extent of its capabilities and without discrimination. At the request of many different entities, it has been privileged to cooperate in such activities as the training of linguists and native authors; in educational projects (preparation of materials, literacy campaigns, and training of bilingual teachers); emergency flights and vaccination campaigns; community projects, training of national technicians, and training of health promoters. In all of this it has endeavored to follow the example of Jesus who said "the Son of Man did not come to be served but to serve, and to give His life a ransom for many" (Mark 10:45).

SIL'S ATTITUDES AND ACTIVITIES IN PERU

Attitudes of the members

Each member of SIL is conscious of the fact that his cultural heritage has negative traits of which he does not approve and which he does not desire to transmit to others. The basic attitude is:

> We are fallible human beings who are continuously being renewed intellectually by a wholesome, positive, encouraging, and refreshing spiritual fountain. We wish to place this within the reach of those who could use it but do not yet possess it. We are also conscious that ethics demand that we do everything possible to contribute to our fellow man's fulfillment as a whole person. Our human and economic resources are merely a grain of sand compared with the needs. Therefore, we contribute as much as possible to the implementation of national programs, endeavoring to help the Indian communities take advantage of the assistance provided by official organizations.

SIL's policy regarding the positive traits of a culture is to reinforce them as much as possible, for example, wearing typical clothing on appropriate occasions and stimulating the use of the mother tongue by the children. As to the negative aspects, the basic attitude is that no action should be taken, but that the people must make their own decisions after considering various alternatives, for example, those found in health manuals, in the Universal Declaration of Human Rights, and in the teachings of the Gospel. On rare occasions, however, when the life of a human being is at stake, human compassion demands intervention.

In serving Peru, the members of SIL seek to work closely with government, scientific, and educational programs, making the linguistic and cultural data obtained available to the public. We deem this contribution ethically appropriate.

Out of courtesy and good ethics, the foreign members, as

guests of a host nation, do not participate in internal political affairs and do not support any politicoeconomic system. They consider it the sacred right of each country to choose its own organization and social process without foreign intervention or comments. In addition, they are nonsectarian and seek to maintain a position of impartiality toward religious doctrines.

They always reject violence as a way to social progress. On the other hand, they believe that nonviolence is not synonymous with passivity, weakness, and submission to exploitation. They are certain that native cultures do not need more violence, but rather that courage, vision, and love should be stimulated to build a society with neither exploiters nor exploited, dedicated to serving every man and all men.

Activities

Identification with the objectives of the ethnic groups. SIL members believe that in each case the help given to an ethnic group should be in response to needs felt and expressed by the group itself. Rather than imposing projects upon them, then, SIL works along with them so that their aspirations might be fulfilled. Each linguist is expected to cultivate the ability to recognize the deep desires expressed to him and know how to offer help and suggest alternatives within the total context. On the other hand, some of the problems of the indigenous groups have already been publicly expressed, for instance, at the 25th Annual Latin American Congress in a mimeographed bulletin entitled "The Autochthonous Americans Give Their Opinion" (University of Florida, Gainesville, February 17–23, 1975). Some of the problems and recommended solutions are listed here, along with some of SIL's activities and methods which might be considered positive responses to them.

The following are the conclusions of the Congress, with SIL activities and methods appearing in italics following each point:

(1) That American Indians do not receive an education suited to their social and cultural reality and consequently are pushed to the fringes of society.

literacy and bilingual education programs in cooperation with the Ministry of Education.

2. That aboriginal languages, being mostly only spoken, are considered inferior.
   Formulation of alphabets, preparation of books, compilation of folklore, and other materials in the vernacular languages; emphasis on the value of each culture and language; training of indigenous authors.
3. That it is unjust that the present sociopolitical system of the American Indian be basically that of mere subsistence.
   Programs of community development; training of Indian leaders and technicians; aid in finding markets and marketing products (always bearing in mind the objective of training them to assume responsibility and initiative, not creating dependence).
4. That the Indians do not knowledgeably participate in the politics of the social system which surrounds them.
   Through bilingual education, travel, and other means, doors are opened to fruitful contacts with the "outside" world. In addition, members of minority language groups are assisted in the acquisition of the personal documents necessary to participate in the civic life of the country.
5. That there is a lack of interethnic unity.
   Training courses provide opportunities for meeting other groups; frequently enemies are reconciled when they get to know each other.
6. That there are diverse types of organizations operating... in the native groups which, rather than raising the level of human existence, serve as elements of alienation.
   The fostering of literature in vernacular languages has resulted in a growing sense of cultural identity and has helped to avoid alienation.

Following are some of the recommendations made by the Congress:

1. Instruction in the mother tongue as a means of education according to the cultural traits of each ethnic group.
   A fundamental principle on which SIL's work is based.

2. Create autonomous indigenous linguistic institutes, directed by Indian professionals competent in the field.
A work plan was drawn up for an intensive introductory course in descriptive linguistics, psycholinguistics, and sociolinguistics for speakers of vernacular languages in Peru.[7] *In 1978 a brief introductory course in descriptive linguistics was offered to a number of bilingual teachers.*
3. In the bilingual education programs, the teachers should be bilingual natives.
A fundamental principle on which the bilingual education program in which SIL has cooperated with the Ministry of Education since 1953 is based.
4. In the headquarters of educational organizations in whose area of responsibility there are monolingual or incipient bilingual populations, there should be personnel specialized in bilingual education.
SIL cooperates to train specialists in bilingual education when invited to do so by the government entities responsible.
5. Restitution of lands usurped from indigenous communities and at the same time providing implements, necessary credits, and technical assistance.
Before the establishment of the Unit for Assistance to Native Communities, which took responsibility for such matters, SIL helped many communities with the legal documents, transportation of surveyors, and other necessary steps to acquire titles to their lands. It has also helped to obtain loans and tools. A number of SIL's agricultural engineers have given technical assistance at the request of the Indians.
6. Seek markets and promote the sale of the native products by the producers themselves.
A donation was obtained to initiate a transportation project to facilitate the independent marketing of products by various groups—Machiguenga, Piro, Shipibo-Conibo, Ticuna, Aguaruna, and Chayahuita.[8]

---

7 SIL collaborates with the University of New Mexico in a course of this kind for native speakers of languages indigenous to the United States.
8 For more details see Instituto Linguístico de Verano (1975), pp. 27–31.

7. Train natives to participate in the planning and execution of integrated development programs in Indian communities.

For several years SIL has collaborated in occupational training courses and artisan workshops, and has helped some natives to attend other courses. Some of the students and leaders have participated in the planning and carrying out of development projects in the communities. For example, during a course held in an Amuesha community, the native leaders made decisions and plans for the future.

8. Preservation of native cultural values.

Folklore stories and other manifestations of cultural aspects have been published, contributing not only to the preservation of native values, but also to the understanding of these values by scientists and public officials. The use of the vernacular languages as the medium of instruction and written communication has given them greater prestige. In the case of the Piro, this has prevented the language from falling into disuse among the Indians themselves. In the case of the Amuesha, having their language in written form seems to be one of the factors which has contributed to the strengthening of their sense of ethnic identity.

Medical aid. It is well known that throughout history, isolated tribal groups have been decimated or even extinguished as a result of having come in contact with Western diseases against which they had no resistance. SIL gives emphasis to the preservation of the health of the peoples whom they serve. As a result, no group has become extinct since members of SIL have begun work in it. On the contrary, several groups which would have disappeared are now increasing in number. As an example, we cite the Arabela of the Záparoan linguistic family. In 1954, when SIL field workers first arrived, the population of the group was 40. In 1975 there were about 150 people. The increase is due to improved health and the integration of 33 persons from other ethnic groups, mainly Quechua. From the arrival of the linguists until 1976, only four adults and seven children (some of whom were abnormal at birth) died. Although their population is still very low for a

viable group,[9] there is at least a chance that the Arabela will survive as an ethnic group for several more generations.

The Mayoruna, among whom SIL has recently begun to work, are seminomadic and since the time of the rubber boom had kept themselves totally isolated from "civilization." Their only contacts were sporadic attacks for the purpose of stealing women, shotguns, and other tools.

Statistics kept during the first six years after the arrival of the linguists among the Mayoruna are given in Table 22.1.

TABLE 22.1. MAYORUNA VITAL STATISTICS, 1969–1974

Year	1969	1970	1971	1972	1973	1974	Total
Births	2	13	21	30	34	18	118
Deaths	0	8	13	5	2	4	32
Causes of death:							
Accidents		1	1			1	3
Infanticide			2		1	1	4
Suicide						2	2
Snakebite		2	1				3
Jaguar bite		1		2			3
Homicide		1	1				2
Pneumonia			4[10]	1			5
Other diseases		3	4[10]		1		8
Stillborn				2			2

In 1971 and 1973 there were severe epidemics of influenza and pneumonia. The reduced number of deaths is due to the medical attention given by the SIL members. In 1971 a number of patients who were unconscious with cerebral malaria were saved with injections of Aralen. In addition, the linguists and SIL medical personnel, at great cost in terms of time and money, have successfully treated two cases of jaguar bite and several cases of snakebite.

9 We base our proposal of the minimum population for a viable group on a comparison of the state of the ethnic groups in 1900 and 1975. For more details see Ribeiro and Wise (1978).

10 Linguist absent.

In cooperation with the Ministry of Health, vaccination campaigns have been carried out, using DPT, polio, tuberculosis, and measles vaccines.

The Mayoruna, who remember the terrors of other epidemics, have remarked, "Before, we used to die in groups due to sicknesses brought by kidnapped women and endemic diseases, but now we die one by one."[11]

From the many examples that we could add, the following have been selected:

> In 1975 a bilingual health promoter received months of treatment in Lima after being seriously hurt in an accident. The surgeon offered his services free of charge, but the other expenses, amounting to over $5,000, were covered mainly by donations from individual members of SIL and by people whom they interested in the case. This same type of help has been given in numerous cases.
>
> In 1975, there were 5,818 immunizations given in a number of tribal communities. In the first months of 1976, three immunization flights were made among the Campa, who were suffering a whooping-cough epidemic. The time invested by SIL personnel amounted to 38 eight-hour days. Their donations towards the cost of the flights were over $350.

Such assistance for specific cases is necessary, but the health problems of the tribal groups cannot be solved without the establishment of a system providing long-term prevention and treatment. In places where no facilities exist, SIL cooperates with the Ministry of Health in training bilingual native health promoters. With their services, the general health of the communities has noticeably improved. Thus, dependence on

---

11 Many of the groups are dispersed, living in small, scattered communities, making it impossible to provide exact demographic data on the population increase from the beginning of the work of SIL in each group. The examples given represent the general tendency toward population increases. It can be shown that in the groups where SIL works, no reduction in population has been registered from the time the field researchers began their work.

foreign sources is not created, and aspirations which cannot be fulfilled on a long-term basis are not fostered.

A study of two Chayahuita communities, published in July 1976, exemplifies the results of this program. The charts in that article present the data given in Table 22.2, compiled by the researcher in a visit made in March 1976 (Lee and Congdon 1976).

TABLE 22.2. CHAYAHUITA HEALTH STATISTICS

	% Population of San Miguel (no health promoter	% Population of Palmiche (with health promoter
Sick people	48	20
Incidences of disease		
Skin infections	3	3.5
Malaria	4	1
Intestinal parasites	28	9
Gastrointestinal infections	6	1
Respiratory infections	3.5	0.5
Sick persons who recognized they were ill	20	98
Patients who received treatment the previous year	0	98.8
Deaths attributed to witchcraft	90	20
Population with latrine	0	18

From the above and other data, one can agree with the author on the following conclusions:

> Reviewing the comparisons between San Miguel and Palmiche, there is sufficient evidence to show that the health promoter has contributed to raising the community's health standards. The inhabitants of Palmiche enjoy better health than those of San Miguel although they live in an environment much less conducive to good health. If there were opportunity to visit the posts of the forty-five other health promoters dispersed in the Peruvian jungle, similar

results would be noted. The degree of success would be greater or less than that achieved by Juan Tamiche depending on the aforementioned factors and on the personal dedication of each promoter (Lee 1976:34).

Community development. It is not just the privilege, but also the obligation of every man to support himself and his family and to help his community. Ceasing to do so would downgrade him to the status of a social parasite, living off others without making his contribution within the unit. For this reason SIL helps the ethnolinguistic minority groups to acquire titles to their lands. It has also cooperated with the Ministry of Education and the Ministry of Health in programs which train Indians to serve as bilingual teachers and health promoters among their own groups. Additional programs equip the Indians to participate in the economic development of their community through native crafts, transportation, cattle-raising, and agriculture, fostering a general spirit of cooperation within the tribal communities.

SIL has collaborated in these programs which respond to various universal human needs to promote the development of the communities as a whole. For example, hunting and fishing have traditionally been an adequate source for the provision of proteins. However, the construction of roads has brought an influx of colonists, and this, along with normal growth of the native population, means that game animals and fish are becoming more and more scarce, causing a number of communities to suffer from lack of protein. To supply this physical need, SIL members are searching for other sources of protein appropriate for the ecology of the jungle.

Education and contact with government authorities. The members of SIL consider it a privilege to offer their cooperation to the Ministry of Education's bilingual education program. Up until the past few years the linguists have devoted a great part of their time to the preparation of basic textbooks in the indigenous languages. At the request of the Ministry, they have also taught bilingual teaching methods in the Bilingual Teacher-Training Program.

It has been advantageous for the minority groups that the Educational Reform defines education globally. This includes the education the student receives outside the school, particularly in the home and in the community. His self-image as a member of a group which possesses a valuable cultural patrimony is strengthened when part of that heritage becomes the subject of his textbooks. Moreover, the Indians themselves participate in the preparation of books. Thus, they are accorded the satisfaction and the prestige of becoming authors. At the same time they have the opportunity of expressing themselves positively for the enjoyment of others and for the preservation of community values.

Among the textbooks in the vernacular languages there are over fifty volumes which record the cultural patrimony of these groups. Furthermore, native authors have been trained and have already produced some 130 booklets on a variety of subjects of interest. These publications not only contribute to the prestige of the native culture, but they also constitute a source of ethnographic information within reach of the scholar.

Since the tribal communities are in contact with the majority culture, their members feel the need to be able to speak the national language. They also need a basic knowledge of mathematics in order to conduct their business affairs in such a way as to avoid being exploited and being perpetually in debt. Once the first bilingual school was established among the Candoshi, other communities of this monolingual group recognized the benefits and demanded bilingual education for their communities.

In addition, they need to know their rights in order to defend themselves both effectively and legally, safeguarding the interests of the community against exploitation. Thus, they avoid entering into a dependency relationship with "civilized" people or with the nearest populated centers. Here is an example of how they can be helped in this aspect:

> In 1973 some members of SIL organized a trip to Quillabamba, Machu Picchu, and Cuzco for the Machiguenga and Piro bilingual teachers. Quillabamba is

the educational district to which the Machiguenga schools belong. However, being geographically separated from Quillabamba and Cuzco, with the exception of one school, there had been no contact between the authorities and the teachers.

The Supervisor of Education in Quillabamba received the delegation very kindly and placed the teachers in contact with the Ministry of Agriculture and many other civil authorities. He also gave them a tour of the city. The morale of the teachers was boosted considerably by the interest the supervisor showed in them. In Cuzco, the teachers were courteously received by the President of the Supreme Court of that state, who accepted their requests for birth certificates.

As a result of that trip, two communities obtained civil registries, and now many Machiguengas can receive their legal documents in their own communities. Moreover, having learned to whom to go and where the offices are located, the teachers have overcome their instinctive fear of the unknown city. Several of them have returned to do official business. Once they have transportation by road, this will occur more frequently.[13]

Spiritual values. In the majority of tribal cultures, life depends on the weather and various other phenomena which are beyond human control. Therefore, the Indians recognize their dependence on the supernatural to a greater degree than is the custom in mechanized cultures, where man feels himself in control of his existence. As a result, indigenous cultures are usually less compartmentalized into sacred and secular aspects than Western ones. The spiritual penetrates all aspects of daily life, but traditional spiritual values are not always adequate to satisfy the new needs of a society in contact with the outside world.[14]

---

13 For more details on the philosophy and methodology of the Bilingual Education Program in the Peruvian jungle, see other chapters of this volume.

14 This is amply documented by Wilson and Wilson (1954)

In this context, it would be a mistake not to recognize the need the tribal groups feel for spiritual help when facing the difficult life of the twentieth century. The teachings of the Gospel can replace fear, so common in their religions, with the certainty of the love of God. This love gives man hope and motivates him to feel and show this same love toward his brethren. These teachings are presented to the ethnic groups as an option, not as an imposition.

The need for a new moral code as a basis for the revitalization of a culture can be seen in the history of the Capanahua. As a result of their prolonged contact with "civilization," the Capanahua culture was disintegrating:

- With the propagation of alcoholism, fights, hatred and resentments arose. Occasions of drunkenness provided an opportunity to seek revenge. The victims of alcoholism felt oppressed by their incapacity to reject—due to their condition—the merchandise which the traders offered for sale. As a result, they were trapped in a cycle of increasingly greater indebtedness.
- Prostitution was introduced, and with it venereal disease.
- They lost their community social organization.
- They lost their material culture (type of housing, ceramics and other manual arts, etc.).
- Social solidarity was ruined. Robbery, rivalry, and hostility prevailed.
- Positive reactions to tuberculin tests rose as high as 90 percent.
- They felt inferior to others. They were of the lowest social class.

But many Capanahuas have shown a considerable change and overcome such tendencies, although they have never recovered their traditional material culture. As a result of a campaign against tuberculosis, many who were at the point of death recovered. The impact of having books written in Capanahua has produced a notable improvement in their self-esteem, which had suffered from more than three generations of direct contact with *patrones* and rubber hunters.

They have adopted a new life which includes a set of moral values based on the brotherly love taught in the Gospels. These, translated into the Capanahua tongue, produce joy, diligence, mutual love, forgiveness, and brotherhood. They have been involved in a gradual process of progress toward maturity and growth as whole persons. The love of God for mankind, when it is accepted, generates love toward others. When man, impelled by love, makes an effort to help others and to forgive the enmities that exist, mutual acceptance and friendship are fostered. The teachings contained in the Scriptures concerning the love of God, His care for mankind in the present, and the hope offered for the future provide stability in the face of the problems and pressures of cultural change. They provide an internal stability which would otherwise be lacking, giving the people an optimistic prospect for the future.

Love does not imply defeatism. To the contrary, many Capanahuas are now free of the exploitation they suffered when they let themselves be intimidated by their Cocama neighbors. The Cocama have a reputation among the Capanahua of being very powerful sorcerers. The Capanahua, because of fear of that sorcery, used to sell their products at the price fixed by the Cocama *patrón*. Now free of fear, they demand a fair price for their goods.

Other groups, such as the Candoshi, did not suffer cultural disintegration to the same extent as the Capanahua. They had contacts with the missionaries in the seventeenth century but defended their territory and preserved their social system almost intact. However, during the first decades of the twentieth century, they began to have sporadic contacts with *patrones*, traders, and rubber workers on the main rivers. For the most part, they did not allow them to enter their communities but had good relations with several outside the communities. Evidently due to such contacts, there was an epidemic around 1940 during which hundreds of Candoshi died, leaving a population of perhaps only a thousand.

Another factor which reduced the population was the custom of revenge killings. The entire male population was involved in

these, resulting in much tension and grief. Totally apart from exterior forces, the group was headed towards self-destruction. At last, when one of the present chiefs was still young, the chiefs of the Candoshi, Huambisa, and Achual met to discuss the seriousness of the situation. To avoid the extermination of their people, they agreed to stop killing, but the agreement lasted only a short time.

However, over the past twenty years the Candoshi population has steadily increased and now has reached about two thousand. This increase is due to two main reasons: first, the new standards and hopes of the Christian ethic have almost entirely eliminated revenge killings. Thus, the men have lived to have children, and their children have also lived to have theirs. Second, they have accepted the use of medicines and have adopted improved hygienic measures. This has considerably reduced infant mortality, and other diseases have been controlled.

This is an important case history, the influences from the outside world having been reduced and the delineation of the factors being clearer than in certain other situations. With groups such as the Candoshi, SIL has contributed to the maintenance of social vitality through Bible translation. At the same time, it has helped to build bridges of communication and participation in the national life through advice and encouragement in the development of bilingual schools and other community projects.

Newly adopted Christian teachings can overcome other negative traits of the native culture. For example, a trait which predominates in the daily life of the Machiguenga is the ever-present fear of death. This influences the majority of their actions and attitudes. It is typically expressed in the reply which surprised some visitors when saying good-bye:

"Goodbye. We'll see you next year."
"I won't be here next year. I'll be dead."

If one believes he will die within a year (and, although it is sad to have to admit it, a great deal of Machiguenga history justifies such pessimism), there is not much reason to make

long-term plans, such as planting coffee or cacao, beginning to raise cattle, or even building a school for the children. It is the hope of living forever in the presence of Jesus Christ, promised in chapter 14 of the Gospel according to John, which—once discovered by the Machiguenga—has encouraged many and given them a sense of security. Now they know that if worse comes to worst, there is always Someone who loves and cares for them.

At present the Machiguengas are building schools, planting coffee and cacao, raising cattle, and cooperating in efforts to develop not only agricultural production but also a network of transportation for getting produce to market. Now when a traveler says: "Goodbye, we'll see you next year," the answer which one sometimes hears, thanks to their new attitude of confidence, is: "Yes, I'll probably see you next year because God will take care of us."

Without this confidence the Indian is unable to participate actively in the integral development of his community. For example, Martín is a Campa who followed the custom of fleeing from the spirit of the dead, whenever someone died in the family. Due to deaths which occurred in the village, he had to do this every six months for several years. And each time he had to abandon his crops, he lost any benefit he might have obtained from them. Martín eventually found liberation from his fear of the dead in Biblical passages translated into his tongue. This change allowed him to attain economic stability in the face of the pressures of the dominant culture which surrounds his people. He was able to make productive the land on which he settled permanently and for which the government had granted ownership title to his community.

These cases serve to illustrate that a fruitful cultural interchange can lead to the strengthening of the tribal society. When the native community participates in such interchange of its own free will, the society enjoys better prospects for improving the quality of its community life. Thus, the Biblical message can give the Indian a new sense of values.

We wish to cooperate with the ethnic groups so that the native can recognize and value the positive aspects of his

culture and have the moral strength of a new spiritual dynamic and the will to work for the common good of his fellowmen. In order to do this, he must maintain with dignity his own cultural identity and be able to answer the following question:

"Are you an Aguaruna?"
"Yes, I am an Aguaruna, and proud to be a Peruvian."

SUMMARY

In summary, the fundamental principles of SIL prompt it to serve minority groups, fully respecting their customs and their right to self-determination. SIL believes that linguistics and anthropology should contribute to the well-being of the groups studied—"well-being" which is not determined and imposed by foreigners but is significant to the tribal society. Where exploitation and domination exist, SIL reaches out with compassion to the oppressed. It recognizes that culture change is an immensely complex problem. The mere presence of scientific researchers can have a deleterious effect on a native community. According to Tax (1975:515), field workers must not only apply the available anthropological theories to a situation of change, but also recognize "that the proportion of new knowledge which must develop in the situation [on the field] is much greater than the old knowledge which can be applied." Therefore specialists in anthropology are a part of SIL. Counsel or other assistance which specialists outside the organization wish to offer is welcome, particularly from those who have experience in field work among the groups with which SIL works. In addition, we endeavor to serve both Peruvian and foreign scholars by cooperating in field work and publishing scientific material.

We recognize that for three centuries the ethnic groups of the Peruvian jungle have had contacts with the outside world which have resulted in exploitation and in the death of a great proportion of their population. Also, it is obvious that many cultural traits have been adapted effectively to the changes in their environment. At the same time, we are also certain that

there are still many psychocultural clashes ahead because of ever-increasing contact. Therefore, we are convinced that it is necessary to work in such a way as to reduce the devastating effects of contact and to strengthen the unity and self-esteem of each group. With these criteria, the members of SIL affirm once more that:

> We do not believe that a foreign religion should be imposed upon the members of any community, but we do believe that every man should have access to master works in his own language, including the teachings of Jesus Christ as they are presented in the New Testament. In them we have found help and sincerely hope that others will also. It will be by his own decision that the individual chooses to seek in its pages the route for fulfilling his aspirations and those of the society to which he belongs.

BIBLIOGRAPHY

Aberle, David et al. 1950. "The Functional Prerequisites of Society." *Ethics* 60:100–11.

Chirif Tirado, Alberto, Carlos Mora Bernasconi, Carlos Yañez Boluarte, and Tulio Mora Gago. 1975. *Communidades nativas de selva central: Diagnóstico socio-económico.* Lima: Sistema Nacional de Apoyo a la Movilización Social.

Grover, Jeanne. 1971. *Problemas de los aguaruna en relación con el terreno.* Mimeo. Yarinacocha: ILV.

Herskovits, M. J. 1948. *Man and His Works, The Science of Cultural Anthropology.* New York: Alfred Knopf.

Instituto Lingüístico de Verano. 1975. *Informe general sobre las actividades desarrolladas por el Instituto Lingüístico de Verano en el año 1975 en cumplimiento del Convenio suscrito con el Ministerio de Educación.* Yarinacocha, Pucallpa: Instituto Lingüístico de Verano.

Lee, Wilma and Joy Congdon. 1976. *Estudio comparativo del índice de salud de dos comunidades chayahuitas: una de las cuales cuenta con los servicios de un Promotor de Salud.*

Pucallpa: Ministerio de Salud, Area Hospitalaria No. 6, in collaboration with the Instituto Lingüístico de Verano.

Malinowski, Bronislaw. 1944. *A Scientific Theory of Culture and Other Essays*. Chapel Hill, North Carolina: University of North Carolina Press, pp. vii and 228.

Meggers, Betty. 1971. *Amazonia: Man and Culture in a Counterfeit Paradise*. Chicago: Aldine-Atherton, Inc.

Mendizábal Losack, Emilio. 1962. "Textos Culinas: Antropología, Folklore y Psicología." *Folklore Americano* 10:91–92.

Pike, Kenneth L. 1967. *Language in Relation to a Unified Theory of the Structure of Human Behavior*. 2nd ed. (*Janua Linguarum* Series Major, 24.) The Hague: Mouton.

Ribeiro, Darcy. 1973. *Fronteras indígenas de la civilización*. 2nd ed. (Spanish) México: Siglo Veintiuno Editores, S.A.

——— and Mary Ruth Wise. 1978. *Los grupos étnicos de la Amazonía Peruana: 1900 y 1975. Comunidades y Culturas Peruanas* 13.

Sapir, Edward. 1949 (original printing, 1924). "Culture, Genuine and Spurious." In David G. Mandelbaum, ed., *Selected Writings of Edward Sapir: Language, Culture, and Personality*. Berkeley and Los Angeles: University of California Press, pp. 308–31.

Siskind, Janet. 1970. "The Culina Eat Snakes and Never Bathe: Cultural Competition for an Ecological Niche." Paper presented at the Twenty-Fifth Annual Congress of the Association of American Archaeology, Mexico, D.F.

Solá, Donald F. and Rose-Marie Weber. 1978. *La planificación educativa en países multilingües: Un informe sobre una reunión de trabajo del 14 al 20 de enero de 1978*. Cuzco and Lima, Peru: Cornell University Language Policy Research Program.

Tax, Sol. 1975. "Action Anthropology." *Current Anthropology* 16:514–517.

Varese, Stefano. 1972. "Las comunidades nativas de la selva: Esquema de un marco contextual." *Primer Seminario Nacional de Educación Bilingüe: Algunos estudios y ponencias* Lima: Ministerio de Educación, p. 82.

Vivar A., Judith E. 1975. "Los mayoruna: en la frontera Perú-Brazil." *América Indígena* 35:329–47.

Wilson, Godfrey and Monica Wilson. 1954. *The Analysis of Social Change. Based on Observations in Central Africa*. 2nd ed. London: Cambridge University Press.

Wycliffe Bible Translators in collaboration with the Summer Institute of Linguistics. 1963. *Who Brought the Word*. Santa Ana, California: Wycliffe Bible Translators.

——— 1972. *Language and Faith*. Santa Ana, California: Wycliffe Bible Translators.

APPENDIX A

Resolution Authorizing Bilingual Education in the Peruvian Jungle

SUPREME RESOLUTION No. 909

Lima, November 28, 1952.

CONSIDERING:

That the purpose of the Government is to extend the benefits of the Rural Campaign to the jungle, where the tribes are isolated due to special geographic conditions of the terrain and to the varied linguistic characteristics of the ethnic groups;

That in order to accomplish this objective it is necessary to prepare teachers, using natives who are literate and establishing a special type of school in which, besides teaching the essential elements of basic education, the students will be trained for productive work and taught the basic [cultural] norms of [Western] civilization [necessary for participating in national life], the concept of citizenship, and principles of hygiene; and

That it is advantageous to make use of the experience acquired by the members of the Summer Institute of Linguistics of the University of Oklahoma during recent years among the jungle tribes;

IT IS RESOLVED:

1 - To organize a training course for literate natives of the Peruvian Jungle, which will function at Yarinacocha (District of Pucallpa).

2 - This course will be attended by 20 literate natives from the following tribes: Piro, Amuesha, Cashibo, Aguaruna, Huitoto, and Bora.

3 - The course will be held in collaboration with the Summer Institute of Linguistics of the University of Oklahoma and will last three months.

4 - The curriculum for the course will include:

a. Phonetics
b. Basic education (reading, writing, arithmetic)
c. Teaching methods
d. Principles of hygiene and sanitation
e. Principles of school administration

5 - The Ministry of Public Education is responsible for the fulfillment of the present Resolution, and the expenses involved will be covered by the amount designated for that purpose in the General Budget of the Republic for 1953.

To be registered and communicated.

Rubric of the President of the Republic

General Juan Mendoza
Minister of Education

APPENDIX B
Laws Related to Bilingual Education

Selected chapters from

SUPREME RESOLUTION No. 003-ED/73

Lima, February 8, 1973

CHAPTER I: EDUCATION AMONG VERNACULAR-SPEAKING GROUPS

Article 1: Educational activities at all levels and of any nature must of necessity take into consideration the multicultural and multilingual situation of the Peruvian nation.

Article 2: Where a monolingual vernacular-speaking population, or one with incipient bilingualism, exists within the jurisdiction of the Educational Districts, bilingual schools at the primary level, special programs, or nonacademic programs should function.

Article 3: In bilingual schools at the primary level and in bilingual programs, indigenous languages should be used as a vehicle of communication whenever it may be necessary. Spanish and the indigenous language will be languages of instruction in the first cycle of primary education. Reading, writing and learning of Spanish will be carried out according to methodological norms established by the Ministry of Education.

Article 4: Within the jurisdiction of the Educational Districts

where a monolingual vernacular-speaking population or one with incipient bilingualism exists, schools, special programs, or nonacademic bilingual programs may also function at preschool level.

Article 5: In the Educational Districts where bilingual schools or programs exist, special curricula will be applied for bilingual education which will take into account cultural traits of the vernacular language.

Article 6: Texts and teaching materials used in bilingual schools and programs will be prepared specifically for each linguistic group by the Ministry of Education, or under its supervision.

Article 7: In bilingual schools and programs the teaching personnel preferably will be bilingual; care should be taken to have bilinguals whose mother tongue is the indigenous language and bilinguals whose mother tongue is Spanish. In case there is no bilingual of the latter type available, a monolingual Spanish speaker trained in teaching a second language and/or bilingual education may serve.

Article 8: In the offices of the Regional and Zonal Directors and of the Educational Districts in whose jurisdictions a monolingual vernacular-speaking population or one with incipient bilingualism exists, personnel with special training in bilingual education shall be assigned, when the size of the indigenous population justifies it.

Article 9: Educational extension programs, schools and programs of specialized professional training, or others dedicated to the adult population which function in monolingual vernacular-speaking areas or where there is incipient bilingualism will adapt their curricula, content, didactic materials and educational efforts in general to the culture and language of the different groups, without neglecting necessary information about other cultures and languages of the nation.

Learning of vernacular languages will be promoted. Schools will provide opportunity for increased understanding of these

languages and their influence on the national language and culture.

In schools of all levels activities will be programmed for the promotion and appreciation of vernacular cultures and languages, in accord with the national policy of bilingual education and directives from the Ministry of Education.

CHAPTER II: CONSERVATION AND PROMOTION OF VERNACULAR CULTURES AND LANGUAGES

Article 10: Educational programs transmitted by means of mass media must dedicate a minimum of 30 percent of content to enhancing the appreciation of vernacular cultures and languages, including regional dialects.

Article 11: The Ministry of Education will promote studies of the vernacular cultures and languages, coordinating its action with universities and other specialized institutions.

Article 12: Individuals and institutions, national and foreign, who carry out investigations of vernacular cultures and languages within the country are obliged to present technical semester reports to the National Institute of Investigation and Development of Education.

Article 13: Publications in vernacular languages must use an alphabet approved by the Ministry of Education for each language.

CHAPTER III: THE TEACHING OF VERNACULAR LANGUAGES

Article 14: At centers of primary education for Spanish speakers, elective courses with academic credit must be programmed for one or more vernacular languages, using the methodology for learning a second language.

Article 15: Vernacular languages must be taught as second languages by bilingual teachers (vernacular language—Spanish) trained in the appropriate methodology.

Article 16: Teacher training programs must include in their curricula the teaching of one or more vernacular languages, using second-language-teaching methodology.

Article 17: The Ministry of Education will periodically authorize private institutions to teach vernacular languages, after previous evaluation of the personnel, curricula, didactic materials and equipment.

Article 18: Teaching personnel specialized in the teaching of vernacular languages must be trained only in university educational programs.

CHAPTER IV: THE TEACHING OF SPANISH AS A SECOND LANGUAGE

Article 19: The learning of Spanish by speakers of a vernacular language will be effected by applying second-language-teaching methodology.

Article 20: The curricula, content, texts, and basic didactic materials used for the teaching of Spanish in bilingual education must be authorized by the Ministry of Education.

Article 21: In educational centers and bilingual programs the teaching of Spanish must be carried out by bilingual teachers (Spanish-vernacular language) and/or a Spanish speaker trained in second-language-teaching methodology.

General Juan Velasco Alvarado,
President of the Republic

General Alfredo Carpio Becerra,
Minister of Education

Appendix C
Sample pages of the 1977 Curriculum

FIRST GRADE	SECOND GRADE	THIRD GRADE	FOURTH GRADE
Carry out activities in response to simple oral messages.	Understand the content of messages related to daily experience.	Understand the content of oral or written messages.	Understand the content of oral or written messages and give opinions about them.
Spontaneously express daily experiences, orally and in one's own words.	Spontaneously express interests and experiences orally and in one's own words.	Express orally, clearly and in an orderly fashion, interests and experiences using the language common to the community. ("Language common to the community" means the local dialect of Spanish.)	Express orally, interests and experiences, clearly and in an orderly fashion, speaking in turn and respecting the opinions of others.
Beginning reading: read aloud brief, simple stories.	Read aloud brief, simple stories which develop reading skill.	Read aloud and silently brief, simple stories using adequate intonation when reading aloud.	Read aloud and silently stories related to experiences and interests, giving opinions.
Write in legible handwriting brief, simple stories, using sounds learned in reading.	Write in legible handwriting stories related to interests and experiences.	Compose brief stories based on interests, needs and experiences using legible handwriting.	Compose brief stories based on interests, needs and experiences, using legible handwriting, preferably cursive.

OBJECTIVES

1. Carry out activities in response to simple oral messages.

BASIC ACTIVITIES

The accomplishment of this objective should be based upon student participation in activities programmed to accomplish the objectives of other subjects. However, supplementary drill should be specifically programmed, with activities likethe following.

- Listen to stories in which most elements are familiar. Relate afterwards what has been heard.
- Listen to and tell riddles that the student can understand.
- Play aural games with rhyming words. Ex.. cabeza-mesa; tuna-cuna-luna.
- Listen to and respond to simple commands, that refer indirectly to objects and places.
- Listen to and respond to a series of commands. Ex.· Take off your sweaters; put them on the bench and take out your pencils.
- Practice being silent.
- Observe theatrical programs· role play, plays, puppets, etc.

2. Spontaneously express daily experiences, orally, and in one's own words

As in the first objective, this objective should be accomplished during activities programmed for other subjects. However, supplementary drill should be specifically programmed, with activities like the following

- Relate recent experiences from the home, school and community.
- Relate experiences acquired on visits to recreational spots, cultural institutes, and places of work
- Narrate short stories, fables, and legends.
- Look at posters, photographs, pictures, and replicas of paintings. Describe them and comment on what is observed.
- Observe various objects and describe them
- Make up stories derived from observation of large pictures and other illustrations. Ex. A poster shows several children laughing. Why are they happy? Where will they go later?
- Compose a story all together, with the "chain technique": one child begins the story; others supply a part one after the other.

FIRST GRADE	SECOND GRADE	THIRD GRADE	FOURTH GRADE
Recognize the natural numbers, using the intuitive idea of sets.			
Read and write numerals through 9, applying the principles of place value.	Read and write numerals up to 999, applying the principles of place value.	Read and write numerals up to 9,999, applying the principles of place value.	Read and write numerals up to 99,999, applying the principles of place value.
			Read and write common fractions and decimals.
Compare natural numbers through 9, with the relationships "less than", "greater than", "equal to".	Compare natural numbers up to 999, with the relationships "less than", "greater than", "equal to".	Compare natural numbers up to 9,999, with the relationships "greater than", "less than", "equal to".	Compare natural numbers with the relationships "greater than", "less than", "equal to".
	Solve mental arithmetic exercises in addition, applying the commutative and associative properties and taking note of the unique quality of the identity element 0.	Solve mental arithmetic exercises in multiplication, applying the commutative, associative, and distributative properties, taking note of the unique quality of the identity element 1.	Solve mental arithmetic exercises applying the properties of multiplication and addition.
Add natural numbers through 99.	Add and subtract natural numbers up to 999.	Multiply natural numbers.	Divide natural numbers with dividends having a maximum of 4 digits and divisors having a maximum of 2 digits.
Create and solve number stories based on real life situations, using addition of natural numbers.	Create and solve number stories based on real life situations, using addition and subtraction of natural numbers.	Create and solve number stories based on real life situations, using addition, subtraction and multiplication of natural numbers.	Create and solve problems based on fact, using addition, subtraction, multiplication and division of natural numbers.

Show paths of motion, using arrows on a grid.	Reproduce figures using any type of grid.	Construct with or without patterns geometric shapes such as cubes, tetrahedrons, right prisms, and pyramids, after having observed these objects.	Locate points on graphs by means of ordered pairs of natural number. Recognize polyhedrons, polygons, and segments, after having constructed geometric solids.

OBJECTIVES

1. Recognize the natural number, using the intuitive idea of sets.

BASIC ACTIVITIES

- Recognize the properties of an object (such as shape, color, etc.).
- Recognize properties common to various objects (whether usage, material, the owner, color, shape, etc.), and classify them forming sets. The children group themselves according to their age, sex, area in which they live, color of clothing, etc.
- Play freely with objects, classifying them according to one or two properties (for example, "Group the LARGE ones that are RED.")
- Recognize and express common characteristics, that is to say common properties, of a set of objects (largeness, owned by Manuel, made of paper, useful for writing, etc.).
- Use strings (or yarn) to set off sets of objects and name each set formed by means of labels.
- Represent graphically, using diagrams, the activities already carried out (sets designed).
- Compare elements of one set with elements of another (using lines or arrows).
- Establish correspondences between elements of the two sets and find cases in which elements "are left over", "are lacking", or "are neither left over nor lacking". Represent graphically.
- Use the expression "to have as many elements as" in the case where there are neither any "left over" nor "lacking" after the correspondences have been established. For example: "...as many bottles as tops". (We say that these sets are equivalent because it is possible to establish a one-to-one [or biunique] correspondence.) (Use the double arrow to indicate one-to-one correspondence.) (Introduce the word NUMBER, changing the expression "To have as many elements as" to "to have the same NUMBER of elements as".)

INDEX

403