NATIONAL INTEGRATION AND MASS MEDIA:
THE SOCIALIZATION EFFECTS OF TELEVISION
IN A RURAL IVORY COAST VILLAGE

by
Milton Nathan Adams

A dissertation submitted to the Department of Educational Research, Development, and Foundations in partial fulfillment of the requirements for the degree of Doctor of Philosophy

APPROVED:

[Signatures]

Professor Directing Dissertation

December, 1978
NATIONAL INTEGRATION AND MASS MEDIA: THE SOCIALIZATION EFFECTS OF TELEVISION IN A RURAL IVORY COAST VILLAGE

(Publication no. _________)

Milton Nathan Adams, Ph.D.
The Florida State University, 1978

Major Professor: Sydney R. Grant

In this study the Multi-Dimensional Scaling Method is used in a case study approach to examine the possible national integrative effects of television in a rural Ivory Coast village in French West Africa.

National Integration is approached as a process of cultural change leading to (a) an increased sense of national identification among members of a community, and (b) a reduction in the range of perceived cultural differences between members of different sub-communities.

The population for this study consisted of 47 male heads of permanent households in the fishing village of Toukouzou II, located 105 kilometers from the capital, Abidjan. The original time-series design of this study called for a series of observations before and after the installation of a television set in the village school, which, used for elementary school instruction during the
day, is available in the evenings for adult viewing. Actual conditions in the field, however, made only three post-television observations possible during a 10-month period, commencing close to the date of installation.

During each period of observation the subjects were presented with a list of 21 concept pairs for which they were required to give similarity/issimilarity ratings. In the MDS method similarity and difference between concepts is expressed in quantitative terms as ratio level distances relative to a standard; the more similar two concepts are, the less distance there is between them; the more different, the greater the distance. The 21 concept pairs were based upon all possible combinations of the following seven concepts: "Me", "School", "Government", "Senoufo", "France", "Radio", and "Television."

Before the experiment, "Schools," and "Government" had been rated highly as elements of the national Ivorien culture by a panel of Ivorien experts. The Senoufo, an ethnic group to the north, were included to measure changes in perceived difference between sub-cultures. "Radio" was included as a communication control concept. "France," the former colonial authority, was included to measure possible influence of this external culture on the emerging Ivorien identity.

It was predicted in the research hypotheses that,
as a result of television exposure, over-time the subjects would perceive less distance (Difference) between themselves and all of the concepts with the exception of "Radio." It was reasoned that this concept would remain relatively stable since the subjects had had adequate time to acclimate themselves to its effects.

Through the assistance of a local translator, each subject was interviewed individually, during three observation dates extending over a 10-month period from October, 1977 to July, 1978. Individual distance ratings for all concept pairs were tabulated together and averaged to produce mean distances representing the collective perception of the population.

The results of the data analysis showed the following distance reductions between the population and the other six concepts from T1 to T3: Schools, 25 percent; Government, 63 percent; Senoufo 28 percent; France, 51 percent; Radio, 74 percent; and, Television, 70 percent. The data supported all but one hypothesis related to Radio.

As a result of the villagers' low usage patterns, and their low levels of French literacy, the researcher concludes that television did play an integrative function within the village, but that it was less the result of direct effects as much as it was the result of intervening variables: (a) by its very presence television
influenced the villagers to feel that they were members of a more "modern" community, leading to closer identification with the other "modern" concepts of the study, including "Radio," (b) television provided relevant content about the nation-state which was circulated through the community by a multi-step flow process, and (c) television increased the villagers' awareness of radio, which working through inter-personal channels as well, combined with television, resulting in a more effective media mix.
DEDICATION

This dissertation is dedicated to my parents and the people of East Harlem who deserve much more than this modest and singular achievement from their educational system.
ACKNOWLEDGEMENTS

The author would like to express sincere gratitude to the many persons who directly assisted him in the completion of this study. I will be forever grateful to Prophet Papa Nouveau whose hospitality and cooperation opened the doors to his village. Special thanks are also extended to the beautiful people of Toukouzou II who tolerated in good spirit my intrusions into their busy lives, and to my village assistants, Mr. Jean-Claude Gnaba and Mr. Rene Clarac Papa Nouveau, whose translation work provided me with the insights into their culture.

I would also like to acknowledge the assistance provided by the Ivory Coast Government, and Mr. Konan Kouadio, director of the Educational Television Evaluation Service. He and his staff offered invaluable assistance and comradeship.

Special thanks are also extended to members of the National Fellowship Fund who provided the one-year research grant which made this study possible. I must also thank the members of my doctoral committee, each of whom has broadened my thinking about education and mass communication.

vii
I thank my wife, Aline Bory-Adams, for her patience and understanding in dealing with the strains of this task which locked us together in a strange and foreign land and also required our temporary separation.
TABLE OF CONTENTS

ABSTRACT .................................................. ii
DEDICATION .................................................. vi
ACKNOWLEDGEMENTS ......................................... vii
LIST OF FIGURES ............................................. xii
LIST OF TABLES ............................................... xiii

Chapter

I. Introduction ............................................. 1

  Development and National Integration ................. 1
  The Problem ............................................. 5
  The Ivory Coast: General Overview ...................... 6
  Level of Development .................................... 8
  Qualitative Change ...................................... 9
  Media Policy and National Integration ................. 10

II. Review of the Literature .............................. 15

  Effects of Media ........................................ 15
  Trans-National Cultural Integration .................... 22
  Research Findings ...................................... 24
  Synthesis ............................................... 27
  Media Impact on Cultural Change ....................... 32

III. Theoretical Framework ................................. 34

  National Integration: The Dependent Variable ........ 34
  Intercultural Transfer .................................. 34
LIST OF FIGURES

1 Traditional Approaches to the Study of Media Effects................. 29
2 Cultural Approach to the Study of Media Effects................. 31
3 Cultural Differences between Little Tradition and Great Tradition................. 39
4 The Interaction Function of Cultural Brokers................. 41
5 Cultural Elements of the Great Tradition Moving to Equal Proximity with Elements of the Little Tradition................. 44
6 Cultural Elements of the Great Tradition Moving Relatively Closer to Individual or Group................. 45
7 Over-time Changes in Perception Displayed Graphically in Multi-dimensional Space................. 47
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Three Components of Social Change</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Expert Ratings for Six Principal Concepts</td>
<td>51</td>
</tr>
<tr>
<td>3</td>
<td>Research Design</td>
<td>55</td>
</tr>
<tr>
<td>4</td>
<td>Village Modernity Scale</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>Subjects by Age Groups</td>
<td>78</td>
</tr>
<tr>
<td>6</td>
<td>Years of Formal Education of Subjects</td>
<td>79</td>
</tr>
<tr>
<td>7</td>
<td>Levels of French Comprehension</td>
<td>80</td>
</tr>
<tr>
<td>8</td>
<td>Number of Days Spent in Capital</td>
<td>81</td>
</tr>
<tr>
<td>9</td>
<td>Results of Two-Week Content Analysis of Ivory Coast Television</td>
<td>94</td>
</tr>
<tr>
<td>10</td>
<td>Comparison of Television Content data Collected in 1977 and 1978</td>
<td>95</td>
</tr>
<tr>
<td>11</td>
<td>Results of One-Week Analysis of Television News Items</td>
<td>96</td>
</tr>
<tr>
<td>12</td>
<td>Number of Days Spent Watching Television</td>
<td>98</td>
</tr>
<tr>
<td>13</td>
<td>Television Viewing Behavior of Closest Friends</td>
<td>99</td>
</tr>
<tr>
<td>14</td>
<td>Favorite TV Programs Among Villagers</td>
<td>100</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>15</td>
<td>Favorite Radio Programs Among Villagers</td>
<td>102</td>
</tr>
<tr>
<td>16</td>
<td>Mean Distance Matrix for Target Population at $T_1$</td>
<td>103</td>
</tr>
<tr>
<td>17</td>
<td>Mean Distance Matrix for Target Population at $T_2$</td>
<td>106</td>
</tr>
<tr>
<td>18</td>
<td>Comparison of Principal Concept Pairs from Observation $T_1$ and $T_2$</td>
<td>106</td>
</tr>
<tr>
<td>19</td>
<td>Comparison of Construct Validity Sets from Observations $T_1$ and $T_2$</td>
<td>107</td>
</tr>
<tr>
<td>20</td>
<td>Mean Distance Matrix for Target Population at $T_3$</td>
<td>108</td>
</tr>
<tr>
<td>21</td>
<td>Comparison of Principal Concept Pairs from Observation $T_1$, $T_2$, and $T_3$</td>
<td>108</td>
</tr>
<tr>
<td>22</td>
<td>Comparison of Construct Validity Sets from Observations $T_1$, $T_2$, and $T_3$</td>
<td>109</td>
</tr>
<tr>
<td>23</td>
<td>Comparison of Principal Concept Pair Ratings Between Population and Isolated Group with Close TV Identification at $T_3$</td>
<td>110</td>
</tr>
<tr>
<td>24</td>
<td>Comparison of Principal Concept Pair Ratings Between Population and Telespectators at $T_1$</td>
<td>112</td>
</tr>
</tbody>
</table>
CHAPTER I

Introduction

Development and National Integration

In the course of its own unique historical development, each of the more developed countries has evolved national institutions, symbols and political structures which have served to integrate its members into a collective body, providing both a reasonably stable structure and a human resource channel for social and economic development.

Nowhere has the need for stability and development been more acutely felt than in the newly fledged African states, brought to independence with pressing human needs under extreme, fragmenting conditions of ethnic and cultural heterogeneity. Yet, the major news reports from Africa this year (1978) have dramatically underscored a process of national disintegration as conflicting nationalist and separatist movements challenging central authority have seriously disrupted political and economic life in Chad, the Sahara, the Ogaden region of Somalia, the Eritrea region of Ethiopia, and Shaba Province in Zaire.
Much of the latent tension and unrest in Africa stem more than anything else from the attempt to superimpose national governing structures over no fewer than 6,000 ethnic groups on the continent. On the one side is ethnocentrism, or "tribalism:" the deep-rooted loyalty of 225,000,000 Africans to traditional subgroups that represent certainty amid bewildering social and economic change. On the other side is nationalism: the heady dream of creating modern states of affluence and power.

Nationalism implies a dream of an Africa adorned with splendid schools and hospitals, universities and factories, highways and irrigation schemes. It will depend upon a vast and extended amount of skill and toil, requiring the type of national unity and mass mobilization which have characterized development campaigns in Cuba and the People's Republic of China. African leaders have recognized that until they can unify diverse groups and build strong economies, it will be a dream deferred.

"Tribalism," it should be noted, is not a problem limited to Africa. At some point in history, all men belonged to tribes and resisted efforts to integrate them into national-states. The Scots were tribal well into the 18th century. Even the modern West is not free of "tribalism" as witness Canada's French-speaking separatist movement, and the bitter divisions between Walloons and Flemish in Belgium. Many of the so-called "tribes" of
Africa consist of hundreds of thousands of human beings and would in Europe be called "peoples."

Today, tribal loyalties are weakening in African cities where a second generation of Westernized Africans is growing up. But, beyond them, in the forests, plains, and deserts many people still live much as they always have, embedded in their traditional setting. They do not think of themselves as Chadians, Nigerians, or Voltaics, but as Baluba, Ibo, and Bobo. National politics is often simply an arena where ethnic loyalty and rivalries are played out to the benefit of the group in power over the interests of the nation-state.

Long cognizant of this problem, Ivory Coast President Felix Houphuet-Boigny called tribalism the "scourge of Africa." Former Kenyan Minister of Economic Planning Tom Mboya warned that unless tribalism is eradicated in Africa "much of what we have achieved could be lost overnight" (Time, 1968).

Factors supporting national integration. More to the focus of this research, one might ask "What are the factors which contribute to a sense of national unity or integration within a country?"

At the core of any notion of national integration are individuals, the manner in which they perceive the state, and the socialization process by which they acquire a sense of national identification. Traditionally, family, school,
church, and peer group influence have played major roles in the developed nations. History, as a sense of national heritage, has also been an important force, binding people together in a common past, suggesting a common future.

But, in the newer, emerging nations, where artificially imposed boundaries encompass groups with quite different experiences and conflicting historical interpretations, emphasis on the past can serve a divisive function, reopening old wounds and unresolved disputes. Primary group ties and sentiments more often pull members in directions away from national norms and loyalties, and embryonic systems of national education, though important, reach but a fraction of those whose immediate contribution to development and social stability is felt the least.

In the past fifteen years, considerable interest has been focused on the integrative function of the mass media in developing countries. Radio and television, with their sense of immediacy, their mass coverage, and their centralized structure, have been considered as important tools in development campaigns.

Radio and television have been used both as a means and an end: diffusing the content of development strategies while also influencing broader patterns of cross-cultural interaction within a population. In regard to this latter function, the mass media have been heralded
by Pierce (1967) as the "greatest unifying force in history." Chaffee (1966) has argued that disparate communities can be held together "only" by mass communications. Schramm (1963) considers mass media a "requirement" for modernizing societies.

The strength of this view, reflected in the development literature, has served to encourage extensive investments in media expansion in several developing nations, most notably the French West African Republic of the Ivory Coast, the setting of this study.

The Problem

While important theoretical discussions have been advanced to explain the socialization role of mass media in the nation-building process, there have been few attempts to test such propositions empirically, particularly in Third World settings. As Barnett (1977) has observed, much of the literature is based upon "armchair theory" and does not represent a body of systematic knowledge based on verified hypotheses. For the most part, individuals having worked in the field are satisfied with relating their feelings, anecdotes, and impressions concerning the cultural impact of mass media. The few studies which have examined media effects on national integration have focused on measures of political development and have yielded inconclusive and limited results.
In this study the question of television impact on national integration was examined from a cultural perspective, focusing upon members of a small outlying community of the Ivory Coast. Of central importance was the manner in which television viewing affects the perception of self and the nation-state.

National integration was approached as a process of cultural change leading to (a) an increased sense of national identification among members of a community within the state, and (b) a reduction in the range of perceived cultural differences between members of different subcommunities.

The central research question was: "How does the type of television available to villagers in the Ivory Coast affect their perception of themselves and their country?" The method of Multi-Dimensional Scaling is used to monitor and document these changes.

The Ivory Coast: General Overview

Situated at the western edge of the Gulf of Guinea, north of the equator, the Ivory Coast has an area of approximately 126,000 square miles, twice the size of the State of Florida. It is bordered by Liberia, Guinea, Mali, Upper Volta, and Ghana.

The country is comprised of some sixty identified ethnic groups, each with its own distinct language. The
total population of about seven million includes about one million non-Ivoirians coming mainly from neighboring Mali, Guinea, and Upper Volta. There are also an estimated 50,000 non-Africans, mostly French expatriates and Lebanese merchants who dominate middle and large-scale business enterprises and teaching.

For the purpose of conceptualization, the country can be thought of as a square, in each corner of which reside several related ethnic groupings. These groups are most often part of larger cultures which cut across national boundaries. In regard to the pluralistic nature of the country, Roberts (1973) has written:

In each case, the Ivory Coast segment of the larger (cultural) entity is but a small part of it, an extension from its cultural and spiritual center. Furthermore, none of these four culture provinces can be said clearly to predominate in Ivory Coast life, and probably no single ethnic group comprises more than 15 per cent of the total population. The Ivory Coast is thus, ethnically speaking, a total accident. (p. 55)

Since independence from France in 1960, the country has made impressive social and economic gains. In French and African circles, it is proudly referred to as the
"Ivorien miracle." Today it is considered the most prosperous of tropical African nations, boasting a favorable balance of trade, a rapidly expanding industrial sector, diversified agriculture, and political stability derived from the leadership of one party and one president since independence.

Level of Development

Throughout his career, Ivorien President Felix Houphouet Boigny has maintained close fraternal and economic ties with France through an extensive program of technical assistance. As a result, the Ivoriens have evolved a highly efficient cadre of professionals, managers, and technicians who, through a gradual program of Ivorization, have now moved into the highest decision-making levels in all governmental sectors.

The development approach which has emerged has been a two-pronged strategy with priorities on increased productivity in the sectors of agriculture and education. The change statistics in these two target areas are impressive and speak for themselves:

1. Since independence, income from agriculture has tripled so that by 1970 the country ranked as third producer of coffee after Brazil and Colombia; second producer of cocoa after Ghana; fifth producer of pineapple and bananas; second African producer of cotton after Chad; and first African producer of rough timber. The impact of the industrial sector on the GNP has also grown from six percent in
in 1960 to 15 percent. (Houphouet Boigny Presente La Cote D'Ivoire a Giscard, 1977)

2. Increased productivity in the educational sector has been focused at the elementary level through increased fiscal allocations and the implementation of a program of direct instruction by educational television, reaching 1,731 schools in 1977. Few countries can match the Ivorien investment in education which was 17 percent of the national budget shortly after independence in 1962 and is today estimated between 46 and 50 percent. Elementary school enrollment has more than tripled since independence from 238,772 to 735,621 students. (La Côte D'Ivoire en Chiffres, 1977-78) The literacy rate is reportedly among the highest in Africa at 65 percent. (World Almanac and Book of Facts, 1977)

Qualitative Change

Quantitative changes such as those mentioned previously are useful in measuring development in a country but they imply little about the quality of life or the pattern of human relationships.

It is characteristic of many researchers to think of development in terms of the numbers of things and to value their importance by the size of the numbers they apply to them. But this is just one level of change. This is the world outside of us, the tangible elements changing. A second level of change involves our own encounter with these transformations, our revised perceptions of the world, our psychological adjustment to the new environment:
...it has to do with the observable differences in our experience of the configuration of things. They do not, as we experience them, stand in the same relationship—left to right, top to bottom, front to back, color on color—as they did before. For the most part this is what we mean by cultural or social change. Here again, change is measurement, but what we measure is quality not quantity. (Fabun, 1966, p.5)

In this respect, what have been the qualitative changes in the basic relationship between the government and the governed since independence? To what extent have these developments resulted in revised perceptions of the nation among ethnic groups? Can they be shown to have involved the expansion of primary group sentiments based on kin, religious, and linguistic ties toward national norms, values, and institutions? Finally, have such changes been the result of specific policies?

Media Policy and National Integration

In the Ivory Coast, as in many African nations, the mass media of radio, television, and the single daily newspaper, *Fraternité Matin*, are state controlled. It is government policy to use them as tools for development (*Fraternité Hebdo*, 1975). A significant aspect of this
policy is concerned with integrating the various ethnic
groups of the country under a collective spirit of national
unity in support of development aims.

The following statement of these media objectives was
made by the former Minister of Information Mathiu Ekra in
a 1968 speech before the Ivorien Economic and Social
Council.

The present great mission of information is to lead:
1. to insure the predominance of a national
   feeling over atavistic regionalism,
2. to the transformation of citizens' 
   mentality, and
3. to the global education of the masses.
   (Fraternité Matin, 1968)

But, such a policy limited to privately owned tele-
vision sets would clearly be ineffective since the estimated
200,000 receivers in the country are in the hands of the
more affluent, more educated urban dwellers who are more
often employed in the vast government sector. It is with
regard to the final objective of global education of the
masses that the government has sought to expand its reach
beyond this elite group to a national target population.

The Promise of Educational Television

With the support of the French government and several in-
ternational agencies, an extensive program of direct educational
television was implemented in the Ivory Coast schools in 1971. While primarily intended for elementary school instruction, it was also conceived as a tool for national integration which would serve to create a new national culture within which all groups would interact.

This was to be achieved by using the educational infrastructure of 1,731 television schools as a base to reach a national audience of adults and out-of-school youths with special public service programming. The most important of these programs is "Tele Pour Tous," Television for Everyone, a weekly program emphasizing cultural enrichment and village improvement development themes related to health and public hygiene, agricultural improvement, housing, and other salient issues.

These half-hour programs are regularly aired each Wednesday and occasionally on Fridays at 8:00 p.m. after the evening news. The programs are presented in both dramatic and straight-forward didactic formats, accompanied by French commentary.

Throughout the country, classroom teachers were called upon to volunteer their time to organize groups for these French language telecasts, translate their content into the local language, and generate group discussion on ways to implement these ideas. A mail feedback system was devised to encourage communication between those in the field and the program producers.
At the outset of this ETV project, Claude Pauvert (1971), then chief technical advisor to the project, and UNESCO media specialist, envisioned that the schools would become the hub of a national communication network.

Pauvert (1971) stated that with the progressive extension of the ETV infrastructure to remote outlying areas, reaching children and adults from all walks of life, the entire nation would soon be "re-integrated into a triangle of televisual communications." The expanded ETV system, he felt, would serve as a two-way channel through which the entire nation would conduct an educational dialogue with itself, resulting in the creation of a new, integrated culture. He wrote:

...intercommunication (will be) established between children, young people, peasants and villagers. In this way the "global village" will be achieved to which McLuhan refers when he says there is a man who speaks and tells stories, whom everyone sees and everyone talks about the next morning. (p. 44)

Restated, the aim of this dissertation has been to examine the "global village" assumption expressed here. But, before proceeding with a discussion of how this was approached, previous studies were examined in order to review earlier work in this area.
The review is presented in three sections. In the first, assumptions about the integrative effects of mass media are reviewed. This is followed in the second section by a review of related research studies. These findings are synthesized in the final section.
CHAPTER II

Review of the Literature

Assumptions About the Integrative
Effects of Media

As developed by McLuhan (1964), the "global village" notion relates to changing patterns of perception brought about by our expanded electronic involvement in affairs external to our immediate environment. In Understanding Media, McLuhan (1964) elaborated on this process as it related to problems of population:

We still talk about the population explosion and the explosion in learning.
In fact, it is not the increase of numbers in the world that creates our concern with population. Rather, it is the fact that everybody in the world has to live in the utmost proximity created by our electric involvement in one another's life.
(p. 47)

McLuhan (1964) contends that the tendency of electronic media is to create a kind of organic interdependence among
all the institutions of society, emphasizing, according to some interpreters, the view of Pierre Teilhard de Chardin that the discovery of electromagnetism should be regarded as "a prodigious biological event." Interpreting McLuhan's assumption, Goldberg (1971) has written:

Because of its characteristic of integrating rather than separating men from other men and men from society, electronic media, according to McLuhan, have transformed the leitmotiv of Western society from "explosion" to "implosion." It is in this sense that he speaks of a 'global village.' Electronic man, like preliterate man, ablates or outers his whole self in technology and is, likewise, involved in the actions and events of all other men. (Goldberg, 1971, p. 224)

With little, if any, empirical evidence to support his contentions, many of McLuhan's grand ideas have received solid criticism from his peers (Goldberg, 1971). Yet it will be seen that quite similar unsupported assumptions about the integrative effects of media abound in the literature.

While McLuhan's statement addresses existing patterns of social integration "created" by media, considerable theoretical commitment can be found for this proposition
in the form of an inversion, i.e., "If patterns of social interdependency emerge between systems as a result of media, then media development within a nation will lead to greater integration among its sub-systems." This point of view is found in the writings of political scientists like Fagen (1966) and Pye (1963) who have advanced nation-building theories which approach the problems of development as communications problems. Pye (1963) clearly reflects this approach:

A scanning of any list of the most elementary problems common to new states readily suggests the conclusion that the basic process of political modernization and national development can be advantageously conceived as problems in communication. For example, the generally recognized gap between the Westernized, more urbanized leaders and the more tradition-bound, village-based masses, which is the hallmark of transitional societies, represents a flaw in the structure of the national communications, and a fundamental problem in personal communication among people with grossly different life experiences. (p. 8)
While also stressing the importance of interpersonal channels of communication, Pye (1963) contends that a basic task of creating political consenses in new nations involves the building of universal means of national communication, so that "all segments of the society can become more closely involved with each other" (p. 10). Such a national communication system would be instrumental, Pye contends, in countering problems of national consensus related to the deeply held attitudes and sentiments of "separate individuals which emerge out of their accumulative communications experiences" (p. 11).

This same concern with integrative communication systems is present in the work of political scientist Richard Fagen (1966), who has attempted to develop Pye's ideas into a more systematic framework. Fagen (1966) contends that the national integration approach to political development finds its "natural ally" in the study of communication, and that when viewed this way political development involves a structural expansion in the communication sector sufficient to make national politics possible.

...political development involves extending central communication networks into and across previously isolated sectors of the society. The developing political system is characterized by new horizontal channels stemming
from increased socio-economic interdependence and new vertical channels arising from increased pressures for political participation and administrative effectiveness. (p.128)

Schramm (1963) has been concerned with how communication development can serve to accelerate political, economic, and social growth. He asserts that communication assists in public understanding and acceptance of national goals. His theme has been that the mass media can be used to create a feeling of "nationess" in developing countries. The process, according to Schramm, involves the extension of loyalties and awareness to a national level:

Through this process the man who had been a citizen of the village grows self-consciously into a citizen of the nation. But the citizen cannot extend his environment unless the communication system extends its environment. In the oral, traditional society the previsions for wide-horizon communication are inefficient: the traveller and the ballard singer come too seldom and know too little. A modernizing of society requires mass media, some of which must be national. (p.38)
In a related review of development communication literature on national integration, researcher Troy Zimmer (1971) finds other references to this integrative assumption. As early as 1938, O.W. Riegal discussed how mass communication media promoted nationalism through a tendency to spread national symbols. Louis Wirth (1960) considered mass communication to be the main framework of the web of social life. He felt that mass communication contributed to national integration through the spreading of political symbols and the reinforcement of nationalistic norms.

Karl Deutsch (1953) has argued that an important part of the nation-building process involves the diffusion of symbols throughout a nation-state by the means of mass communications. More committed statements include those of John Pierce, Zechariah Chaffee, and Bruce Russett. Pierce (1967) has declared the mass media to be the "greatest unifying force in history." Chaffee (1966) considers it obvious that "a community with its citizens widely separated can be held together only by mass communications." On this matter, Russett (1964) writes:

Communications media may have major consequences for the political unity of a nation. A nation, in the sense of a people with shared values and aspirations,
may not exist before modern communications become reasonably widespread. When radio, newspapers, and other media are introduced they may provide the means whereby the existence of common goals and values are recognized or created .... (p. 105)

Examples of how these assumptions have been applied can be illustrated by the "popular education" and "Americanization" programs of the U.S.S.R. and the United States.

At the twenty-fourth congress of the Communist Party of the Soviet Union (CPSU), a resolution on the report of the central committee stressed the growing importance of the Party's propagandistic and agitation work (Kondrashkov, 1972). The participants agreed that the rapid development of the mass media, their omnipresence, their mobility and efficiency had created "unprecedented opportunity for the active ideological influence of the press, radio and television on the nonmaterial life of society and on the minds of the broadest strata of the population" (p. 98).

The congress attached great importance to the further improvement of the work of those involved in the mass media propaganda work, reminding them that they should always recall the words of V.I. Lenin: "We are doing little to educate the masses on the basis of living... and yet this is the main task of the press during the transition from capitalism to communism" (p. 99).
This concern with using media to transmit a way of life finds its counterpart among the American instructors responsible for the education of aliens for citizenship status.

The Bureau of Continuing Education Curriculum Development of the New York State Education Department has produced an annotated bibliography entitled "Multi-Media for Americanization Programs" (1973). Stating that such instructors have long recognized the value of incorporating a variety of audiovisual aids into their instructional programs, the guide describes a compilation of videotapes, records, tapes, filmstrips, films, film loops, transparencies, charts, and kits which are thought to be useful in the majority of Americanization programs.

Though these particular materials are not intended for mass transmission they, nevertheless, underscore the importance attributed to the media in integrating individuals into the national consciousness. Trans-National Cultural Integration

A contrasting perspective is presented by writers who view the integrative effects of mass media with concern for the threat that foreign values, norms, and aspirations pose to the integrity of their own cultures. This view which is often expressed under the rubric of "Cultural Imperialism" has been articulated most consistently by spokesmen from those nations which lie within
the American sphere of influence, i.e., Canada and the Latin American nations.

Weiss (1974), for example, contends that the effects of constant exposure to American broadcasting on Canadians competes with their sense of identity to their own country. This view is also explored by McPhail and Barnett (1977) whose study is reported in the latter part of this literature review section.

Weiss (1974) calls for a stronger policy on the part of the government to "Canadianize" its broadcasting. Special attention, she contends, should also be given to the development of Canadian cable television to serve this special function.

This section of the literature review has been by no means truly exhaustive; the list of subscribers to this view could certainly be extended. The purpose of this section was merely to indicate the breadth of theoretical commitment to a popular proposition before turning to a review of the empirical studies which have addressed this question.

It must also be noted in this section that many of the writers cited also feel that under certain conditions media development can contribute to "disintegration" in developing nations. Pye (1963), Lerner (1958), and Deutsch (1961) have each argued that new forms of communications can lead to rising political and economic
expectations which outrun government's ability to supply. Civil disorder and overturned governments are said to result when this revolution of rising expectations becomes the revolution of rising frustrations.

Actually these negative consequences of media taken with the earlier statements of the writers serve further to establish their belief in a strong relationship between mass media and patterns of national interaction; it is the nature of the relationship, whether positive or negative, which is the focus of their concern.

Research Findings

Most of the empirical research on the relationship between media and national integration has been generated from the political science perspective. Within this field there have been only a limited number of multivariate studies which have examined this relationship in a fully conceptualized manner. In the majority of studies, researchers have focused on the contributing components to national integration such as the influence of media development on voter turnout, universal suffrage, and the development of political knowledge and national political parties. This type of research has been thoroughly critiqued by Kraus and Davis (1976).

For example, in separate studies conducted in Colombia, Deutschman (1963) and Rogers (1965-1966) found a high correlation between levels of media exposure and political
knowledge. It was also found that these two variables correlated highly in Costa Rico (McNelly and Deutschman, 1963), and in Egypt (Hornik, 1971). Bishop (1973) reported that young men in Peru were able to compensate for lack of education with high media use in the development of political knowledge.

Though these studies seem to provide some support for the central proposition, they are limited because:

1. they use individuals as units of analysis, and
2. because they have only focused on subvariables of the national integration process.

They require too many inferential steps to allow one to make confident, generalizable conclusions about the national integration process within nations.

To date, this writer is aware of only three such political studies which have addressed the relationship between mass media and national integration in a manner which avoids these two weaknesses. In each of these multivariate studies, nation-states are used as the unit of analysis. One addresses the "dis-integration" hypothesis, and the other two focus upon national political integration.

Taylor (1969) tested the hypothesis that mass communication channels change perceptions and raise personal expectations faster than society can cope with them (previously discussed Deutsch and Lerner notions). His
statistical analysis was based on newspaper circulation and number of radios in use. Political violence and stability measures were obtained from the Yale World Data Program. He found no significant correlations.

In another study, Adelman and Morris (1967) were interested in societal correlates of economic development and performed a factor analysis on several variables, some of which were related to mass communication development and national integration.

Media development was based upon newspaper circulation and number of radios, and an integration measure called degree of integration-unity was developed (Zimmer, 1971). (The components of this index are unspecified. The primary source is currently unavailable.) Data were collected from 74 countries. Mass communication was reported to be highly correlated (.72) with degree of national integration-unity.

In the most recent study, Zimmer (1971) performed a statistical analysis on aggregate data from 108 nations. Of primary interest is his hypothesis that there would be a positive relationship between media development and national political integration. The dependent variable was operationalized as: (a) a low degree of political violence, (b) a low degree of potential separatism, (c) linguistic homogeneity, and (d) high political enculturation.
Level of mass media development for each country was represented in an index of daily newspaper circulation, radio and television receivers in use, and number of cinema seats available.

The results of Zimmer's correlational analysis were problematic. There were countries such as Tanzania and the Central African Republic with low levels of media development and high levels of national integration. On the other hand, there were nations such as Czechoslovakia, Spain, and Belgium which rated relatively high in media development but scored low in national integration. Zimmer (1971) concluded:

It seems reasonable to conclude that mass media development does play a role in the political integration of the nation-state. But, the degree of importance of the role ... is difficult to establish. There were deviant cases to refute the claims made by some that mass media development is either a necessary or sufficient condition for political integration. (p. 100)

Synthesis

Two significant points are derived from this literature review: (a) There is a wide range of theoretical commitment to the assumption that the mass media perform an important integrative function in countries, and...
(b) when researchers have conceptualized national integration in political terms, their studies have yielded mixed and inconclusive findings.

Taylor (1969) found no support for the "disintegration" notion; Adelman and Morris (1967) confirmed their integration thesis, while Zimmer (1971) failed to find support for the same hypothesis.

What then does this suggest about the assumptions? Have scholars such as Deutsch (1953), Lerner (1958), Russett (1964), and others overstated their case?

Before any conclusions can be reached, it must be noted that many of these writers whose assumptions were identified in the first section of the review include in their discussions of national integration a cultural component of shared values, symbols, and norms. The available research studies, on the other hand, have not addressed these factors. They have primarily been directed toward indicators of political stability based upon citizen participation, political knowledge, and civil violence.

Changes at the level of an individual's perception of the nation-state are either implied by the researchers from behavior, or are considered unimportant. To this writer's knowledge, there has been only one study in which the integrative effects of media on perception and culture have been examined (McPhail & Barnett, 1977).
This study will be discussed later in this section.

This researcher views the process of national development, or any process of directed large-scale social change as consisting of three basic components: (a) cultural/psychological, (b) structural/institutional, and (c) social/behavioral.

![Diagram of Media Approaches]

**Figure 1**
Traditional Approaches to the Study of Media Effects

As illustrated in Figure 1, political researchers such as Zimmer, Taylor, and Adelman and Morris have looked for a direct link between media development and political manifestations of behavioral change. Such an approach seems unreasonable to this researcher when one considers the importance of intervening cultural and structural factors which operate differently in each country to either hinder or support development and national integration efforts.

The structural component assumes central importance whether national development and integration are concept-
conceptualized in political economic or social terms; unless an individual has both the capacity (income, mobility) and the opportunity, there is very little chance that he can participate in activities at these levels. Changes in this component are brought about through new social structures and institutions which support socio-economic and cultural transformation at the local and national levels of a country.

The Cultural/Psychological component is equally important. For without concomitant changes at the level of beliefs, values, and attitudes, the opportunities brought into existence through structural changes can be misunderstood, overlooked, or ignored. These factors can be viewed as pre-conditions to change. The relationship among the three components is illustrated in Table 1 using as an example the opening of an agricultural cooperative bank in a new community.

Table 1
Three Components of Social Change

<table>
<thead>
<tr>
<th>Cultural/Psychological Pre-conditions</th>
<th>Structural/Institutional Change</th>
<th>Behavioral Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Values</strong></td>
<td><strong>Beliefs</strong></td>
<td><strong>Attitudes</strong></td>
</tr>
<tr>
<td>Save for a rainy day</td>
<td>Government Co-op banks are safe</td>
<td>The Government Co-op bank is convenient</td>
</tr>
<tr>
<td>Money needs protection</td>
<td>Government Co-op banks are fair to the small man</td>
<td>The Government Co-op bank is a good place to save</td>
</tr>
<tr>
<td>Let your money work for you and the nation</td>
<td>Establishment of local branch of Agricultural Co-op Bank</td>
<td>Resident opens an account</td>
</tr>
</tbody>
</table>
While it is certainly not being suggested that beliefs, values and attitudes alone have any impact on an individual's capacity to participate in new institutional structures or to adopt new behavioral patterns, it is argued that they do affect that person's ability to recognize their value and to take advantage of such opportunities once they are brought about through structural changes. It would seem then that educative mass media campaigns targeted at these pre-conditions might play an important role in influencing an individual's perceptions of the nation-state and its policies of development.

A revised model for a research approach stressing the central function of the cultural component is indicated in Figure 2.

Figure 2
Cultural Approach to the Study of Media Effects
Media Impact on Cultural Change

The Canadian pilot study of McPhail and Barnett (1977), mentioned earlier, represents an important effort at assessing media impact on national integration from a cultural perspective. In this study, the researchers sought to evaluate the importance of Canadian television on its viewers. Of special interest was the competing influence of American television programs which are extremely popular among Canadians and widely available both on the Canadian networks and from United States based stations which transmit across the border.

Using the Multi-Dimensional Scaling Method, the researchers asked a group of 149 Canadian university students to indicate the cultural difference between themselves and a conceptual field of 16 other concepts including "Canada," "Separatism," "National Unity," and the "United States."

Cultural differences were expressed by having the subjects estimate ratio level "distances" between themselves and all other possible concept pairs to indicate similarity/difference and the strength of these relationships.

The most significant finding of the study was that those subjects who, over the years, had experienced the greatest exposure to American television programs per-
perceived themselves culturally as being "closer" to the United States (more American) than the rest of the sample, and further away from Canada (less Canadian).

The results indicated an inverse relationship between the viewing of American television programs and a sense of Canadian identity. But, because the research design did not satisfy the criteria of time-order, it could not be confidently concluded that the viewing of American programs "caused" this group to perceive themselves as being more American.

Despite the limitations of the research design in this study, the use of the MDS method demonstrated a promising, empirically rigorous approach to the study of media impact on cultural change. In the following chapter a theoretical framework is presented for employing this methodology in the study of national integration in the Republic of the Ivory Coast.
CHAPTER III

Theoretical Framework

National Integration: The Dependent Variable

In a review of general literature on national integration, Icken Safa (1971) has noted that researchers and theorists tend to define this concept in a manner which reflects their particular discipline. Economists have emphasized the importance of an economic infra-structure; political scientists have focused on the growth of a "participant society" and political consensus.

While these definitions may vary in emphasis they all point up, she observes, the necessity of replacing "traditional, local, 'primordial' ties with a new identification with the state" (p. 212). Researchers approaching this process from the cultural perspective, she notes, have tended to emphasize a change in values or ethos as being indicative of the process of national integration.

Anthropologist Clifford Geertz (1963) provides a definition which will serve as the conceptual definition for this study. Geertz refers to this process as the
"integrative revolution" and defines it as "the progressive extension of the sense of primordial similarity and difference ...to more broadly defined groups within the framework of the entire national society" (p. 153-154).

The sense of similarity and difference, manifested in how we perceive the world, is a psychological attribute of an individual, and a cultural characteristic of a particular ethnic or social group. One could expect, for example, that members of an American teenage drug culture might perceive greater similarity between the concepts "marijuana" and "white wine" than would members of a law enforcement subculture such as retired F.B.I. agents.

By the same token, educated, highly urbanized Africans are more likely to perceive greater similarity between the concepts "malaria" and "mosquitoes" than might illiterate forest dwellers. However, in both examples these perceptual patterns would be subject to change over time as a function of direct personal experience and information exposure.

Woefel and Barnett (in press) argue that given a set of relevant concepts, and expressing differences between them in terms of ratio level distances, that any culture can be represented mathematically as the mean differences between the concepts and "self" perceived by its individual members:
...the collective consciousness, i.e., that aggregate psychological configuration which constitutes the culture of a society and toward which individual beliefs may seem to tend, may be represented accurately as the average matrix $\bar{S}$, where any entry $\bar{s}_{ij}$ is the arithmetic mean conception of the distance or dissimilarity between objects $i$ and $j$ as seen by all members of the culture. (Barnett, 1977, p. 2)

The authors have demonstrated that these objects can be abstract aspects of belief, attitude, ritual, and patterned activity including such things as language, religion, or the nation-state. As such, this approach provides an analytical definition of culture which can be described quantitatively.

Returning to the Geertz (1963) cultural definition of national integration as the extension of this sense of similarity and difference across a national society, it is important next to address the question of how this transfer process takes place, and what are its principal mechanisms.

**Intercultural Transfer**

The process by which aspects of one culture are transferred to another, and its consequences, have been examined
by researchers under three major conceptual frameworks, each distinguished by a particular value bias toward the process. These are Diffusion Theory, the Cultural Imperialism Perspective, and the Theory of Cultural Transmission.

Diffusion theory. In diffusion theory (Rogers, 1971), the researcher regards the transfer process as a positive one. The researcher is concerned with maximizing those social, interpersonal, and psychological conditions which are believed to make an individual or a culture more receptive to the adoption of values, beliefs, and technological innovations deemed necessary for development. It is a practical theory of social intervention rooted in the assumptions of planned change.

Cultural imperialism. The cultural imperialism perspective can be viewed as a political-philosophical reaction against foreign cultural dominance much as dependency theory is a reaction against the effects of foreign economic control over other countries. Its adherents contend that the indiscriminate adoption of foreign cultural elements results in a psychological dependence upon that culture and the ultimate demise of authentic, meaningful, indigenous cultural systems (Gibbons, 1974).

With regard to Africa, such a loss would be tragic. Tribal culture has developed all of Africa's arts: its
vigorous songs, dances, and music, its rich legends and folklore, the carvings, masks, and decorative bead and basket work, its pottery and elaborate weaving and dyeing techniques.

The social structure of the tribal system has provided a security blanket under which all members could seek shelter. No tribesman need ever be alone. Every fellow tribesman is bound by sacred rules to give shelter, food, and comfort when another is in need. It has provided the perfect welfare state based on blood relationships.

Several African novelists such as Achebe (1967), and Ngugi (1977) have written about the mental and spiritual effects of de-tribalization under the influences of Western cultural dominance which started with the activities of white missionaries: The young have flocked to the cities. Severed from tribal morals, yet longing for them, some have sunk into alcoholism, prostitution, and petty crime in order to obtain Western luxuries. Most are victims of "alienation."

It has been estimated, for example, that in some Nigerian cities, two thirds of the population suffer from some form of mental illness, mostly anxiety (Time, 1968). Such consequences are indeed tragic and one can only hope that African leaders are fully cognizant of them in their present policies of national integration.
Cultural transmission theory. Like diffusion theory, the theory of cultural transmission provides a framework for understanding the process of intercultural transfer, but, avoids either of the two previous value biases. It is a detached perspective which lends itself to anthropological investigations of cultural change, or culture in the making.

This transmission process can be illustrated graphically as in Figure 3 with references to the Redfield-Singer notion of "Great Tradition - Little Tradition," (Wax & Wax, 1971) and Eric Wolf's "Broker" thesis (Icken Safa, 1971).

Figure 3
Cultural Differences between Little Tradition and Great Tradition
The point of the illustration in Figure 3 is to indicate that the constellation of cultural elements which surround these two systems are quite different. For example, the world view of the individual who is integrated into the Great Tradition (the nation-state) may consist of: (1) formal education opportunities, (2) material consumer objects, (3) specialized government services, etc.

In the Little Tradition (sub-culture) an individual's world would consist of those norms and patterns of behavior prescribed by one's own community, tribe, or ethnic group.

Wolf contends that through the interaction of "brokers," elements of the two systems are transmitted from one to the other; more often this is predominately a one-way process from the national system to the sub-group.

These brokers are often: (1) agents of national institutions, i.e., tax collectors, teachers, policemen, health workers, (2) marginal men seeking economic and political power, and (3) as suspected in this study, the mass media.

The result of this interaction is illustrated in Figure 4.
Media Mechanisms of Cultural Transmission

In their study of mass media effects on political behavior, Kraus and Davis (1976) identify five theoretical perspectives on the role of media, two of which can be considered within the framework of this study as mechanisms of cultural transmission: the communicational reality and agenda setting functions.

**Communicational reality.** First advanced by Lee Thayler, (Eulua, 1963) this construct describes reality as a function of human communicational behavior structured through such acts as talking, listening, and thinking. Thayler contends that "Whatever one or more men can and do talk about, but which is not amenable to sensory contact by them, has no reality beyond what can be and is
said about it" (p. 54). By contributing symbols, ideas, and issues to this conceptual environment in which persons interact, mass media create communicational reality.

By extension, abstract notions of a nation-state broadcasted by nationally controlled media become part of the political reality which are talked about, altered, and interpreted by citizens of a society. This process is very similar to the expectations of Pauvert (1971), related earlier, that Ivorien television would create a new national culture within which all groups would interact.

Agenda setting. The concept of agenda setting asserts that media content sets personal agendas. By focusing attending on certain issues while ignoring others, the media, it is believed, set "priorities of concern" within the various sectors of a public. Maxwell McCombs (1972), a prominent researcher in this area, argues that audiences not only learn about public issues and other matters through the media, but that they also learn how much importance to attach to an issue from the emphasis placed on it by the mass media (p. 213).

Following this proposition one might reasonably expect that in countries such as the Ivory Coast where media are nationally controlled and strong emphasis is placed on themes of national development, educational
reform, the achievements of government, and the need for a sense of national unity, that these issues would become more salient to members of the viewing audience.

In summary, national integration is approached in this study as a process of cultural change where culture is conceptualized as a shared sense of similarity and difference among members of a public toward selected concepts. The mass media are viewed as cultural transmission brokers which expand the field for cultural interaction through the mechanisms of communicational reality and agenda setting, creating an information environment of issues and concerns to which the public attends.

Demonstration of the Process: A Research Approach

In keeping with Geertz's conceptual definition used in this study, there are two ways to approach a demonstration of cultural transmission from a measurement point of view. First, it would be necessary to obtain interval level measurements describing the proximity of Great Tradition and Little Tradition elements on a similarity-difference continuum. One would next try to show that over time certain Great Tradition elements had become similar (i.e., less strange and foreign) to Little Tradition elements for members of that culture.
Figure 5

Cultural Elements of the Great Tradition Moving to Equal Proximity with Elements of the Little Tradition

But since national integration is conceptualized as a process, "a progressive extension of the primordial sense of similarity and difference," it would not actually be necessary to go through with this full demonstration showing relatively equal similarity among elements. It would suffice to demonstrate that elements of the Great Tradition have moved closer to the individual along this continuum (or that he moves closer to them).
Cultural Elements of the Great Tradition
Moving Relatively Closer to Individual or Group

Such is the approach of this study. Difference/similarity ratings of selected national cultural elements have been generated from members of an Ivorien community over time to determine whether their television viewing serves to alter their proximity to members of that community.

In the following chapter Multi-Dimensional Scaling (MDS) is discussed as a method for monitoring cultural change; a field of seven concepts is delineated; and the major research hypotheses are presented.
CHAPTER IV
Methodology and Related Research Hypotheses

Multi-Dimensional Scaling (MDS)

The method of Multi-Dimensional Scaling (MDS) is ideally suited for this study because of its close correspondence with the conceptual definition of the dependent variables. Basically, MDS is a technique which produces a conceptual map in which cognitions and concepts are located in relation to one another on the basis of discrepancy or dissimilarity data reported by a subject.

In this method, subjects are presented with a list of concepts (stimuli) and asked to make ratio level judgements about their similarity or difference relative to a standard. Through the use of the Galileo computer program these judgements are illustrated mathematically in a space resulting in a geometric pattern. Changes in the relationship among the concepts are represented as changes in this pattern over time (Woelfel, 1974).
Figure 7

Over-time Changes in Perception Displayed
Graphically in Multi-dimensional Space
The Galileo program is presently available at Florida State University, but was not fully operational at the time of this data analysis. All computations were performed with standard calculating equipment. The examples presented below are used solely to illustrate the manner in which the relationship between concepts can be displayed graphically through this method. It will not be possible to illustrate the actual data collected in this study in this manner. The concepts displayed in Figure 7 were used in this study and are discussed later in detail. The figure shows changes in the relationship of seven concepts over-time.

When the individual is the unit of analysis, the concept configuration yielded by this method can be interpreted as a cognitive map for that individual. When similarity/difference ratings are averaged over a large sample of individuals, they yield extremely precise estimates of discrepancies as perceived by that aggregate of people. Joseph Woelfel, who has been instrumental in the development of this technique, writes:

These measures might well be seen as descriptive of discrepancies as seen by the culture from whom the sample of individuals is drawn. While we might hope that this theory and its associated measurement
system can eventually serve as a precise tool for the analysis of individual cognitive processes, it would seem to be fully able to serve now as a precise system for the analysis of cultural or macrocommunication processes. (Woelfel, 1974, p. 14)

Recent cultural applications of this method have included a cross-cultural study of the relationship between media and social institutions in Mexico, South America, and the United States (Barnett & Wigand, 1976); political processes in the 1974 Michigan congressional election (Barnett, Serota, & Taylor, 1976), and cultural definitions of sex roles (Saltial, N.D.). Barnett reports that the method has been used successfully with subjects from non-English speaking cultures, including Japanese, Dutch, Swedish, Finnish, and Spanish (Barnett, 1977).

Scaling procedures. Actual procedures for conducting an MDS analysis are described by Barnett, et al. (1976), and Woelfel, et al. (1974). Subjects are presented with a list of paired concepts and asked to make ratio level judgements about the dissimilarity between pairs. They are given the following general instructions: If concepts X and Y are U units apart, how far apart would you say concepts A and B are from each other? (In this study,
this question was expressed at a level of familiarity which proved to be very effective with the subjects, see p.84.)

The first distance is set by the researcher as a "Rod S" standard. Providing the subjects with this initial standard distance (U) allows them to make proportional judgements for all possible combinations of paired concepts. These data are transformed to provide a multidimensional representation of the interrelationship among all concepts, including the subject. This is achieved by arranging the subject responses into a mean distance matrix, which is transformed to a scaler-product matrix whose origin is at the centroid of the distribution. From this, a coordinate matrix is generated which allows the researcher to map each concept in a multidimensional space.

When over-time data are collected from a sample or a population, the changes in the proximity of the mapped concepts reflect a shift in that group's perception of their interrelationship, as well as the strength of the group's identification with each concept.

Integration concepts. Seven concepts were selected for this study to monitor possible changes in the relationship between the subjects and elements of the national and international culture. These concepts are listed in Table 2.
Table 2
Expert Ratings for
Six Principal Concepts

<table>
<thead>
<tr>
<th>Concept</th>
<th>Rating</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Me</td>
<td>4.8</td>
<td>National Culture</td>
</tr>
<tr>
<td>2. Schools</td>
<td>3.9</td>
<td>National Culture</td>
</tr>
<tr>
<td>3. Government</td>
<td>2.3</td>
<td>External Sub-Culture</td>
</tr>
<tr>
<td>4. Senoufo</td>
<td>2.1</td>
<td>External International Culture</td>
</tr>
<tr>
<td>5. France</td>
<td>4.0</td>
<td>Communication Concept</td>
</tr>
<tr>
<td>7. Television</td>
<td>3.1</td>
<td>Independent Variable</td>
</tr>
</tbody>
</table>

Concepts (2), Schools, and (3) Government were selected by the researcher and validated by a panel of Ivorien experts as representing important elements of Ivorien national culture. The panel was comprised of twenty professionals from the government civil service and the university system. They were asked to rate each of the concepts on a five-point scale, a high score indicating that the item was an important element of the national culture.

The concept of a "national culture" was defined in the following manner:

In the course of its own unique historical development each nation has developed national institutions, symbols and political structures which serve to integrate its members into a collective body, with a common sense of national identification.
Collectively, these factors constitute what can be called a national culture. In countries composed of many different ethnic groups like China, the United States, and the Ivory Coast, these groups are able to cooperate and share experiences within this national culture in spite of their ethnic differences.

A list of six general concepts is presented below. Using a five-point scale, please estimate, according to your own opinion, which concepts represent important aspects of Ivorian national culture. A score of 5 is high, a score of 1 is low.

A score of 3.5 was arbitrarily set as the lower limit for a concept of national culture. "Government" and "Schools" were validated as national concepts, meeting the researcher's expectations. It can be noted that the panel also rated "Radio" as an important national concept, though it was originally included in this study as a communication control concept.

The fact that "Radio" is rated higher than television is consistent with popularly held opinions in Ivory Coast that television tends to mainly address itself to a small, well educated, urban, minority of the population.
Concepts (4) Senoufo, and (5) France, respectively, represent an external subculture and an external international culture. The Senoufo are an ethnic group located in the north of the Ivory Coast who practice a lifestyle which could be characterized as more traditional than that of the target population of this study. They are known for their deep attachment to traditional social and religious values and organizations. Comparatively, they have been little touched by Western culture and the modern economic system.

Senoufo is a culture rich in legend and folklore. Their musicians, dancers, and artisans attract thousands of tourists each year to this region for a glimpse of "L' Afrique Vrai" (The True Africa). Their music and dance are featured prominently on radio and television, and as a group they constitute an important part of the National Dance Company.

As the former colonial power and presently the major trading partner of the Ivory Coast, France continues to exert a powerful cultural influence upon this country, particularly upon the lifestyles of the more educated, urban dwellers, and on those Ivoriens aspiring to such positions. French is also the official language of the country in which all instruction is conducted and most of the radio and television programs are transmitted.
Concept (7), Television, is the dependent variable in this study. A content analysis is presented in a later section of this study to provide an overview of the type of programming available in the Ivory Coast.

Concept (6), Radio, was included as a control concept since it is the only alternative medium of mass communication available to the subjects of this study.

Concept (1), Me, represents the individual subject. In this study, it is a summary measure reflecting the collective consciousness of the target population.

Research Design

The original intention in this study was to use a classical time-series experimental design in which a series of observations are collected from a group of subjects before and after the introduction of a specified treatment. The pre-treatment series of observations establishes a base-line pattern in which changes brought about by the treatment are registered as deviations from this steady state.

The target population sought for this study was a village in which television receivers had not yet been installed in the school, but were expected within several months, allowing ample time for a series of pre-treatment observations. Members of the community would be monitored over the course of ten months for cultural changes which
might be attributed to their exposure to viewing television programs in the school during the evenings.

However, the actual conditions in the field made it impossible to collect the pre-treatment series and the actual design used in this study commences at the approximate date of television installation in the village. Thus, the design is more representative of a case study and is thus subject to weaknesses. This design is diagrammed in Table 3.

Table 3
Research Design

\[
\begin{array}{ccc}
T_1 & T_2 & T_3 \\
X & O & X \\
X & O & X
\end{array}
\]

In order to control for threats to validity and rival hypotheses, a questionnaire was administered to the subjects at the end of the series. This instrument was intended to explore other influences on the daily lives of the subjects which might explain significant changes during the course of this study (displayed as Instrument 2 in Appendix B).

One such influence which was anticipated by this researcher was the daily interaction between the general population and those villagers who became regular participants in the weekly organized discussion groups centered
around the programs of "Tele Pour Tous." Because of the added reinforcement of the interpersonal channel of communication in these sessions it was anticipated that attitude change would be more dramatic among these villagers when compared with the general population.

For various reasons, discussed later in this chapter, these sessions never became operational in the village of Toukouzou II, thus this aspect of the study is treated neither as part of the research design nor in the statement of research hypotheses.

Research Hypotheses

Hypothesis I predicts that as a result of television exposure the subjects will identify more closely with the medium, thus: "Over time, the subjects will perceive less distance between themselves and the concept "Television."

Hypothesis II is advanced as a control mechanism. Since the subjects have already been exposed to radio for a considerable period of time, it is reasoned that there should be no significant change in perception toward this medium, thus: "Over time, the subjects will not perceive a significant change in the distance between themselves and the concept 'Radio'."

Hypothesis III is concerned with national identification. It predicts that a stronger identification will
develop between the subjects and the two elements of national culture as a result of television mediated cultural transmission: "Over time the subjects should perceive less distance between themselves and the concepts 'Government' and 'Schools'."

Hypothesis IV is concerned with closer identification between sub-cultures as a result of television mediated cultural transmission: "Over time the subjects should perceive less distance between themselves and the concept 'Senoufo'."

Hypothesis V addresses the "Cultural Imperialism" thesis. It predicts: "Over time the subjects will perceive less distance between themselves and the concept 'France' as a result of television mediated cultural transmission."
CHAPTER V
Research Setting

Site Selection

The process of site selection began on September 30, 1977, shortly after this researcher's arrival in Ivory Coast. On this date a meeting was held with officials of Compagnie Africain de Television (CATEL), the private French agency responsible for the installation and maintenance of all television receivers in public and private schools. The intention was to identify a village where television did not yet exist, but where installation was expected within two or three months, permitting adequate time for two pre-television observations of the population.

However, it was learned at this meeting that most of the new installations for the 1977-78 academic year had already been completed during the summer vacation months. There remained only five villages where installations were running behind schedule and where connections were expected to be completed within the week.

From this list of five potential villages where
television was not yet operational, the village of Toukouzou II was selected as the research site for this study, primarily because it was the most removed, located some 105 kilometers from the capital city of Abidjan. This criterion was applied to keep to a minimum the possible influences on the population of frequent travel to the city, an activity which might also serve to explain any relevant attitude change during the course of this study.

Because of the installation schedule, the plan of employing a time-series design with two pre-television observations was modified to a series of observations commencing at the time of installation.

Location of the Village

The Village of Toukouzou II is situated in the Lagoon Region of the Ivory Coast along a narrow coastal belt of sandbars and islands which extend some 340 kilometers west along the Gulf of Guinea from the Ghana border. Built by the combined action of the heavy surf and the eastward current, this barrier has closed most of the river mouths in the region, forming a series of lagoons between itself and the true continental shore.

Most of the lagoons are narrow, salty, and shallow and are parallel to the coastline, linked to one another by small canals built by the French. The fringing sandbars and island vary in width from about 60 meters to
six or seven kilometers. The section of the bar on which Toukouzou II is located ranges from about 200 meters to two kilometers.

Access

By car, the trip from the capital to Toukouzou II takes from two and a half to three hours, depending on the traffic and road conditions. The first leg begins on a major two-lane blacktop invariably congested with commercial transport vehicles and other travellers headed into the interior. After an hour, one turns off onto a single-lane dirt road which passes through plantations heading southwest to the fishing village of N'Djem where a regular ferry service transports vehicles across the lagoon.

At the other side, one travels another 60 kilometers along a sand track which is periodically cleared and filled by a team of bulldozers. One passes through the tiny fishing villages of Abrebi, Akrou, Jacqueline, Addah, and Toukouzou I, seldom passing another moving vehicle. This road comes to an abrupt end at Toukouzou II. The location of the village is such that there is no through traffic. The only travellers reaching the village are those who have set it as their destination.
The People of Toukouzou II

Toukouzou I and Toukouzou II are sister villages separated by a distance of about one kilometer along the main road. The second village was founded some 40 years ago by the Prophet Papa Nouveau who has established his church there in a compound situated in the southern corner of the village facing the sea. It is an impressive concrete structure said to be 100 meters long with seating capacity for 3,000 worshippers. It is the social, religious, and cultural center of the village. The bamboo huts of the villagers extend for about one kilometer between the sea and the lagoon, bordered on both sides by lush coconut groves.

The people of Toukouzou, known both as the Avikam and the Brignan, trace their ancestors to Ghana. They are one of seven small ethnic groups which inhabit the Lagoon Region comprising what is called the Lagoon Cluster. Though these groups are believed to be related within a common Ghanian language grouping, historically, they have lived separate from each other and relations have been antagonistic between their villages. It is estimated that the total number of Avikam are about 5,000. Outside of the Toukouzou area they can be found in the vicinity of the port town of Grand Lahou, about 30
kilometers west, near the mouth of the Bandama River.

Western cultural contacts. Historically, the peoples of the Lagoon Region have had more exposure to European culture than those groups in the interior through contacts with French colonialists and Christian missionaries who established their administrative centers in the south. But, direct contact was minimal in Toukouzou because of its minor economic importance and, as will be discussed later, Christian influences have been synthesized within the traditional belief system, minimizing its disruptive impact upon the culture.

As a result, one finds today that many of the traditional African life patterns have remained intact in Toukouzou II. Canoes are hollowed out of tree trunks with simple hand tools; fishing nets are handwoven. Farming, mainly limited to subsistence level production, is delegated to women.

In the evenings, after school and work, the villagers prefer traditional body wraps to Western styled clothing; women frequently go bare-breasted. The men in the village have as many wives as they can afford. Though there are a few concrete housing starts along the road, the majority of the homes are fashioned in the traditional manner with bamboo sticks and thatched roofs, with separate huts for cooking and bathing.
Some Socio-Economic Characteristics of the Village

Within the Ivorien context of development, Toukouzou II can be considered a small village ranking low on the scale of modern development. Though government statistics estimate the adult population at 600, the actual number of "permanent" adult residents was found to be less than half this figure.

The level of illiteracy is about 90 percent for adults; most of the children have learned to speak and read some French in the village school. The average income from fishing and individual small scale agricultural production was difficult to determine. Estimates ranged from between $80 and $200 per month. During the period of this study, the yield from the lagoon was poor, creating economic hardships for the majority of families.

Further insight into the level of development of Toukouzou II can be gained by examining its socio-economic infrastructure through a village modernity scale developed by researchers of the Ivory Coast ETV Evaluation Service (Lenglet, 1976). Using this scale, a modernity score is calculated for a village based on the presence or absence of 18 unweighted indices of development. The scale differentiates three levels of development based upon the following score categories: High (13-18 points);
Medium (7-12 points); and Low (1-6 points). Toukouzou II is rated in Table 4.

Table 4

Village Modernity Scale

<table>
<thead>
<tr>
<th>Service</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Protected Water Supply</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Appportioned Housing Lots</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Grocery Store</td>
<td>Yes</td>
</tr>
<tr>
<td>4. School</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Maternity Ward</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Health Center</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Covered Market</td>
<td>No</td>
</tr>
<tr>
<td>8. Lattines</td>
<td>No</td>
</tr>
<tr>
<td>9. Running Water</td>
<td>No</td>
</tr>
<tr>
<td>10. Durable Concrete Housing</td>
<td>No</td>
</tr>
<tr>
<td>11. Land Agent</td>
<td>No</td>
</tr>
<tr>
<td>12. Cooperative</td>
<td>No</td>
</tr>
<tr>
<td>13. Post Office</td>
<td>No</td>
</tr>
<tr>
<td>14. Cultural Center</td>
<td>No</td>
</tr>
<tr>
<td>15. Youth Center</td>
<td>No</td>
</tr>
<tr>
<td>16. Mechanical Workshop</td>
<td>No</td>
</tr>
<tr>
<td>17. Electricity</td>
<td>No</td>
</tr>
<tr>
<td>18. Access by All Weather Road</td>
<td>No</td>
</tr>
<tr>
<td><strong>Cumulative Score</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

A cumulative score of 6 places Toukouzou II in the category of low modernity. Though comparable data has not been collected on a national level, one would be safe in stating that in this regard Toukouzou II is characteristic of the majority of small villages with population of less than 2,000.

External Economic Links

To examine the level of contact with the outside world generated by the economy, a simple ratio can be calculated contrasting the number of different food items
cultivated in a village against the number sold to outside markets (Lenglet, 1976). At one end of this continuum one finds the self-supportive, subsistence economies of traditional villages; at the other, those villages highly integrated into the cash crop, money economy where the use of land and labor are maximized for the production of highly commercial crops.

Using this method, a village with an independent agricultural economy would be indicated by a low score (.00 - .40), a mixed economy oriented both toward external markets and internal needs would fall in the middle category (.41 - .70), and a highly commercial agricultural economy would be indicated by a high score (.71 - 1.0).

There are 14 types of crops cultivated in Toukouzou II; with the inclusion of fish, the total number of food items is 15. Those items sold to outside markets are fish, coconuts, and cassava. The other items grown include plantain, bananas, sweet potatoes, pineapples, lemons, papaya, mangoes, avocado, red peppers, ocra, palm oil, and tomatoes. This gives the village a ratio of 0.2 (3/15), indicating an independent agricultural economy oriented toward internal needs, generating minimal commercial contacts with the outside world.
Daily Life Patterns

As in most of rural Africa, life in the Lagoon Region revolves around the requirements of subsistence. The climate is harsh; disagreeably hot during the dry season and visited by torrential rain storms between the months of March and September which may last for several hours or extend for several days.

Malaria, nutritional deficiencies, and poor waste disposal systems continue to be the major cause of disease.

The workday in Toukouzou II begins at dawn with the regular chore of preparing the morning meal which will most likely consist of fish and acheke, a fluffy, starch dish made from the cassava root. While the female head of the household will supervise this task, the actual work is most often delegated to the young girls of the household who are either daughters, relatives, or children placed under the charge of another home because of their family’s inability to support them.

In the morning, the majority of children attend the village school which covers the first six elementary grades. Those who are slow learners or drop-outs will assume responsibility for the care of the younger children, who lead an idyllic childhood free of responsibility and worry.
The social hierarchy built upon age groups is such that members of each age group are responsible for those beneath them and respectful of those who are older. The elders of the village are revered by everyone; the children are pampered and cared for by all. They frolic along the beach, singing and dancing to their own tunes and those they have learned during religious festivals, or generally wallow away their hours, fashioning toys from the natural objects around them.

The activities of the women during the morning hours routinely involve cleaning the house and yard, washing clothes, tending the family garden, and collecting water and firewood for bathing and cooking. Preparation of the noon-time meal is a time consuming process which might begin at 11 a.m. to be ready by 1 p.m. Preparing the root staples of cassava and sweet potatoes into a digestible format involves a laborious process of grating, pounding, and kneading.

The fishing hours of the men rotate with the cycles of the tide, and so it is not uncommon for them to push out in their one-man canoes in the late evening or night. During the daylight hours they will patch nets, make repairs on their huts, visit friends, or simply rest along the shady side of their hut or under a coconut tree.
After the mid-day meal, there is generally a siesta until 3 p.m. when the children return to school until 5 p.m. There is some time for socializing among the women before it is time to start the food preparation cycle over again. This activity is picked up by the young girls when they return home. The school aged boys will usually tend to the coconut and banana trees.

For those fishermen who have worked the morning hours, they will often return in the evenings to their fields to collect the sap of the palm tree which is fermented with yeast and sugar and made into a chalky white bitter drink called palm wine or "Bangi," which when consumed in large quantities can be quite intoxicating.

Evening activities are severely limited by the lack of electricity in the village. Men can often be found in front of their huts playing with their children, demonstrating a very affectionate relationship with them. It is also a time for visiting friends, listening to the radio, and visiting the newly installed 21 inch, black and white television set located in the second grade classroom where one can view nationally produced development programs like "Tele Pour Tous," feature films, and French-dubbed telecasts of "Columbo," "Ironsides," and "Happy Days."

During the dry season when rain is not a threat, the
entire family will sleep out of doors, placing kerosene lanterns at their heads to alert late night strollers of their presence. On particularly hot and muggy evenings, the villagers will settle down along the beach or in the Prophet's compound to be cooled by the ocean breeze which also reduces the omnipresent annoyance of mosquitoes and sand fleas.

Saturday is an official day of rest declared by the Prophet during which fishing is not permitted. Adults and working age teenagers will spend the day assisting the Prophet in his fields or engaged in one of several village improvement projects he has initiated. The Prophet leads the village in religious services each morning, the most widely attended being on Friday, Saturday, and Sunday.

The Role of Religion in Village Life

Among the villagers, Toukouzou I is known as Hozalum; its sister village is called Tourouzalum. Both represent important cardinal points in their religious cosmology: Toukouzou I being the birthplace of their Prophet Papa Nouveau; Toukouzou II, the site of a religious community founded on his teachings and principles.

The Prophet's home sits in the southwest corner of
a compound area about 150 meters square, bordered on all sides by a four-foot concrete wall. Contained within the walls are the large church; his two-level concrete bungalow; the home of one of his seven wives; a low rectangular building used for small group worship; the ruins of his first church; a concrete two story structure used to house pilgrims and guests; and the beginnings of a new home for the Prophet whose present home is deteriorating because of its close proximity to the ocean.

The prophet can always be found dressed in a long white gown criss-crossed around the chest by a black belt, wearing a high cloth cap resembling a bishop's headpiece. He is a striking figure, well known throughout the country, and particularly revered in the Lagoon Region. In his presence all men will kneel, including the traditional chiefs of the area. As head of the community, he holds council with important representatives of government. It was necessary to obtain his approval for this study before any of the interviews could be conducted.

The Prophet's role as a community leader. Close to 70 years of age, the Prophet is blessed with the remarkable strength and mental awareness of any man half his age. Over the years, he has been credited with using his influence with government officials to help obtain fresh water wells for his villagers, a health center and
maternity ward, and the village school.

To improve access to the lagoon for the fishermen, he led the villagers in the digging of two canals, each about a kilometer long, extending from the lagoon across swampy marshlands to the bank of the village. This they accomplished with their bare hands. They are presently working on an extensive irrigation system to increase available farming acreage about one kilometer away from the village. It is a densely wooded area covered by thick underbrush. They have already cleared the land and started the trench work, revealing its rich virgin topsoil.

A man with no formal education, the Prophet says the scheme of lacing the land with canals and trenches came to him in a religious vision, as did the design for his massive church.

He is a man who believes in the virtue of hard work, rising each morning before dawn to conduct a morning religious service for the village, then walking to the newly cleared fields where he can be found until dusk supervising the planting and irrigation work under the shade of a black umbrella.

In the traditional African calculus, his virtue is measured by his success: he has a large coconut plantation, a growing flock of lambs, and seven beautiful wives.
Many of his children have earned academic degrees in France and are employed there. His evenings are spent at home in prayer, counseling youths, and arbitrating village disputes. He retires at around 10 p.m.

Since much of the social and cultural life of the villagers finds central expression through the church, a brief historical discussion of the religion is presented.

**Roots of the religion: Harrism.** The religion of the Toukouzou villagers draws its name from its founding prophet: The Religion of Papa Nouveau. It is one of several syncretic cults which flourish along the coastal region of the Ivory Coast, inspired by the early Christian teachings of a prophet named William Wade Harris.

Called Latagbo by his followers, Harris came to this country from Liberia in 1914 and has left a distinctive mark on Ivory Coast Christianity. Raised in Cape Palmas, Liberia as a Methodist, he claimed at the age of 60 to have received a call from the Angel Gabriel to go convert the "pagan" of the Ivory Coast. He travelled extensively throughout the lagoon area and is estimated to have baptized some 120,000 persons.

In photographs he can be seen wearing a long white gown and turban, carrying a bamboo staff and cross, a small bible and a calabash of water. He is said to have led a simple life eating what the villagers offered him.
He considered himself simply a messenger of God, claiming no superiority or divinity. He preached against idolatry, sorcery, and exorcism, and ordered the systematic destruction of fetishes. He condemned adultery, theft, and lying. He ordered the strict observance of the Sabbath and Christian ritual, preaching hell for sinners and paradise for the virtuous.

In 1915, in spite of the fact that Harris preached total obedience to customary and colonial authorities, he was expelled to Liberia by the French governor, who at that time feared the disruptive potential of his movement.

In his wake, Harris left along the lagoon dozens of independent "Harrist" churches, many starting with mud and bamboo walls to be later replaced by concrete and granite.

In 1924, two English Methodist missionaries discovered his legacy and took up his work. In 1927, Harris was discovered living in Liberia, and he is said to have given a Methodist missionary the "Testament of Harris," specifying that his followers should join the Methodist Church and none other. The majority, numbering about 50,000 complied. A faction, however, maintained their independence, and beginning in 1939, Harrism or Neo-Harrism witnessed an important revival in the lagoon region.

The religion of Papa Nouveau. Little is known by
this researcher about the early life of Prophet Papa Nouveau save the fact that he was born in Toukouzou I and was baptized by Harris. It is reported in one press account mounted on the Prophet's living room wall that Harris himself had predicted the emergence of a new prophet in Toukouzou during one of his visits there.

It was in the midst of the Neo-Harris revival some 40 years ago that the Prophet Papa Nouveau says he fled Toukouzou I because of religious bickering among competing Christian denominations. He walked to what is now Toukouzou II where he found eight huts and a loosely organized group of inhabitants "who lived a life of suffering in ignorance and darkness," he says. He chose this site to build a new religious community which has since grown to include several hundred inhabitants.

Like his mentor, Prophet Papa Nouveau also experienced difficulties with the French colonial authorities and during the 1940's he was imprisoned for a period of five years as a security risk for daring to predict in a sermon that the day would come when Whites would sit and eat at the same table as Africans. The date of his release in the month of July is celebrated throughout the region.

Today much of the social and cultural life of the village revolves around the church where the Prophets Harris and Papa Nouveau are revered in song and sermon.
The religious services are open to all outsiders, and one occasionally finds visitors from foreign countries. The sermons are conducted in the local language and are often translated for the benefit of strangers.

At his age, the Prophet has deep roots in the rich oral tradition of his ancestors; he is capable of speaking abundantly for hours. At times he has chided his followers for forgetting the subtle nuances of their everyday language.

The large church is usually reserved for major holidays and festivals. Most of the services are held in the small church which accommodates about 200 worshippers. It is a long rectangular white building with a low roof supported by six interior columns with a floor of blond swept sand. The Prophet sits on a raised platform at the far end at a simple table containing a driftwood candelabra, several bottles of holy water, and assorted items including a miniature model of the Eifel Tower, a calendar, and a clock. Both his chair and the table are covered by white clothes.

The one-hour service alternates between the Prophet's sermon, reinforced by comments from his chosen disciples, and spirited singing from the congregation.

It can be observed that the Prophet preaches the morality of good deeds to neighbors and allegiance to
authorities. He uses parables from the Bible to illustrate Christian virtues and the power of God. Toward the end of the service, he uses holy water and the laying on of hands in certain liturgical practices as in his prayers for the pregnant and sterile women of the village. He requires public statements from petitioners who generally request his prayers for improved health, fertility, and success in their general day-to-day affairs.

There are three major festival seasons in Toukouzou II: The Easter and Christmas holidays, and a special celebration in August in honor of school children who converge from around the country for the festivities. Each of these occasions is marked by lengthy religious services, traditional African singing and dancing, and a sumptuous feast for which several of the Prophet's lambs are slaughtered and prepared.

In comparison, one sees that where Harris served a proselytizing John the Baptist function, basically "spreading the word," Prophet Papa Nouveau has brought structure to this, synthesizing religion and village life in such a manner as to reaffirm important African values while providing a vehicle for community directed change and development.
Some Characteristics of the Target Population

The target population for this study consisted of a group of 47 male heads of permanent households in the village of Toukouzou II. The selection of this limited group was based upon two major considerations. The first, and most important, was the need to select subjects who were stable enough in their residential patterns to allow for several observations over the course of a year. The second consideration was related to research load.

Because Toukouzou II is the home of the Prophet, it attracts religious pilgrims who come to seek an audience with him. They stay in the village with relatives or friends for several days or weeks and then move on. The general African pattern of extended families also accounts for the presence of transients such as in-laws and close family friends.

In addition, there is a small, growing community of Muslims from the Dioula ethnic group of the north who have migrated to Toukouzou II. Though not integrated into community life, they co-exist with the followers of the Prophet, living in a walled compound area on the outskirts of the village.

The 47 families selected for this study were identified as stable units of the community by a resident,
Jean-Claude Gnaba, who served as translator and general research assistant.

The decision to limit the study to the male heads of these families was based on practical considerations related to research load. It was found that among the men the average interview required from 20 to 45 minutes. Since some men have as many as two or three wives, to have included the women as well would have considerably increased the time and energy required to complete this research. Since one aim of this researcher was to study an intact population, rather than a sample, it was decided that this might be more practically achieved by limiting the group to all men, rather than expanding it to include all adults.

A descriptive profile of the target group. Biographical data collected from the subjects during the course of this study are presented in Tables 5 through 8. It can be noted that with regard to age that 51 percent of the subjects are middle-aged, between 46 and 56 years of age. A majority of 85 percent are between the ages of 30 and 65.

**Table 5**
Subjects by Age Groups

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-25</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>30-45</td>
<td>16</td>
<td>34</td>
</tr>
<tr>
<td>46-65</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>66-120</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>
An obvious relationship can be seen to exist between age, level of education and literacy. Since this population is comprised of a middle age group of men one finds that they score low in these two categories.

It has only been in recent years that formal education has been made available to school-aged children; the majority of adults, having missed this opportunity, are thus unschooled and illiterate in the national language of French.

Table 6 shows that some 80 percent have had no formal schooling; some 26 percent have had some literacy training as adults. Table 7 shows that about one third of the villagers speak no French at all, while close to the remaining two thirds say they speak "a little."

Table 6
Years of Formal Education of Subjects

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>25</td>
<td>54</td>
</tr>
<tr>
<td>1-3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3-7</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>7-13</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Adult Education Less Than a Year</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Adult Education More Than a Year</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 7

Level of French Comprehension

<table>
<thead>
<tr>
<th>Level</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>A Little</td>
<td>28</td>
<td>61</td>
</tr>
<tr>
<td>Good</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Very Good</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In connection with television viewing, the villagers' low levels of French mastery pose obvious problems. The use of teachers as translators in the "Tele Four Tous" groups was intended to address this need. When such assistance is not available, for example, during the viewing of regular, entertainment programs, the villagers must depend on friends who understand more French than they do, to provide them with running capsule summaries of the program. Otherwise, they must rely solely upon visual information. The same form of buddy system is used in the cinemas.

In June 1978, information was collected from each subject on the number of days he had spent in the capital of Abidjan. The purpose of this question was to provide data to help determine whether the subject's exposure to socio-cultural activities outside of the village could be considered a rival explanation for any pertinent attitude change which might be otherwise attributed to the television treatment.
The data presented in Table 8 show that 39 percent of the subjects spent the entire period of time in the village. Another 30 percent spent from one to two weeks in Abidjan. Most of the others who had spent more time out of the village said they did so in order to seek medical attention and to visit relatives. The three subjects who reported spending more than 41 days in Abidjan were students attending secondary and technical schools. In Table 5, they comprise the youngest age group, their level of education is rated highest in Table 6, and they have a higher level of French literacy.

Table 8

Number of Days Spent in Capitol

<table>
<thead>
<tr>
<th>Days</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>0-7</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>8-14</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>15-21</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>22-30</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>31-40</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>41-</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>
CHAPTER VI

Procedures

Data for this study were collected during a 10-month period between October 1977 and July 1978. During this period some seven field trips were made to the Village of Toukouzou II, the duration of each trip lasting from five to ten days.

The first trip took place on Friday, October 7, 1977. Mr. Konan Kouadio, Director of the ETV Evaluation Service took responsibility for the necessary preliminaries: arranging for official transportation to the site, and securing letters of introduction from the Minister of Education to respective political and educational district leaders. He also assigned a staff researcher born in the Lagoon Region, Mr. Lavry Digre, to help establish personal contacts. The researcher was accompanied by his wife, Aline Bory-Adams, a native speaker of French, during the first two trips to help with translation work.

Field Trip I

During this visit, considerable care was exercised in establishing positive lines of communication with the
village secular and religious leader, Prophet Papa Nouveau. During the evening of October 8, my wife and I met with the Prophet at his home to explain the purpose and methodology of the study, which was passed through multiple translations from English to French to Avikam. The following morning he passed this information on to his congregation.

As an indication of his support, and partly out of his concern to oversee the project, the Prophet assigned two young disciples to serve as translators and assistants; his son, Mr. Rene Clarac Papa Nouveau, and Mr. Jean-Claude Gnaba, whose mother supervises the village Maternity Ward. Both young men are in their early twenties, speak fluent French, a little English, and are highly respected among their fellow villagers.

Refine test instrument. The first important research task involved adapting the MDS format to the language and culture of the research subjects. This required identifying a standard unit of measurement employed by the villagers in their daily lives, and identifying a shared set of culturally determined reference points to which this unit could be applied as a "Rod S" in the MDS Method.

With the help of my assistants, the unit of measurement selected for this study was the "meter," one of the few European technical terms which have been completely
integrated into the local culture. In order to insure uniformity in its application as a measurement tool, two reference points were required whose degree of similarity and difference were shared by all members of the Toukouzou II community. The two concepts chosen for this purpose were "Toukouzou I" and "Toukouzou II," two sister villages perceived by all members of the target community as being very "similar" in the way of life practiced there.

Combined, these three pivotal concepts were presented to the subjects in the following manner: "The people of Toukouzou I and of Toukouzou II are very similar in their way of life. Let us, therefore, say that the cultural distance between them is very small, say one meter. Using meters to measure with, how much distance would you say there is between you and the schools?, you and the government?," etc. Using the seven concepts discussed earlier in this study, there were 21 sets of comparisons.

_Instrument field test._ This procedure was field tested with the two village assistants who had been assigned by the Prophet. They at first experienced some difficulty with the notion of expressing difference in terms of distance but once they had completed the first three comparison sets, they proceeded without difficulty.

Because both young men had received some secondary schooling, it could not be assumed that similar results
would be achieved with the less educated members of the community. In practice it was found, however, that the majority of villagers experienced very little difficulty with the MDS Method, though they required considerable more time to comprehend and complete the task. The reliability of subject ratings and a construct validity check of the instrument are discussed in the following chapter with research findings.

Data collection. Data were collected for the first field trip between October 9 and 15. Since most of the subjects were not literate and could not be expected to complete a written questionnaire alone, each subject was interviewed separately. The purpose of the researcher's visit, general instructions, and the set of concept pairs were presented orally in the local language by the two village assistants.

Most of the interviews were conducted in the evenings in front of the subjects' homes after they had returned from their fishing tasks; some of the older men were contacted during the day. Each interview required from 20 to 45 minutes. This procedure of oral presentation was used during each field trip.

The population of male heads of permanent households totaled 50 persons. During the course of the week each male was contacted and interviewed with the exception of three villagers: an old man who was too weak from illness
to participate, the village political party representative who was away on business, and the Prophet, who declined the invitation.

For the first two evenings, the researcher and his wife divided up into two groups, each working with an assistant who did the translation work. Later in the week, when Mr. Rene Clarac Papa Nouveau had to leave to prepare for a trip abroad, we worked together in a group of three. During the subsequent five field trips, the researcher worked along with Mr. Gnaba.

The two local assistants were invaluable. Residents of the village, they were easily able to identify those permanent villagers from the more transient persons. They were quite persistent in following up on reluctant subjects, some of whom had to be literally chased. For each subject, the nature of the study and the MDS Method had to be explained anew. The assistants were exceptional in their ability to generate interest and enthusiasm time after time (only two interviews were conducted with two or more persons simultaneously). Once the villagers had grasped the notion of ratio judgement, one felt that they rather enjoyed the opportunity to express their views to serious listeners in this novel manner.

There were interesting variations from the Western, highly personal notion of what an interview is all about. The villagers did not just consider the question quietly
and respond, but, in most cases the subject would repeat the question, "think out loud" about it, and then finally give his response. Since most of the interviews were conducted in front of their homes, the subjects were most often in the company of family members and neighbors who all seemed to enjoy the activity as much as the subjects. Open discussion is very much a part of village life and children were never discouraged from listening to their elders as long as they remained well-behaved.

Palm wine or beer were frequently offered to the interviewers and each visit was received by the subject as a personal social visit. Traditional salutations and the customary exchange of "news" took place before the official purpose of the visit was discussed. These formalities usually required about ten minutes.

Field Trips II, III, and IV: The "Tele Pour Tous" Group

On October 21, the researcher returned to the village for a week to collect data from the group of viewers participating in the "Tele Pour Tous" programs of group discussion. It was learned, however, that no teacher had yet taken responsibility to lead these sessions. Data were, nevertheless, collected from those adults who were present in the television room. The questionnaire was presented using the same oral format employed with the general population.
On November 16, a third field trip was undertaken for the same purpose of collecting data from the "Tele Pour Tous" group. The program had still not been organized and there was little reason to suspect that it would be during the initial year of television in this village.

The reasons for the failure to organize "Tele Pour Tous" sessions were characteristic of program weaknesses reported by other researchers of this program (Grant, et al., 1978). Principally, most of the teachers assigned to Toukouzou II are from other regions of the country and do not speak the local language, and, in fact, discourage students from speaking Avikam in the school. This practice is part of a national educational policy to promote French as the official language.

It was also apparent that these teachers, most of them under the age of thirty, lacked the authority and possibly the motivation to assume directive roles among full adults in a village where they themselves were social outsiders, albeit members of a privileged, respected, social elite.

The program aired on "Tele Pour Tous" that week was a socio-cultural report on the traditional dances of an ethnic group in the north. The audience was made up of over 50 persons, mainly youngsters, of which only nine were adults. They all appeared genuinely absorbed in the program.
At the end of the telecast, the teacher officially assigned to animate the group turned down the volume of the set and then asked some general questions in French about the program content. He was completely ignored as the audience continued to focus its attention upon the silent television images of a French Victorian soap opera. After a minute of this the volume was turned up again.

Field trip IV was scheduled for the Christmas holiday season and provided a valuable opportunity for this researcher to participate in the religious services and festivities centered around the church. On Thursday, December 29, the date for the scheduled "Tele Pour Tous" broadcast, the researcher found only six adults in the television room and no evidence of directed group discussion. As during the previous visits, these viewers were interviewed as they watched the evening programs.

Though these three data sets do not relate directly to the stated research hypotheses data from the second field trip, are presented in Chapter 7 for comparative purposes.

Field Trips V, VI, and VII

The final three field trips were planned for the collection of data from the general population, directly related to the major research hypotheses of this study.
Field trip V began on April 1, when this researcher returned to the village for ten days to collect data from the population of male permanent heads of households to compare with the pre-television data collected six months earlier in October.

As in October, the interviews were conducted orally and in the evenings. It was an exhausting experience; locating and interviewing an average of six to eight men a night under the light of a kerosene lamp or flashlight. After ten days, my assistant, Mr. Gnaba, and I managed to contact 45 of the original 47 men of the study.

As an incentive, I had offered to photograph each subject with his family and provide them with color copies upon my return.

Toward the end of my stay, the village was celebrating their completion of a second canal dug by hand from the village to the lagoon. There was much singing, dancing, and praying, the villagers being joined by followers of the Prophet from Abidjan and other regions. I was allowed to take photographs and record the religious music.

The last data collection was completed during field trip VI from June 5 to 11. Some 43 of the original 47 participants were contacted and interviewed. The photographs offered as an incentive were returned to the subjects who were highly appreciative of the gesture. Additional portraits were taken of those subjects who had
missed the original shooting schedule.

The final field trip toward the end of July was arranged for the purpose of returning the remaining portraits and to express my deep gratitude to the Prophet, and Mr. Gnaba and his family for their support, their assistance, and their demonstration of traditional African hospitality in providing me with food, lodging, and an invaluable opportunity to share, all too briefly, in their culture.

In Chapter 7, which follows, the data collected during these field trips are analysed and presented in the form of tables and matrixes. In Chapter 8, the Conclusion, a discussion is presented which interprets the significance of these findings to the research hypotheses; general conclusions are drawn, and implications are presented for mass communication policy and future research.
CHAPTER VII

Research Findings

In this chapter, the researcher reports the results of the data collected from the target population from October, 1977 to July, 1978. It is divided into three major sections.

In the first section, data are presented from a content analysis of Ivorien television. In the second, results are highlighted from a unidimensional questionnaire administered to the subjects at the completion of the study in July, 1978. In the final section, the MDS results are reported from three observations of the target population.

Television Content Analysis

In the Ivory Coast where state owned television is used primarily for elementary school education, the general broadcasting day for public viewing begins at 12:30 p.m. with a daily talk show followed by a 30-minute news report. There are no public telecasts during the afternoon. General broadcasting resumes at 7 p.m. and continues until about 11 p.m. This gives a total of about five "general public" broadcast hours per day.

92
For the purpose of this content analysis two months were randomly chosen, and in each of these months a week was randomly selected. This resulted in a random sample of two weeks of television broadcasting during a 10-month period. The observation dates were May 6-12, 1978, and July 12-18, 1978.

The types of programs offered to the general viewing public have been organized into five categories used by Seya (1978) to render the data comparable. These categories are (a) News, (b) Public Education, (c) Local Language Programs, (d) Entertainment, and (e) Talk Shows.

**News.** The three daily news programs include local African and international items. A detailed analysis is provided later in this section. The time devoted to each news program usually varies from 20 to 45 minutes.

**Public education.** This category includes for the most part locally produced programs concerned with community and national development themes. It includes such programs as "Tele Pour Tous," "Promo Village," "Sante Magazine," "Operation Riz," and "Comment Ca Va." It also includes some French produced documentaries. These programs vary from 30 to 60 minutes in length.

**Local language programs.** There is one local language program entitled "Nouvelles du Pays," (News of the Country) in which a 5-to-10 minute news summary is presented by
speakers in their local language. Each evening from four-to-six different ethnic groups are represented.

**Entertainment.** This category includes all television series, movies, sports, theater, children's programs, and local and international variety programs. The programs vary from 30 minutes to two hours.

**Talk shows.** These programs cover a wide range of topics, from interviews with prominent French literary figures, to discussion with local artisans, intellectuals, and civic leaders. Talk shows usually last 30 minutes.

### Table 9

Results of Two Week Content Analysis of Ivory Coast Television

<table>
<thead>
<tr>
<th>Category</th>
<th>News</th>
<th>Public Ed.</th>
<th>Local Lang.</th>
<th>Entertainment</th>
<th>Talk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Hours</td>
<td>18</td>
<td>16</td>
<td>4</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>% of Total Hours</td>
<td>23%</td>
<td>21%</td>
<td>5%</td>
<td>45%</td>
<td>6%</td>
</tr>
</tbody>
</table>

It can be observed from this analysis that entertainment receives the greatest allotment of air time, followed by news and public education programs. Of the entertainment programs monitored, some 26 percent were of French origin, and 12 percent were of U.S. origin. The American
programs included "The Virginian," "Ironsides," "The Muppet Show," the film "Citizen Kane," and variety shows featuring soul and rock music performers. The rest of this category consisted mainly of African music variety shows and a small percentage of international music programs.

In Table 10 these data are contrasted with information collected by Seya (1978) based upon a six-week period of observation in 1977.

Table 10
Comparison of Television Content Data
Collected in 1977 and 1978

<table>
<thead>
<tr>
<th>Year</th>
<th>News</th>
<th>Percentage of Total Program Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>News</td>
</tr>
<tr>
<td>1978</td>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>1977</td>
<td>19%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Significant differences appear between these two data sets under the category of Talk Shows, which are probably not the result of program schedule changes in one year. They, no doubt, reflect problems inherent in this particular category which alone is oriented toward program format rather than content.
This discrepancy may be due to the fact that programs listed by Seya as Talk Shows were placed in the Public Education and Entertainment categories by this researcher on the basis of their message intent. Both data sets, nevertheless, clearly show a dominance of entertainment programs, followed, in the more recent analysis, by a substantial commitment to news and public education programs.

The unexpected priority given to news programs, representing 23 percent of all air time, led this researcher to conduct an analysis of news items from July 12-18, 1978. The results of this analysis are presented in Table 11

<table>
<thead>
<tr>
<th>Category</th>
<th>Local</th>
<th>Africa</th>
<th>France</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Minutes</td>
<td>142</td>
<td>107</td>
<td>61</td>
<td>122</td>
</tr>
<tr>
<td>% of Total Time</td>
<td>33%</td>
<td>25%</td>
<td>14%</td>
<td>28%</td>
</tr>
</tbody>
</table>
This analysis shows that one third of all news items deal with events, personalities, and issues pertinent to the national Ivorien culture. Considerable attention is also given to African and International affairs. Yet, if one considers the amount of air time alloted to all events outside of the country one finds that the affairs of France comprise 21 percent of such items.

In addition, the majority of international and African news stories are filmed and reported by French journalists who display a strong ethnocentric perspective, particularly in their treatment of issues and conflicts in former French territories.

This researcher draws two important conclusions from these analyses. First, there is evidence of a balanced broadcast policy in regard to the function of the medium and the scope of its coverage. Air time is divided quite evenly between entertainment and non-entertainment materials with news and public education programs comprising 44 percent of all transmission, compared with the 45 percent share of air time alloted to entertainment programs. The news analysis shows a news policy primarily oriented toward national concerns, yet balanced by an interest in those events occurring elsewhere on the continent and the rest of the world.
A second conclusion is that France exerts a significant influence upon Ivorian television. As previously stated, some 26 percent of all entertainment programs were found to be of French origin. The majority of news items reporting on affairs outside the country, representing 67 percent of all news items, are produced in French studios, and 95 percent of all programs are broadcast in the French language.

Mass Media Unidimensional Questionnaire

The section of the questionnaire reported here documents television usage patterns in the Village of Toukouzou II. These data were collected at the end of a ten-month period during which television was available in the village school. The viewing patterns of the villagers are presented in Table 12:

Table 12

<table>
<thead>
<tr>
<th>Days</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Fewer than 5</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>More than 5</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>More than 10</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>More than 20</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>
The data clearly show an under-utilization of television in Toukouzou II during the initial 10-month period. Some 78 percent of the villagers reported that they attended the viewing center fewer than ten times during this period. A small minority representing some 15 percent of the population attended more than ten times. It should be noted that the three subjects who report viewing television more than 20 times were students who had access to television outside of the village. The majority of villagers who report having never visited the television center were elderly persons.

Some reasons suspected for this pattern of low usage are offered in the conclusion.

Though the majority of subjects reported low usage patterns, they indicate that they believed their close friends in the village whom they seek out for advice and comradeship watched more television than they. This view was reflected by 65 percent of the subjects, illustrated in Table 13.

### Table 13

Television Viewing Behavior of Closest Friends

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>View more than I</td>
<td>28</td>
<td>65%</td>
</tr>
<tr>
<td>View the same as I</td>
<td>6</td>
<td>14%</td>
</tr>
<tr>
<td>View less than I</td>
<td>9</td>
<td>21%</td>
</tr>
</tbody>
</table>
These data are particularly interesting, because they suggest that interpersonal communication networks exist within the village which could operate to transmit the opinions, attitudes, and values of the higher television users to those who under-utilize the medium.

This pattern of interaction, known as the two-step media flow process, has been shown by other researchers to operate in a manner where individuals receive information from mass media channels and re-transmit it to persons within their interpersonal networks (Rogers and Shoemaker, 1971).

Another item on the questionnaire asked the villagers to state the name of their favorite television program. The results are listed in Table 14.

Table 14
Favorite TV Programs Among Villagers

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tele Pour Tous</td>
<td>10</td>
<td>26%</td>
</tr>
<tr>
<td>Sports</td>
<td>10</td>
<td>26%</td>
</tr>
<tr>
<td>Films</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>News</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>International Variety</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>Traditional Dancing</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Tele Jeudi</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>
When considered in connection with the previous findings on interpersonal communication patterns in the village, the fact that "Tele Pour Tous" was rated as the favorite program by 26 percent of the population suggests that the national development themes of this program might be reaching a larger audience through the two-step flow process.

A final television item on this questionnaire, administered after the villagers had completed the MDS paired comparisons, asked "Does television make you feel more Ivorien?" This was a forced choice question which required a response of either "no," "a little," or "very much." None of the respondents chose the first category; three chose the second category; and 35, representing 92 percent of those polled, responded that television had influenced their sense of being Ivorien "very much."

Questions related to radio. Several items in the unidimensional questionnaire were focused upon the role of radio in the village. In regard to access, it was found that of the 43 respondents, some 20 reported either owning or having access to radio. This suggests a pattern of distribution sufficiently broad enough to reach most of the villagers. Of these 20 subjects, only three reported having purchased or gained access to radio during the period of this study.
In respect to radio program preferences it appears that a substantial group of villagers, representing 46 percent of the target population, turn to radio for musical entertainment. Some 19 percent, however, prefer "The National Cup of Progress," a short, narrative, mini-documentary which each week showcases the development activities of a particular community or village for special commendation. These preferences are presented in Table 15.

Table 15
Favorite Radio Programs of Villagers

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of Subjects</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td>20</td>
<td>46%</td>
</tr>
<tr>
<td>National Cup of Progress</td>
<td>8</td>
<td>19%</td>
</tr>
<tr>
<td>News</td>
<td>6</td>
<td>14%</td>
</tr>
<tr>
<td>Public and Personal Announcements</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td>Local Language Shows</td>
<td>4</td>
<td>9%</td>
</tr>
</tbody>
</table>

In response to a forced choice question of whether radio made them feel more Ivorien, none of the subjects chose the first category "no." Two subjects chose the second category "a little," and 41 subjects, representing 95 percent of the population, responded that radio influenced their sense of being Ivorien "very much."
Analysis of the MDS Data

As stated earlier, the subjects experienced little difficulty with the task of making the direct paired comparisons among the concepts. This in itself should represent an important finding; to this researcher's knowledge, this experiment represents the first attempt to use this methodology with subjects whose backgrounds were not based on high levels of formal education.

Observation 1. In Table 16 a means distance matrix is presented, displaying the mean scores for each of the 21 concept pairs generated by the target population at the first observation (T1), during the week of October 9, 1977. To determine the distance between "self" and each of the principal concepts, one reads from row one across each column.

Table 16
Mean Distance Matrix For Target Population at T1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Me</td>
<td>38.32</td>
<td>84.84</td>
<td>66.08</td>
<td>124.7</td>
<td>58.31</td>
<td>52.42</td>
<td></td>
</tr>
<tr>
<td>2. School</td>
<td>17.8</td>
<td>53.82</td>
<td>22.26</td>
<td>6.46</td>
<td>7.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Govt.</td>
<td>75.65</td>
<td>9.71</td>
<td>4.52</td>
<td>6.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Senoufo</td>
<td>100.22</td>
<td>61.76</td>
<td>76.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. France</td>
<td>4.07</td>
<td></td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Radio</td>
<td></td>
<td>3.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. T.V.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Me = subjects, Sc = Schools, Gv = Government, Sn = Senoufo Fr = France, Ra = Radio, T.V = Television. A ceiling of 200 was placed on four extreme scores.
Among these concepts, the villagers feel closest to the "Schools," perceiving a distance of 38.32 meters between themselves and the concept; the lower the score, the closer the concept is to the definition of self. Conversely, the higher the score, the further away is the attribute from the self in both saliency and relevance (McPhail & Barnett, 1977).

Government is much further away at 84.84 meters. They perceive the Senoufo to be 66.08 meters away, and France is the furtherest concept (most different) from their culture at 124.47 meters. Radio and Television are perceived to rest at relatively moderate distances from "self" respectively, 58.31 meters and 52.42 meters.

The matrix also displays the distances between each of the other concepts. For example, the distance between Television (Column 7) and Radio (Row 6) is found to be very close at 3.03 meters. There are only 3.5 meters difference between Television and France. The culture of the Senoufo and that of France are perceived to be very different, separated by 100.22 meters.

**Construct validity.** Though it is the first row of concepts in the matrix which directly relate to the research hypotheses, others are of equal importance for monitoring the validity of the procedure through construct validity checks.
Using Government as one central concept for this check, this researcher would expect the subjects to relate it very closely to Schools, Radio, and Television which are all state operated institutions whose links with the Ivorian government are highly visible, and in the case of the media, this association is stated daily in regular public statements.

It was reasoned that Schools and Television should also be perceived as close because of the major educational role of television in the Ivory Coast, and because of its physical location within the village school. Radio and television should be considered close, it was reasoned, because they are both electronic media of mass communication.

A check of these concept pairs on the matrix shows the distances between "Government" and the concepts Schools, Radio, and Television to be respectively 17.8 4.52, 6162 meters. Schools and Television are separated by 7.66 meters. Television and Radio are separated by 3.03 meters. All of these distances can be considered close in relation to the score range of the other concept pairs, indicating that the villagers were using the scaling method as expected by the researcher.

Observation 2. The mean distance matrix presented in Table 17 displays the mean scores generated by the
villagers during the second observation, T₂, collected during the week of April 7, 1978, six months after the initial observation.

Table 17
Mean Distance Matrix for Target Population at T₂

<table>
<thead>
<tr>
<th></th>
<th>Me</th>
<th>Sc</th>
<th>Cv</th>
<th>Sn</th>
<th>Fr</th>
<th>Ra</th>
<th>Tv</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36.24</td>
<td>48.54</td>
<td>65.63</td>
<td>81.76</td>
<td>30.20</td>
<td>28.50</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9.00</td>
<td>63.92</td>
<td>12.97</td>
<td>7.00</td>
<td>4.2</td>
<td>3.46</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>45.00</td>
<td>10.00</td>
<td>34.00</td>
<td>37.66</td>
<td>2.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>65.98</td>
<td>3.46</td>
<td>2.93</td>
<td>1.94</td>
<td>7.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>34.00</td>
<td>37.66</td>
<td>2.93</td>
<td>1.94</td>
<td>7.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>30.20</td>
<td>28.50</td>
<td>34.00</td>
<td>37.66</td>
<td>2.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>28.50</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n=45

In Table 18 the principal concept pairs of these data set, found in row one of the matrix, are contrasted with the data from T₁:

Table 18
Comparison of Principal Concept Pairs From Observation T₁ and T₂

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T₁</td>
<td>Self</td>
<td>38.32</td>
<td>64.84</td>
<td>66.08</td>
<td>124.7</td>
<td>58.31</td>
</tr>
<tr>
<td>T₂</td>
<td>Self</td>
<td>36.24</td>
<td>48.54</td>
<td>65.63</td>
<td>81.76</td>
<td>30.20</td>
</tr>
<tr>
<td>% of Change</td>
<td>.05%</td>
<td>43%</td>
<td>.006%</td>
<td>34%</td>
<td>48%</td>
<td>48%</td>
</tr>
</tbody>
</table>
This comparison shows very little change in the distance between self and Schools over this six-month period. The distance between self and Senoufo is also quite stable. However, significant changes can be seen between self and the other principal concept pairs. The change in distance between self and Government represents a reduction in distance of 43 percent. The reduction for France, Radio, and Television are respectively, 34 percent, 48 percent, and 48 percent.

A comparison of the concept pairs used in the construct validity check shows that the five expected associations have also been reduced.

Table 19
Comparison of Construct Validity Sets From Observations T₁ and T₂

<table>
<thead>
<tr>
<th>Concept Pairs</th>
<th>T₁</th>
<th>T₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government and Schools</td>
<td>17.8</td>
<td>9.00</td>
</tr>
<tr>
<td>Government and Radio</td>
<td>4.52</td>
<td>3.44</td>
</tr>
<tr>
<td>Government and Television</td>
<td>6.62</td>
<td>2.93</td>
</tr>
<tr>
<td>Schools and Television</td>
<td>7.66</td>
<td>4.2</td>
</tr>
<tr>
<td>Television and Radio</td>
<td>3.03</td>
<td>1.94</td>
</tr>
</tbody>
</table>
Observation 3. It can be observed in Table 20 that the trend observed in observation two (T2) is further established as the distances between the principal concept pairs continues to diminish. This data set was collected during the week of June 5, 1978, eight months after the first observation (T1).

Table 20
Mean Distance Matrix for Target Population at T3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Me</td>
<td>18.86</td>
<td>31.11</td>
<td>47.20</td>
<td>61.60</td>
<td>15.09</td>
<td>16.20</td>
<td></td>
</tr>
<tr>
<td>2. School</td>
<td>3.13</td>
<td>11.15</td>
<td>3.61</td>
<td>2.04</td>
<td>1.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Govt.</td>
<td>50.09</td>
<td>5.39</td>
<td>2.61</td>
<td>2.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Senoufo</td>
<td>62.30</td>
<td>23.90</td>
<td>20.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. France</td>
<td>2.33</td>
<td>3.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Radio</td>
<td>1.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. T.V.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n=45

In Table 17 the principal concept pairs for all three data sets are presented for comparison:

Table 21
Comparison of Principal Concept Pairs from Observation T1, T2, and T3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 Self</td>
<td>38.32</td>
<td>84.84</td>
<td>66.08</td>
<td>124.7</td>
<td>58.31</td>
<td>54.42</td>
</tr>
<tr>
<td>T2 Self</td>
<td>36.24</td>
<td>48.54</td>
<td>65.63</td>
<td>81.76</td>
<td>30.20</td>
<td>28.50</td>
</tr>
<tr>
<td>T3 Self</td>
<td>28.86</td>
<td>31.11</td>
<td>47.20</td>
<td>61.60</td>
<td>15.09</td>
<td>16.20</td>
</tr>
</tbody>
</table>

% of Change from T1 to T3 | 25% | 63% | 28% | 51% | 74% | 70%
This comparison shows that the villagers perceive that the distances between themselves and the Schools and the Senoufo have been reduced from their stable locations observed at T2, representing reductions of 25 percent and 28 percent respectively. The distance reductions between the villagers and Government, France, Radio, and Television have also continued to decline, representing respective change values of 63 percent, 51 percent, 74 percent, and 70 percent.

When the five concept pairs used in the construct validity check are compared across all three data sets in Table 22 one finds that the expected close associations continue, indicating that the subjects understood the methodology.

Table 22

Comparison of Construct Validity
Sets from Observation T1, T2, and T3

<table>
<thead>
<tr>
<th>Concept Pairs</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government and Schools</td>
<td>17.8</td>
<td>9.00</td>
<td>3.13</td>
</tr>
<tr>
<td>Government and Radio</td>
<td>4.52</td>
<td>3.44</td>
<td>2.61</td>
</tr>
<tr>
<td>Government and Television</td>
<td>6.62</td>
<td>2.93</td>
<td>2.59</td>
</tr>
<tr>
<td>Schools and Television</td>
<td>7.66</td>
<td>4.2</td>
<td>1.74</td>
</tr>
<tr>
<td>Television and Radio</td>
<td>3.03</td>
<td>1.04</td>
<td>1.94</td>
</tr>
</tbody>
</table>
Another area of analysis involved the delineation of a special group within the target population comprised of individuals who had reported very close identification with the concept of "Television" at T3, estimating the distance between themselves and the medium at less than 10 meters. It should be noted, however, that these subjects had reported both "high" and "low" usage patterns.

When their mean distances are contrasted against those of the total population at T3, significant differences are found in the strength of their identification with all concepts, further indicating a definite correlation between them and television.

Table 23
Comparison of Principal Concept Pair Rating Between Population and Isolated Group with Close TV Identification at T3

<table>
<thead>
<tr>
<th>Principal Concept Pairs</th>
<th>Population (n=43)</th>
<th>Close TV Group (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self and Schools</td>
<td>28.86</td>
<td>17.</td>
</tr>
<tr>
<td>Self and Government</td>
<td>31.11</td>
<td>16.</td>
</tr>
<tr>
<td>Self and Senoufo</td>
<td>47.20</td>
<td>28.</td>
</tr>
<tr>
<td>Self and France</td>
<td>61.60</td>
<td>39.</td>
</tr>
<tr>
<td>Self and Radio</td>
<td>15.09</td>
<td>10.</td>
</tr>
<tr>
<td>Self and Television</td>
<td>16.20</td>
<td>3.</td>
</tr>
</tbody>
</table>

Data derived from individual distance ratings within the general population show that from T1 to T3 the number of villagers reporting "close" identification with "Television" increased from 11 to 19. Also to be noted
is the fact that during this same period, the number of individuals reporting "close" identification with "Government" increased from 8 to 19.

A final area of analysis, of secondary importance to the research hypotheses, concerns the MDS ratings of adults interviewed as they viewed programs in the village television rooms. The researcher had originally intended to monitor "regular" members of the "Tele Pour Tous" tele-clubs to compare their mean change scores with those of the general population. As previously stated, this strategy had to be abandoned because the discussion groups were never organized.

On three separate occasions, data were collected from actual telespectators, a group which included women as well as men, and transient "strangers" as well as permanent male residents. Interviews with these persons revealed that they had more education, and spoke more French than most members of the general population.

In Table 24, mean distance ratings for the principal concept pairs are displayed for the general population at T₁ and for the telespectators at T₁ (these data were actually collected on October 26 about two weeks after the first population observation). This comparison clearly shows that at this early date the television center was attracting a mixed audience whose members
perceived considerably less distance between themselves and all of the research concepts.

Table 24

Comparison of Principal Concept Pair Ratings Between Population and Telespectators at T₁

<table>
<thead>
<tr>
<th>Concept Pairs</th>
<th>Population (n=45)</th>
<th>Telespectators (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self and Schools</td>
<td>38.32</td>
<td>2.</td>
</tr>
<tr>
<td>Self and Government</td>
<td>84.84</td>
<td>12.</td>
</tr>
<tr>
<td>Self and Senoufo</td>
<td>66.00</td>
<td>16.</td>
</tr>
<tr>
<td>Self and France</td>
<td>124.7</td>
<td>21.</td>
</tr>
<tr>
<td>Self and Radio</td>
<td>58.31</td>
<td>4.</td>
</tr>
<tr>
<td>Self and Television</td>
<td>52.42</td>
<td>3.</td>
</tr>
</tbody>
</table>

Impact of Findings on Research Hypotheses

In Hypothesis I it was predicted that over-time the subjects would perceive less distance between themselves and television as a result of exposure to this medium. This hypothesis is supported by a 70 percent reduction in distance.

In Hypothesis II the researcher used radio as a control mechanism and predicted that over-time the subjects would not perceive any significant reduction between themselves and this concept. The data fail to support this hypothesis. A 74 percent distance reduction was reported by the villagers.
In Hypothesis III the researcher was concerned with national identification. It was predicted that over-time the subjects would perceive less distance between themselves and the concepts "Government" and "Schools."

The concept "Radio" was not originally included in this hypothesis, but since the panel of Ivorien experts rated it highly as an element of national culture, it is treated as such in this section. The results support this hypothesis showing respective distance reductions of 63 percent, 25 percent, and 74 percent.

In Hypothesis IV the researcher was concerned with closer identification between sub-cultures and predicted that over-time the villagers would perceive less distance between themselves and the Senoufo. This hypothesis is supported by a 28 percent distance reduction.

In Hypothesis V the researcher addressed the "Cultural Imperialism" thesis and predicted that over-time the subjects would perceive less distance between themselves and the concept "France." This hypothesis is supported by a 51 percent distance reduction.

Thus, four of the five major research hypotheses are supported by this study. In the final chapter the researcher interprets these findings, discusses some of the shortcomings and weaknesses of the study, and offers suggestions for future research and mass communication policy.
Weaknesses and Limitations
of the Study

Number of concepts. Increasing the number of concepts would have enhanced the cultural picture obtained from this population and would have expanded the researcher's powers of explanation.

At the outset of this study the researcher intended to include a concept which would measure village integration into the national economy, such as "Banks." He also considered employing a second ethnic group "Baoule," to expand data on identification between sub-cultures. The president of the republic is a member of this group, and they are generally believed to be among the most modern, and most educated of Ivoriens, occupying prominent positions in the civil service system.

The problem with such additions is that with the MDS method, as the number of concepts increase arithmetically, the number of paired comparisons which the subject is required to make increase geometrically. By merely expand-
ing the number of concepts from seven to ten would have increased the number of comparisons from 21 to 45.

College students from the United States, and Third World countries as well, have reportedly completed as many as 105 comparisons (Barnett, et al, 1977). Canadian students have completed MDS questionnaires with 136 comparisons (McPhail & Barnett, 1977). But the differences between these populations and the one that was studied here, and the different conditions under which interviews were conducted, require a shorter questionnaire which the subjects could handle.

It was found during the initial field-test and during actual interviews that 21 comparison sets represented the ceiling beyond which the subjects would lose concentration and interest in the task. Nevertheless, the failure to include the concept of "modernity" has hampered the analysis of the research findings and is, therefore, acknowledged as a serious weakness.

Research design. This researcher's inability to collect at least two pre-television observations from the population which would have provided base-line date for this study is a weakness which could not have been avoided. As previously stated, the date of the researcher's arrival
in the Ivory Coast, and the schedule of new television installations precluded this possibility.

As such, this experiment was modified from a time-series design to one which more closely approximates a case study, and is thus subject to some of its characteristic weaknesses in the area of internal and external validity.

Among these sources of invalidity (Campbell & Stanley, 1963), "Testing" and "Selection" appear to offer the only real threats to this study. Construct validity checks, displayed in Table 22, indicate, according to the rationale behind their use, that over-time, the subjects did improve their understanding of how to use the MDS methodology. For the most part, however, these fluctuations are small, less than ten units, and do not represent significant gains in skill. Testing can thus be dismissed as a serious threat.

Since this village and the subjects were not randomly selected, selection would appear to pose a serious threat to the validity of these findings by introducing the question of whether the village and its residents were representative of most villages and villagers in Ivory Coast, and Africa.
Within the context of a study such as this one, the question loses significance. In a nation comprised of some sixty different ethnic groups, it is virtually impossible to find any one group of villagers which can be said to be representative of the national population. It was, in fact, this reality of cultural diversity and the absence of national cultural consensus to which this research was addressed.

As a result, in respect to the generalizeability of these findings, it can only be speculated that the fact that national integration was shown to have occurred in this one "atypical" setting suggests that, in the absence of any specific forces of resistance, it should be capable of taking place in others.
CHAPTER VIII

Conclusion

Mass Media and National Integration

The data collected in this study, for the most part, support the general assumptions of several major theorists and scholars in the fields of communication and development about the integrative effects of the mass media. Within the limited context of this experiment, television does appear to perform such a function within the nation-state.

In this study, national integration was approached from a cultural perspective as a process which occurs in sub-cultures of a country. This process was conceptualized as a two-pronged activity resulting in increased identification with elements of the national culture, and the reduction of perceived differences between sub-cultures. Both of these processes have been demonstrated through the MDS Method to have taken place in the village of Toukouzou II during the course of this experiment. Questions related to the generalizeability of these findings will be addressed later in this chapter in the
section dealing with limitations and weaknesses of the study.

**Differences between sub-cultures.** The reported 28 percent reduction in perceived distance (difference) between the subjects (Avikam) and the Senoufo is quite significant, particularly in view of the fact that the chances of direct, personal interaction between members of these sub-cultures during the course of this study were quite remote. The geographical distance which separates them and language differences preclude such an explanation.

There is the possibility, however, that radio might have contributed to, or even been directly responsible for this change score since both radio and television folklore programs feature the music and dance of this ethnic group. The general question of possible radio impact on the villagers during the course of this study is addressed more fully later in this chapter.

**National identification.** In this study, "Schools," "Government," and later "Radio" were identified as concepts representing important elements of Ivorien national culture. As displayed in Table 21, at the end of this study, the subjects reported respective reductions in distance of 25 percent, 63 percent, and 74 percent. The changes in perception toward "Government" and "Radio" are quite impressive while the 25 percent distance reduction for "Schools," though significant, represents the slightest
movement among all six concepts. This is particularly interesting in view of the fact that at T1 the subjects felt relatively "closest" to this concept (see Table 16).

Television viewing and the schools. This researcher believes there is an important connection between the relatively low change score for "Schools" and the low television usage patterns reported in Table 12. The cultural distance which the villagers perceive between their own culture and the village school is based upon actual, objective conditions which changed very little during the course of this study, and operated as obstacles to their regular attendance at the television viewing room.

Because the television is set up in a second grade classroom, all of the physical aspects of the setting serve to reinforce the notion that this is an environment for children, not adults.

Respect for elders is an important traditional value in the village, yet, in the television room adults are forced to openly compete with children for good seating. The seats themselves are designed for a child's height and are placed behind desks. There is clearly a degree of humiliation and loss of respect associated with this arrangement.

Children usually comprise about 75 percent of the viewers, and teachers often have difficulty in maintaining order in the room. Adults must tolerate this confusion,
whereas in their own homes they are the final authority. Adults have often been seen peering through the windows and doors rather than place themselves in such a setting.

This researcher believes that it is these objective conditions which lie at the base of the low change scores toward "Schools," and the generally low usage patterns of this facility among adults.

Conditions such as these, documented by researchers in other villages, (Faustin, 1976; Fritz, 1976) have certainly contributed to the generally low turnout of adults to the "Tele Pour Tous" discussion groups. It has been reported that from the 1973-74 season to the 1976-77 season, the number of television schools in Ivory Coast increased from 950 to 1,731. Yet, the actual number of participants in the "Tele Pour Tous" groups had declined from a high of 16,024 in 1974, to 5,296 in 1977, reaching less than one percent of its out-of-school youth, and rural adult target population (Grant, et al., 1978).

The Cultural Imperialism Thesis

The summary data presented in Table 21 show a 51 percent reduction in the perceived distance (difference) between the villagers and the concept "France" during the course of this study, supporting the popular thesis that exposure to foreign media increases identification with that culture.
This thesis is often extended to suggest that this identification in time leads to the acceptance of foreign values and lifestyles which leave the recipients dependent upon that external culture for the gratification of their newly acquired "needs."

In this connection, it is also interesting to note that the villagers at T3 perceive close links between "France" and their own Ivorien "Schools," "Government," "Radio," and "Television." The respective distances, displayed in Table 20, are 3.61, 5.39, 2.33, and 3.34 meters. These are extremely close relationships when considered within the range of distance ratings estimated for all 21 concept pairs.

It clearly indicates that the villagers perceive their government, its educational system, and its mass media to be all heavily influenced by France. These perceptions are, no doubt, quite accurate, for the Ivorien government is quite openly proud of its close cultural and economic ties with France.

The implications of the MDS relationships suggest that in such a country, heavily influenced as it is by a foreign culture, that in moving closer to the nation-state it is only natural that the villagers also move closer to the dominant external culture which prevades those governmental institutions.
Mechanisms of Cultural Transformation

The fact that the national integrative process was shown to have occurred in association with the presence of television in the village of Toukouzou II satisfies the major research question of this dissertation. The MDS change scores for the related concepts were quite significant. The relationship between "closeness" to television and the strength of identification with the research concepts (reported in Table 23) serve further to establish the importance of this medium, if only at the level of a correlation.

But, at the same time, these findings raise another question of equal importance: What were the actual mechanisms of this cultural transformation? Do the findings also support the assumptions set forth by this researcher in the theoretical framework for this study?

In the theoretical framework for this dissertation presented in Chapter 3, the researcher offered a theoretical approach posited primarily on the direct cultural transmission function of mass media. Yet, one important finding collected in the unidimensional questionnaire leads this researcher to question this explanation. This finding, reported in Table 7, revealed the low television usage patterns of the majority of villagers. Are we expected to accept the conclusion that attitudes could be so
dramatically changed as a result of villagers, who, on the average, viewed television about once a month over a ten-month period? This researcher does not think so, particularly in light of the low level of French comprehension reported by most of the subjects and displayed in Table 7. This researcher suspects that there were other interpersonal mechanisms operating within the village which suggest a two-step, or multi-step flow process.

The two-step flow model. The Two-Step Flow Model of media impact, developed by Lazarsfeld, contends that ideas often "flow" from the mass media to opinion leaders and from them to less active sections of the population (Lazarsfeld, et al., 1944). This basic model, combining mass media and interpersonal communication networks, has been further elaborated to include more interpersonal links between the medium and the population resulting in what is referred to as the Multi-Step Flow Model. In both models the primacy of face-to-face interpersonal communications is emphasized in the process of attitude change.

One item on the unidimensional questionnaire was addressed to this model by asking the subjects whether their close friends, and persons they turned to for advice, viewed more, less, or the same amount of television as they did. The results reported in Table 13 revealed that 65 percent of the villagers felt that these close friends,
"opinion leaders," viewed more television than they did, suggesting that the Two-Step Flow Model might be a more viable explanation for the changes documented in this study.

The importance of structural change. A second explanation offered by this researcher is that television might have served as a catalyst, interacting with a second intervening variable closely associated with "modernity" and "development." This explanation emphasizes the importance of structural change over information content. It does not necessarily conflict with the Two-Step Flow Model, it relates more to specific types of information and opinions which might have been passed along interpersonal channels of communication. Since there were no data collected to support this position, it is offered speculatively.

This researcher believes that it is quite possible that the villagers were not influenced as directly from television content as they might have been by its actual, physical presence in their village. The fact that they now had access to this expensive, technical, urban medium could have made them feel "closer" to unidentified concepts such as "modernity" and "development" around which all of the other research concepts, except "Senoufo," might also be found to cluster.
Sensing that they were now members of a more "modern" village because they had a television set, the progression of this interaction effect would be that the villagers might also tend to identify more closely with other concepts associated with "modernity" and "development" such as "France," "Radio," "Government," and, to a lesser extent, "Schools."

An integrative function is, nevertheless, served by television, but a similar effect could be achieved, logic dictates, through the construction of a new paved highway, modern concrete housing, or by providing the villagers with a fleet of ocean-going fishing vessels.

This thesis could have been tested if "modernity" had been included as a concept in the MDS questionnaire. A factor analysis performed on the concepts in space would have revealed a cluster around "modernity." This weakness was discussed in the limitations section.

This observation that the mass media can operate and have impact as institutions at a structural level in societies was not considered in the research approach to this study diagrammed in Figure 2. Neither was the important implication that structural/institutional entities, in and of themselves, alter the cultural contexts in which they function, regardless of the specific content of their official programs.
Possible radio influences on the population. The researcher's inability to conduct a series of pre-tele­vision observations of the population severely weakened his chances of controlling for the cultural influence of radio as a competing treatment in this experiment.

The concept "Radio" was originally intended to serve as a control concept. The rationale was that subjects would be expected to identify more closely with television as a direct result of exposure to it, but that "Radio" would remain stable since the subjects would have had ample time to "acclimatize" themselves to its effects over the preceding years. The results, however, showed distance reductions for "Television" and "Radio" respectively at 70 percent and 74 percent.

The researcher was initially surprised by the unexpected "Radio" change score. The fact that the villagers had moved closer to this medium of communication raised the possibilities that the altered cultural outlook of the subjects could have been the result of (a) a media mix of television and radio, or even (b) radio alone. This latter possibility was explored and dismissed on the basis of data obtained from the unidimensional questionnaire.

A more obvious explanation for the decrease in distance between the villagers and this concept relates to
its inclusion in this study, not as a control, but as one of the three rated elements of Ivorien national culture.

The fact that only three villagers reported that they had gained access to radio during the ten-month period of this study ruled out the possibility that their stronger identification with this medium was the result of increased availability and exposure.

More important, in connection with radio influence on the target population during the study, are two limitations related to (a) inherent qualities of the medium, and (b) the French language skills of the subjects.

By its very nature radio, more than any other mass medium, including print, requires a high level of language mastery if one is to benefit from it. While the information content of both television and newspapers are supplemented by a visual component, radio relies solely upon the spoken word. Most of all broadcasting in Ivory Coast is presented in French. Though there are some special local language programs, they are limited to the more widely spoken native languages such as Baoule, Bete, and Malinke. The total population of the Avikam is estimated at around 5,000 persons, a group much too small to merit special programming consideration.
The low levels of French comprehension reported by the subjects in Table 7 make it highly unlikely that the other change scores reported in this study could have been the result of their attending, comprehending, and assimilating the messages of this medium alone.

This conclusion seems to be partially supported by data on the radio program preferences of the villagers, reported in Table 15. The results can be seen to illustrate the interaction between the French language limitations of the villagers and their radio listening behavior, with some 46 percent of the subjects naming favorite programs which feature music, requiring no knowledge of French. When local language programs are added, the total percentage of non-French program preferences increases to 55 percent.

Nevertheless, the possibility that radio might have played a role in the concept change scores through interpersonal links cannot be completely ruled out as a possible contributing factor.

When "Radio" is considered as an element of national culture, as it was rated by the Ivorien panel of experts, the reduction in distance between this concept and the subjects is quite consistent with the expectations set forth in the research hypotheses. In effect, the panel
expressed the view that an Ivorien integrated into the national culture would tend to identify quite closely with "Radio." But how does one explain the mechanisms behind such an identification related, as it is, to television effects?

The structural explanation of the possible interaction between television and an unidentified modernity factor is one explanation which might explain this "Radio" change score.

A second explanation, not wholly unrelated, is that exposure to a new medium, television, might have increased the villagers' awareness and appreciation of other existing media. No doubt, interpersonal communication channels were also involved in a multi-step flow process which linked villagers who could understand French and had access to radios with other members of the population who lacked one or both of these requirements.

In summary, the researcher concludes from the data and reasonable speculation that television did play an integrative function in the community of Toukouzou II, (a) by its very presence, thereby influencing the villagers to feel that they were members of a more modern community, leading to closer identification with the "modern" concepts of the study, (b) by providing relevant content which was circulated throughout the community by a multi-
step flow process, and (c) by stimulating increased awareness of radio, which working through interpersonal channels as well, combined with television, resulting in a more effective media-mix.

Implications for Mass Communication Policy

A first and primary observation in regard to these findings is that the present policy of media expansion in the Ivory Coast is contributing to the nation-building aims of that government. The findings suggest that mass media played an important role in increasing the sense of national identification of members of one sub-culture and helped to reduce the sense of dissimilarity between that ethnic group and another.
As previously stated, however, these cultural transformations appear to be more the result of structural change and intervening interpersonal communication networks than from the direct impact of television viewing upon the villagers whose actual utilization of this medium was low. Media policy makers should not expect their aims to be sustained by these mechanisms, since they might be of a short term nature. Efforts need to be directed toward strengthening the basic structure of the Out-of-School Education Program.

Two problems identified by this researcher as serious obstacles to fuller adult utilization of television in the village of Toukouzou II underline the interrelationship between mass communication and educational policy and will thus require coordinated solutions. These are the obstacles posed by unfavorable viewing conditions for adults in the schools, and obstacles associated with the low level prerequisite French language skills of the villagers.

Obstacles related to the school. Since the educational system is the framework for the television infrastructure, policies should first of all be directed toward strengthening the community/school relationship. In some communities significant improvements in television utilization
might be achieved through basic organizational changes which would insure the allocation of classroom space for "adults only" where they could view and discuss television undisturbed by the presence of children.

In other communities where motivation and interest are lacking because the cultural gap between the community and the school is too great, increased participation in tele-club activities will only be achieved through higher level decisions which re-conceptualize the school/community relationship along the lines of a convergence in which mechanisms are developed which actively solicit community participation in school activities, and policies are initiated which demonstrate increased school commitment and involvement in community life.

A more costly policy alternative would be to circumvent the schools, and the associated problems, by installing television receivers outside of the school setting, possibly in the homes of respected village leaders who would assume responsibility for organizing adult viewing and discussion activities. Such arrangements are known to take place informally in some villages where there are privately owned television sets. But, for government, the added costs incurred in installing and servicing the additional sets needed for such an endeavor would probably render such a policy untenable.
In the village of Toukouzou II there is evidence of a community/school convergence, though on a small scale, which operates at the individual level. It was observed by this researcher that most of the teachers participate in the major cultural and religious activities of the village, and that two village residents are employed in teaching positions in the school, one of whom is the wife of Prophet Papa Nouveau.

But, alone, these activities, significant as they are, were not sufficient to bridge the gap between school and the community during this initial year of television. Perhaps it is too early to draw conclusions and improved patterns of television utilization will emerge in the forthcoming broadcast seasons. But, as reported earlier, government evaluations of adult participation in television viewing groups are not encouraging; they show declining patterns of participation over time, and generally low levels of motivation among teachers to organize these groups.

At present, the Ivory Coast Government is considering offering monetary incentives to teachers as compensation for the extra time and energy required in the organization of group viewing clubs for "Tele Pour Tous." This researcher feels that a favorable decision on this issue could be a positive step toward reviving or stimulating
interest among villagers in group viewing clubs, particularly if the decision is presented as part of a broader policy which, at the same time expands both the role of the teacher and the school in a manner which reflects a more collaborative relationship with the community.

**Obstacles related to language.** One of the major teleclub functions of the teacher-animator is to serve as a translator for those villagers who are not fluent in the national language of French. Where teachers speak the local language, as some do in Toukouzou II, the previously mentioned incentives should be adequate motivation to enlist their services. In those communities where such teachers are not available, the teacher should be encouraged to work through a local translator, students, if necessary, who should also be compensated for their services.

The decision to promote a single national language in the Ivory Coast is consistent with the country's general aim of national unification. However, one can observe, even at the village level, how this policy divides the community into newly created categories of "illiterates" and "literates" whose members perceive themselves as being distinctly different from each other. Under a more collaborative policy of community/school relations
teachers responsible for tele-club organization would need to be encouraged to learn the local language of their setting.

Closely related to the problem of literacy in French is the more general concern for the French cultural influences on Ivorien national life. While this study has shown that television has contributed to increased feelings of national identification among Toukouzou II villagers, it has also shown that closer identification with France has accompanied this transformation. The question of whether this is a positive or negative side effect of their nation-building efforts is one which needs to be critically assessed by policy makers at the highest levels.

Implications for Future Research

Two important aims have been realized in this study which should generate fertile areas for future research. The first aim was to study media effects on national integration from a cultural perspective, and the second was to demonstrate the utility of the Multi-Dimensional Scaling Method in measuring such effects. It is hoped that the fact that this method was used successfully with villagers who had little or no formal education will serve to encourage wider applications of this methodology in more diverse cultural, and socio-economic settings.
Other research concerns are generated by the shortcomings of this study. This study has documented cultural change over a ten-month period. But, what are the long-term effects of television viewing on one's sense of national identification after the possible novelty effects of the medium have worn off? Does national identification continue to increase, or, is there a saturation point beyond which one's identification with the nation reaches a new steady state, or even possibly regresses back in the direction of one's original position?

Such questions underscore the need for longitudinal, time-series research designs which monitor changes over several years. Studies of this nature are expensive and difficult, but necessary.

Another research area, closely related, involves the documentation of behavioral correlates accompanying cultural changes in perception of self and nation. The process of social change is often a long-term enterprise and a researcher might not expect to find significant changes in a villager's actual behavior as a result of short-term exposure to television. Longitudinal studies would provide the opportunity to collect data necessary to test whether strength of identification with the state correlates with constructive, active participation in further nation-building activities.
APPENDIX A

Instrument 1

Multi-Dimensional Scaling Questionnaire
Multi-Dimensional Scaling Questionnaire

I am an American researcher interested in village life. I would like to learn more about how people in your village view the outside world. To accomplish this, I will ask you 21 questions in a manner in which you will need to compare different ideas. I would like you to respond to the questions by estimating how much difference there is between the two ideas presented, in terms of distance.

For example, we can say the people of Toukouzou I and Toukouzou II are very similar in their way of life. Let us, therefore, say that the difference between them is very small, say one meter. Using meters to measure with, estimate the difference between the following concepts. Remember, the greater the difference between the two ideas (illustrate with arms) the greater the distance between them. The more similar the concepts are, the smaller the distance between them.

In meters, how much difference is there between:

1. You and Schools
2. You and Government
3. You and Senoufo
4. You and France
5. You and Radio
6. You and Television
7. Schools and Government
8. Schools and Senoufo
9. Schools and France
10. Schools and Radio
11. Schools and Television
12. Government and Senoufo
13. Government and France
14. Government and Radio
15. Government and Television
16. Senoufo and France
17. Senoufo and Radio
18. Senoufo and Television
19. France and Radio
20. France and Television
21. Radio and Television
APPENDIX B

Instrument 2

Unidimensional Questionnaire
Unidimensional Questionnaire

1. Since last September, how many days have you spent in Abidjan? ______

2. How many times have you visited the school to watch television?
   - Less than five times
   - More than five times
   - More than ten times
   - More than twenty times

3. How well do you understand French?
   - Not at all
   - A little
   - Good
   - Very Good

4. What is your favorite television program? __________

5. Do you feel that television makes you feel more Ivorien?
   - No
   - A little
   - Very much

6. Do you think your friends in the village, those who you turn to for advice, view television:
   - More than you
   - As much as you
   - Less than you.

7. What is your favorite radio program? __________

8. Do you feel that radio makes you feel more Ivorien?
   - No
   - A little
   - Very much

9. Do you own or have access to a radio?
   - Yes
   - No

10. Have you bought or gained access to a radio since last September?
    - Yes
    - No

11. How many years of schooling have you received? ______

12. What is your age? ______
REFERENCE LIST


Beltran, L. Alien premises, objects, and methods in Latin American communication research. Communication Research, 1976, 3 (2).


Bordenavs, J.D. Communication of agricultural innovations in Latin America: The need for new models. Communication Research, 1976, 3 (2).


Cote d'Ivoire en chiffres. Ivory Coast Ministère du Plan, 1977-78.


Fraternite Matin, September 27, 1968.


Klineberg, F.L. Studies in measurement of the relations among sovereign states. Psychometrika, 1941, 6, 335-352.


National Education Ministry of the Ivory Coast Republic. 
Education by Television: Report of the missions for the evaluation television in Niger, El Salvador, and American Samoa, Volume III.


Roling, N.G. The diffusion of innovations and the issue of equity in rural development. Communication Research, April, 1976, 3, (2).


Schnitman, J.A. Communication, mobilization, and development. Stanford University, Institute for Communication Research, April, 1976.


Shingi, P.M., & Mody, B. The communications effects gap: A field experiment on television and agricultural ignorance in India. Communication Research, April, 1976, 3.


Taylor, C.L. Communications development and political stability. Comparative Political Studies, January, 1969, 1, 557-564.


On tribalism as the Black man's burden. Time, August 23, 1968, 92, 18-19.


Zimmer, T.A. The role of mass communication in the political integration of nation states: An aggregate Analysis. Ohio State University, Ph.D., 1971.
VITA

Milton Adams was born September 2, 1947 in New York City where he received his primary and secondary education in the public schools. He received his B.A. degree in English with a minor in Communicative Arts in 1969 from Hampton Institute, Hampton, Virginia.

After graduation he pursued incomplete graduate studies in the Sociology of Education, and Journalism respectively at Pacific Lutheran University in Tacoma, Washington, and at Michigan State University in East Lansing. He earned both his M.S. and Ph.D. degrees in the field of International/Intercultural Education with an emphasis in Educational Technology at Florida State University in 1976 and 1978.

His professional experience have included assignments as a journalist at the Tacoma (Washington) News Tribune, 1969-1970; and at the New York Post, 1971-1973. From 1974-1976 he worked as a journalism instructor and Audio Visual Officer at the University of Guyana, South America, responsible for the development and coordination of media services and faculty publications for the College of Education. In this capacity he initiated preliminary television research for the Ministry of Education involving a constraints and resources analysis of alternative policies for the introduction of television as a tool for national development in Guyana.

As a graduate research assistant at Florida State University he held several assignments with the Center for Educational Technology and Teacher Education Projects. His research in the Ivory Coast was made possible through a grant awarded by the National Fellowship Fund, Atlanta, Georgia.