Language Death in East Africa

Contributions to the Sociology of Language

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Language Death

Factual and Theoretical Explorations
with Special Reference to East Africa

Edited by
Matthias Brenzinger

Preface

The articles compiled in the present volume are based on contributions initially prepared for an international symposium on "Language death in East Africa", held at the Werner-Reimers Foundation in Bad Homburg (Germany) from January 8–12, 1990. The round table meeting, organised by the Institut für Afrikanistik of the University of Cologne, was attended by fourteen invited participants, who contributed papers on the social motivation for language contraction in East Africa, and the subsequent structural changes in the grammars of these languages. The main aim of the symposium was to provide case studies in order to help to understand the processes of language shift better and to stimulate further research towards a theory of language death.

Part I of this volume deals with a wider range of languages and pertains to the theory of language death. Part II constitutes a collection of case studies from East African, and finally Part III provides an overview of African languages relevant to our topic.

Different approaches were chosen by the authors in describing and analysing the various aspects of specific language shift situations and cases of language death. Not only because of this diversity but also because of the original data and the intimate knowledge of the presented cases which the authors have, we hope that the reader will benefit from this work.

We would like to thank the Volkswagen-Foundation for sponsoring the symposium, and the Werner-Reimers Stiftung for providing an excellent atmosphere in their "Tagungsstätte". Furthermore, we are grateful to Carla Butz for drawing the maps in the volume.

Matthias Brenzinger   Köln, November 1991

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Part I

Social contexts of language death

Matthias Brenzinger and Gerrit J. Dimmendaal

Setting aside the rare case of language extinction through genocide (in Africa only reported within the Khoisan language family so far), all instances of language death are the result of language shift. Investigating processes leading to language death, therefore, means studying language shift situations. Here it should be kept in mind, of course, that language shift does not necessarily result in language obsolescence. Very often, ongoing processes of language shift are halted or even reversed, thereby resulting in revitalization, a case in point being "Suba" on the western shores of Lake Victoria, as described by Rottland and Okombo in this volume.

No consensus seems to exist as to when a particular language is to be regarded as "dead"; in the present context, a language is considered to be extinct when there is no longer a speech community using the language. This applies to East African languages discussed in the present volume such as Kore discussed by Dimmendaal, Yaaku and Elmolo discussed by Brenzinger.

With regard to the phenomenon of language death two levels seem to be involved:

(1) the environment, consisting of political, historical, economic, and linguistic realities;
(2) the speech community, with its patterns of language use, attitudes, and strategies.

Concerning the first level, factors such as status, demography, institutional support, and cultural (dis)similarity are relevant (cf. Giles 1977, Appel–Muysken 1987). These influence the second level, that of the speech community in which a particular language is left to die. In terms of causal relations, then, changes within the speech community very often have to be understood as reactions towards environmental changes.

Most case studies in the present volume deal with minority languages since they are the ones threatened by extinction in language shift situations. Such languages can only survive if its speakers are willing to maintain an active interest in retaining them, i.e. in showing strong language loyalty, as

with the Dahalo, described by Tosco in the current volume. The minority language has to be valued highly by the members of a speech community in order for it to survive a generally hostile environment.

Apart from internal deficits experienced by minorities, such as the limited communication yield caused by the restricted distribution of the language, there are often external pressures on minorities, due to stigmatization, exclusion from education and political participation, and economic deprivation.

Whereas in general one may arrive at diverging conclusions as to whether language is the most important component in constituting ethnicity, the situation is different with minorities. In larger groups, language may be of secondary importance for self-identification; with groups speaking minority languages, however, language is always an eminent component, since minority languages are doomed to vanish, if strong language loyalty is no longer present.

Patterns of language choice reflect language attitudes. Therefore, in cases of language shift one has to investigate underlying changes in attitudes towards the languages involved, namely the abandoned language and the target language (cf. Thomason–Kaufman 1988). As observed by Heine in his contribution on the Terik in Western Kenya, there is often a discrepancy between self-assessment in terms of speech behaviour and one's actual language use in this respect. Being "a good Terik speaker" is determined more by environmental factors than by purely linguistic facts.

Stable bilingualism is also a widespread feature of African societies. Secondary languages are widely spoken in such domains as market places, schools, or at work, especially by members of minorities, since they are generally forced to use a language other than their primary language in communicating outside the group. Examples of language shift at the local, regional, and national level and their effects on notions of ethnicity can be found in the presentations by Batibo and Legère for Tanzania. Such patterns of language shift put a minority language into jeopardy, because the use of the language tends to be restricted to such domains as home, traditional ceremonies, peer group meetings, etc. The actual process of abandoning a language may be observed in a decrease in a) number of speakers, b) functional domains, c) competence.

Next to these aspects of the social context of language death, there are structural-linguistic consequences of language death. Sasse's contribution, "Theory of language death", focusses on these latter issues. The author elaborates on Nancy Dorian's pioneering work in this respect, and investigates the nature of the reduction, as well as problems of interpretation regarding internal versus external causes of reduction processes.

Myers Scotton addresses linguistic and social-psychological aspects of selection by bilinguals of material from an embedded language in a matrix language in conversation; it is argued that the same mechanism operates in contact-induced change resulting in language death, through a process of grammar shift in codeswitching situations.

The rather complex issue of interference and substratum in closely related Bantu languages or dialects of the same language at the southern Kenyan coast is dealt with by Nurse–Walsh, and Möhlig from different theoretical angles.

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Theory of language death[1]

Hans-Jürgen Sasse

1. The state of the art

The most macabre of the numerous anthropomorphic metaphors linguists provide for their subject matter is that of language death. The extinction of a language is in fact a distressing matter, since the cultural tradition connected to it and the socio-cultural or even ethnic independence of the group that speaks it very often perish together with it. Yet it is a very common phenomenon. In the last five hundred years about half the known languages of the world have disappeared; hundreds of languages are in danger of becoming extinct by the end of the century. In Africa alone, nearly 200 languages are endangered (Sommer, this volume). Of course, as we know from history, languages have always disappeared: Gothic, Etruscan, Iberian, Sumerian, Hittite, Egyptian, etc., but the world-wide colonization of many small ethnic units by a minute number of large ethnic units, the formation of big national states, the development of transport technology, the spread of supraregional communication media, etc. have led to an enormous increase in the extinction of smaller languages which can hardly be stopped.

It seems strange that such a frequent and well-known phenomenon has not been studied earlier in greater depth; nevertheless it is a fact that the investigation of language death is a new and developing field which has emerged as something like an independent subdiscipline of linguistics towards the end of the seventies. This comparatively embryonic stage of the field should be kept in mind throughout the following discussion.

It may be useful to start with some preliminary remarks to clarify what our subject-matter is.[2] The title of this paper is misleading insofar as it suggests the presentation of at least a rudimentary theoretical or methodological framework within which the data discussed at this conference could be handled. If anybody expects something of this kind, he will be disappointed. As yet there is no theory of language death.

Extensive material on the process of language extinction, covering all kinds of relevant information is available for only a limited number of European minority languages. Such information includes the following: socio-economic factors, their underlying historical causes, linguistic and sociolinguistic details in different phases of linguistic decline and contraction, and speech behavior of different layers of imperfect speakers immediately pre-ceeding language extinction. The two best-documented cases are the Albanian periphery dialect of Greece, the so-called Arvanitika language, and the East Sutherland variety of Scottish Gaelic. On Arvanitika there will be a four volume documentation by this author, covering approximately 25 years of continuous research, the first volume of which just appeared (Sasse 1991). It deals with all of the possible facets of Arvanitika history, from its first attestation until the final phase of its extinction. Moreover, there is a very detailed sociolinguistic monograph on Arvanitika by Lukas Tsitsipis (1981), which is especially devoted to the obsolescent phase of this language and ex-amines some of the crucial methodological and theoretical issues to which its investigation gives rise. Numerous further studies of article length deal with various linguistic and sociolinguistic aspects of this language. The linguistic history of Arvanitika is amply documented; the historical and sociolinguistic circumstances as well as the social and economic conditions under which the Arvanitika-speaking community lived can be followed through several centuries.

The same is true of Gaelic, which has been attested in written form for many centuries and whose external history in different parts of Great Britain is well known. The final phase of one of its Scottish dialects, East Sutherland Gaelic, has been described in utmost detail in countless studies, some of them of monograph length, by the world's leading authority on language death, Nancy Dorian. No other European minority communities which speak an obsolescent language have been studied in comparable detail. There are a number of interesting smaller case studies among which are those on Breton by Wolfgang Dressler and his students and on Hungarian in Austria by Susan Gal, which provide valuable material on certain aspects, but do not cover the whole array of phenomena whose investigation is necessary in order to obtain a clear picture of the entire process. Longitudinal studies (covering the development within a single self-contained speech community, e.g. a village, over a sufficient stretch of time) have rarely been carried out, a notable exception being Breu (1991) for Italo-Albanian.

In addition to the work on European cases of language death, there are a number of scattered studies from other parts of the world, and these may serve as a corrective to the rather uniform picture that emerges from the

European minority studies. Two of the most outstanding scholars who have contributed to our knowledge of "exotic" obsolescence situations are Hill on Nahuatl (Mexico), and Schmidt on Dyirbal (Australia). But there are huge geographical areas for which no comprehensive studies are available, one of these being the region under discussion in this volume. Furthermore, all this work taken together does not suffice as an empirical basis for a theory of language death. Theoretical or model-establishing approaches have therefore been scarce, and only few attempts have so far been made to give a broad overview of current research in this field (cf. Dressler – Wodak-Leodolter 1977, Rindler-Schjerve 1989, and particularly Dorian 1989). Nevertheless, the studies available thus far offer a sufficient amount of research to serve as a point of departure for asking – and hopefully answering – a number of fundamental methodological questions:

1. What are the relevant problems and research goals in this field?
2. How can we pick out, clarify and separate from each other the principal levels of research and their interaction?
3. Is it possible, given the extremely small number of comprehensive case studies, to base some generalizations on the cases known so far?
4. Are these generalizations sufficiently general in order to serve as a rudimentary model of language death, within which it is possible to unify terminology and establish criteria for further research?

2. Levels of research

A brief look at the literature on language death reveals that the problem is often tackled from quite different angles: some authors deal with the socio-economic factors which have given rise to a certain situation but do not describe the actual linguistic events; others investigate structural phenomena of dying languages without paying attention to the sociolinguistic status of the speech form under consideration. In order to understand the entire process, however, a holistic approach is necessary which takes the interplay and the possible causal connections of the phenomena investigated into account. I will therefore begin by separating the different levels of research and their aims and goals and then try to show the interaction of the empirical facts they are concerned with.

Three types of phenomena relevant to the study of language death must be clearly distinguished.[3] First of all, there is the entire range of extra-

linguistic factors: cultural, sociological, ethnohistorical, economic, etc., processes, which create, in a certain speech community, a situation of pressure which forces the community to give up its language. I will call this the *External Setting* (ES). The linguist studying obsolescence is not so much concerned with ES phenomena *per se*, the detailed investigation of which is the task of historians, sociologists, and specialists in other neighboring disciplines. Nevertheless, ES phenomena must be carefully taken into account because they constitute the trigger for the entire process. I will come back to this point directly. Let me first introduce the second set of phenomena, which I will class under the general term *Speech Behavior* (SB). By this I mean the regular use of variables, which, in a given speech community, are bound with social parameters, e.g. the use of different languages in multilingual settings, the use of different styles of one language (Fishman's famous *Who speaks what language to whom and when*), domains of languages and styles, attitudes towards variants of languages, and so on. For the investigation of these phenomena an integrated sociolinguistic macro-approach is necessary which would have to combine an extended and modernized version of empiricist sociolinguistics of the Labovian type with interpretive models such as those of Gumperz (ethnomethodology) or Giles (social psychology).[4]

Since the political and social conditions are primary, ES phenomena have a strong impact on SB. Attitudes towards languages and styles develop on the basis of political, social and economic pressure, and this pressure in turn develops on the basis of the historical situation in which a speech community finds itself. It is therefore possible, even very likely, that differences in ES induce differences in SB. This is the most delicate point for a model based on European findings because of the relatively uniform conditions of the well-studied minority situations. The few better-known "exotic" cases (Native American, Dyirbal), do not differ very much in this respect. African material will serve as an important corrective here.[5]

The third set of data which is being studied in the investigation of language death is the purely structural, substantial-linguistic set of phenomena, e.g. changes in the phonology, morphology, syntax and lexicon of the language threatened by extinction. I will simply call these *Structural Consequences* (SC) phenomena.

It is necessary to emphasize once more that the study of language death involves all three areas of research, i.e. a combined historical, sociolinguistic and structural-linguistic approach. There have always been attempts to reduce the investigation of language contact and language death to the structural domain and to aim at system-linguistic explanations for this kind of phenomena. This approach is unrealistic and counterintuitive. The idea that a language

can "kill itself" by becoming so impoverished that its function as an adequate means of communication is called in question so that it must be abandoned for structural reasons is not compatible with the empirical facts. Structural impoverishment and so-called "bastardization" may help accelerate the process of language death in the final stage (we will come to this point below), but it will always be the consequence rather than the reason for linguistic obsolescence. Reasons are found exclusively in the ES area. As we shall see below, endangered languages remain functionally intact and are therefore not structurally identifiable ("deviant"), until they reach the terminal stage of extinction. On the other hand, studies confined to ES and SB phenomena (unfortunately the majority of language death research is of this kind, especially for Africa) are defective, given that the main interest of research in language death is merely in the interaction of external and internal phenomena. The restriction to non-structural phenomena neglects just that kind of information in which both linguists and historians[6] have the most vital interest.

This all leads to the conclusion that an explanatory level of research can be reached only when the whole array of sublevels is equally well served. That is, a complete study on language death will have to encompass a historical analysis of the External Setting, a sociolinguistic analysis of the community's Speech Behavior, and Structural Descriptions of different speaker categories in different stages, preferably obtained in longitudinal studies covering a sufficient period of development. (In case longitudinal studies are impossible because of the rapid progress of decay, they can partly be compensated by diatopic and/or diastratic comparison.)

3. The Gaelic-Arvanitika model of language death

As outlined in section 1, it is possible to conceive a model of language death which takes into account the interrelation of all the relevant phenomena, but this model will be based empirically on a very small number of comparatively uniform case studies. Since the bulk of evidence comes from East Sutherland Gaelic and Arvanitika, I will call it the Gaelic-Arvanitika-Model (GAM).[7] GAM is compatible with several smaller studies on European language death situations as well as with the results of other research (Uto-Aztecan, Dyirbal, etc.), and has been slightly generalized in order to include these results. It shows the interactions and causal relations of ES, SB and SC in a very neat way, but it cannot be overemphasized that the situations on which it is based are very similar both in their socio-economic and in their structural

linguistic phenomenology. Indeed, the question of whether differences in ES phenomena result in differences in SB, which in turn result in different structural changes, remains open. At the level of generality I am mostly dealing with, the lack of a sufficient number of detailed back-up studies is not crucial, but it "remains a weakness in the baseline from which any of us theorize" (Dorian, p.c.). The challenge and, as I believe, the usefulness of the approach presented here lies in the possibility to test the applicability of GAM to cases which look different at first sight, and to use it as a heuristic guideline for the comparison of case studies. Of course "every case is special" (Dorian 1989: 7, quoting an experienced field researcher). Even the case studies which form the empirical input of GAM present numerous specific idiosyncrasies which GAM, as proposed here, cannot predict or otherwise explain. Nevertheless, I believe that at least the general design of the model can be applied everywhere. This particularly holds for the postulate that any case of language death involves external causes, changes in the sociolinguistic patterning of variants, and language change (at every grammatical level). The results may be different from GAM, but the general characteristics remain the same. Moreover, it seems reasonable to assume that different ES conditions lead to different SB/SC results. Africa would be an ideal testing ground for this hypothesis. As we know, there are cases where ES factors quite different from those underlying GAM have been described (e.g. the Yaaku and Elmolo cases, cf. Heine 1982, Brenzinger this volume, and Dimmendaal 1989). A careful examination of the sociolinguistic and grammatical data obtained in these case studies is necessary to understand the wider connections.

Let this suffice as a general introduction; I shall now try to construct GAM.

At the present state of research it seems clear that the interrelation of the three sets of phenomena discussed in the preceding section is that of an implicational chain: ES phenomena induce a certain kind of SB, which in turn results in certain SCs in the dying language. It would seem, moreover, that this implicational chain is paralleled by the historical development: the extralinguistic factors appear first; a change in speech behavior then obtains due to or as a reaction to the extralinguistic factors. Finally structural changes emerge as a consequence of the change in speech behavior. While the first appearance of the factors in each case is probably phase-displaced, they continue to be operative throughout the entire process. The simple diagram in Figure 1 illustrates this.

Every case of language death is embedded in a bilingual situation which involves two languages, one which is dying out and one which continues. Following a terminology frequently used in recent studies, the language given

t →

ES

SB

SC
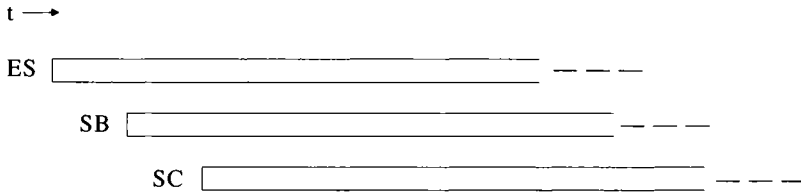
Figure 1

up is called the *Abandoned Language* (henceforth A), and the language which the former speech community of A continues to use is called the *Target Language* (henceforth T). In all well-known cases on which GAM is based, the story begins when a substantial portion of a bilingual speech community shows a simultaneous or nearly simultaneous shift in their primary (P) language from the A language to the T language and a consequent shift in their secondary (S) language from the T language to the A language.[8] I propose to call this situation *primary language shift.*

How is primary language shift initiated? It is triggered by the decision of a speech community to cease to transmit their language to their descendants. The result is an interruption in *language transmission* (LT). By LT we mean the purposive, directed passing-on of a language from one generation to the next. The pragmatic correlate of language transmission is the *language transmission strategy* (LTS), which, as recent cross-cultural studies of language acquisition have revealed, seems to be partly intuitive and partly community-specific (traditional), cf. Ingram (1989: 127). In any case, it always seems to involve a specific way in which mothers (or other language-transmitting adults) talk to their children – this is called "motherese" by child language specialists (cf. Kaye 1980) – as well as repetitions, exercise games, corrections and other types of metacommunication, especially discussions about word meaning, and – last but not least – a strong tendency to assist and encourage children in their own efforts to improve their linguistic skill. LTSs play an extremely important role in language acquisition, whose impact on language death will become apparent later on in the the discussion.

It is now appropriate to say a few words about the reasons for interrupting language transmission. Although the motives for such a decision may vary from case to case, especially in the historical details (restrictive language policy in one case, economical reasons in the other), studies of language death situations available thus far indicate that there is always one common element,

viz. the presence of socio-economic and/or socio-psychological pressure phenomena which move the members of an economically weaker or minority speech community to give up its language. This happens – not always but very often – via the development of a negative language attitude which results in collective doubts about the usefulness of language loyalty. The attitude towards A is often not entirely negative; it may be schizophrenic in that the retention of the language is valued positively for one reason, and negatively for another. For example, according to my experience with Arvanitika and Aromunian in Greece there are cases in which people still retain a positive attitude towards their language as far as its role as a signal of group identity is concerned, but a negative one otherwise: it is claimed that the language must be given up "because it is ugly and useless". It can be assumed that this constellation chiefly characterizes situations in which there is an aggressive language policy on the part of the dominant language community (i.e. the monolingual T community), which consciously and deliberately sets criteria for the negative valuation of the recessive or minority language.

It may be of help to interrupt here for a moment to draw a more precise picture of the implicational relations of External Setting, Speech Behavior and Structural Consequences up to this point. We have a multilingual community, which – for whatever historical reasons – displays an uneven distribution of languages. For further political and/or economic reasons the unevenness becomes the source of strong social pressure, which may create a negative attitude towards the language of the recessive group and leads to the decision to abandon this language. Uneven distribution of languages in a bi- or multilingual speech community always results in complementary distribution of domains, which consequently leads to lexical loss or failure of lexical development in domains where the dominant language is favored. Due to the restrictions of domains, collective bilingualism increases, because the speakers are forced to learn the dominant language in order to use it in domains where the recessive language cannot be used (for a number of examples cf. Hill 1973, Dressler – Wodak-Leodolter 1977, Tsitsipis 1981). This may increase interference and simplification (e.g. loss of complex morphophonemic systems, etc.), but the A language nevertheless still remains a functionally intact language. However, once the decision to abandon A falls and language transmission comes to be interrupted, the situation changes radically. The formerly primary language A becomes secondary and begins to show serious symptoms of imperfection. Due to the lack of LTSs the only source of A data for the infant is what he occasionally hears in his environment. However, simple exposure to a language is obviously not enough in order to develop normal language proficiency (Tsitsipis 1981: 342 ff., quoting

personal communication from Dorian). Further, in a situation in which nearly all domains have been conquered by the T language, A is simply no longer used in a number of important speech styles (e.g. narrative, formal, etc.). From a sociolinguistic perspective, this restricted use of A has a feedback effect on the speaker's sociopsychological evaluation and contributes to the development of a negative attitude towards A (cf. Dressler 1982: 324 f.).

It is at this point that we enter a new phase – and perhaps the crucial one – of the process of language death. This period is characterized by a phenomenon called *language decay*. Language decay is defined as the serious linguistic disintegration which is typical for the speech of so-called *semi-speakers*, i.e. that speaker generation which results from the interruption of language transmission.[9] When a considerable number of infants in a bilingual speech community is regularly subjected to LTSs only in one of the two languages (and perhaps even discouraged to acquire the other), the trivial consequence is an imperfect acquisition of the language whose transmission is suppressed. Semi-speakers are therefore characterized by an imperfect knowledge of A. Their morphology is extremely defective, they lose important grammatical categories such as tense, aspect or mood, even if these categories are present in T. Their speech often shows a pidgin-like simplification of syntax and a strong insecurity in the mapping of forms and functions. They are hardly able to master the phonological distinctions of A and show extreme variation in their pronunciation.

I will not examine details of language decay here because this will be the subject of my second paper (Sasse, "Language Decay and Contact-Induced Change: Similarities and Differences", this volume). I will only briefly touch a number of issues which may help us understand the nature of language decay, its development and the theoretical consequences which arise.

One crucial problem which has been underestimated in the literature on language death is the proper differentiation between phenomena of normal language contact and those of distorted speech in the phase of language decay. The problem has been touched on a number of times in very recent literature, notably by Campbell and Muntzel (1989: 195) and Rindler-Schjerve (1989), however, without having ever been discussed *in extenso*. Two terms used in Creolistic studies have been brought into the debate by Trudgill (1977), *"simplification"* and *"reduction"*. Simplification is loss of external complexity, while reduction is loss of essentials and results in defectivity. In terms of the nineteenth century distinction between form and substance, one could say that simplification mainly involves readjustments in substance, while reduction involves considerable loss of both form and substance. The fundamental problem which resides in the distinction between simplification

and reduction and its application to the investigation of language decay is that of its limited operationalizability. First of all, we do not exactly know what an essential part of human language is. If "essentiality" is the only criterion that distinguishes reduction from simplification,[10] the distinction is largely arbitrary. Second, it is difficult to find objective criteria for the definition of "simplicity"; what may be called simple in one perspective may seem complex in another. Third, since loss is involved in both cases, it can often not be decided whether a certain phenomenon must be attributed to a reductional process; this can only be stated for processes which result in defectivity. Nevertheless, my claim is that we can and must distinguish language decay from normal language contact phenomena (including some instances of "simplification") by identifying the reductional character of decaying varieties of obsolescent languages. All studies of speech forms of obsolescent languages in the terminal phase of language death (admittedly few but uniform in this respect) show deviations from the norm of intact versions of the A language which cannot be attributed to language contact: loss of grammatical means for expressing entire category systems (such as the tense/aspect/mood distinctions mentioned above, unsystematic decay of person marking on verbs, etc.), even if the T language possesses the categories in question. Language contact phenomena ("borrowing" in the broadest sense) involve the transfer of substantial material, of patterns and of category distinctions, they can always be explained as the imitation, in one language, of some linguistic trait of another. In the case of decay, however, we are not dealing with transfer in any sense, but with downright loss leading to a heavy expression deficit. This is something quite different from the phenomena observed in normal language contact situations, and must therefore carefully be distinguished from the latter. The process of morphosyntactic borrowing connected with any situation of intensive language contact may involve "negative borrowing"[11] in the sense that a category can be lost in the replica language because of its absence in the model language. However, this type of "loss" is always compensated by functionally equivalent means of expression which imitate the morphosyntactic pattern of the model language, while in the case of language decay a true reduction takes place in that there is no compensation at all. That is, in contrast to the normal language contact phenomena, which do not affect the functionality of the system, reduction is pathological in the sense that it results in functional defectivity. What remains of the A language in the phase of decay is not a language in the sense properly understood (a structured code), but an amorphous mass of words and word forms, stereotype sentences and phrases, formulaic expressions, idioms and proverbs, which are learned in "chunks", whose forms are im-

perfectly known and whose functions are poorly understood. When used in actual conversation, these linguistic fossils are put together in some random linear order without fixed syntactic rules. The notion of "loss" must therefore be handled with care. For example, the disappearance of the optative in early 20th-century Arvanitika (Tsitsipis 1981: 313 ff.; Sasse 1985: 70) is a normal case of negative structural borrowing due to intensive language contact: the optative was abandoned because the model language, Modern Greek, did not possess it and used the conjunctive instead, which was present in Arvanitika at all events, so the Arvanitika conjunctive simply extended its meaning to cover optative meaning of its Modern Greek model, and dropped the luxusious optative category. The loss of the aspect distinction in the Modern semi-speaker version of Arvanitika (cf. Trudgill 1977) is a clear case of reduction: since the Modern Greek aspectual system is more elaborate than the Arvanitika one, there was a tendency in last-generation full-speaker Arvanitika to extend the system according to the Greek model (Sasse 1985: 74, a case of positive structural borrowing). The underdistinction of aspect totally counteracts this recent development, and since the Modern Greek–Arvanitika bilingual masters the Greek aspect distinction perfectly, he will clearly feel an expression deficit in his Arvanitika speech[12]. The locus of language decay is the semi-speaker. Due to the lack of linguistic skill and the absence of the corrective mechanism normally connected with LTSs, he never acquires the relative proficiency of a full speaker of the language. Semi-speakers often remember an amazing amount of vocabulary, but may get totally lost with morphology and syntax. Having worked extensively with semi-speakers from different speech communities, I have observed at first hand that their situation causes more serious psychological problems than expected. In spite of their being normal full speakers of T, they suffer from the awareness of their linguistic deficiency in A, especially as long as A is still represented in their environment by a sufficient number of full speakers. This creates a kind of collective language-pathological situation which can be overcome by the acceleration of language death. Many semi-speakers avoid speaking a language in which they cannot easily express themselves and which they conceive of as a bastardized, pidginized non-language (the typical attitude of a semi-speaker: "X is not a language").[13]

In order to complete the model, let us finally fix the point where a language is definitely dead. Since this is not an empirical question but a matter of definition, one has to choose among certain alternatives. Was Manx a dead language when Hurlstone Jackson worked with its last speaker, Ned Maddrell, or did it die when Maddrell died? Was Hebrew a dead language before its revitalization in the form of Ivrith, or did it never die? Perhaps the answer

can only be given from case to case. For the present purpose my proposal is to define the final point of language death as the cessation of regular communication in the language (hence the bold type line, symbolizing an obituary notice, in Figure 2). Arguments in support of this definition will be presented in the next section.

A dead language may leave residues of various kinds. It may continue as a ritual language, as a secret language, as a professional jargon, etc. It may leave a codified version, which in turn can be used for ritual or other purposes. It may finally leave a substratum influence (especially lexically) in the dialect of T which the former speech community of A continues to speak.

A summary of the GAM is found in Figure 2.

Terms and Definitions

A = Abandoned Language (Language which is dying out).

T = Target Language (Dominant language which is continued).

Primary Language = L with higher degree of lexical, grammatical and pragmatic competence.

Secondary Language = L with lower degree of lexical, grammatical and pragmatic competence.

Primary Language Shift = Shift from A as Primary to T as Primary and from T as Secondary to A as Secondary.

Language Replacement (= Complete Shift) = Total replacement of A by T (possibly T_A, i.e. an A-influenced variety (dialect) of T).

Language Transmission = Purposive, directed passing-on of a language from one generation to the next.

Language Transmission Strategies (LTS) = The whole array of techniques, used by adults to assist their children in first language acquisition, e.g. "motherese", repetitions, exercise games, corrections, metacommunication, etc.

Language Decay = Pathological language disintegration.

Semi-Speaker = Member of the post-Language-Transmission break generation with imperfect knowledge of A.

Terminal Speaker (Sometimes confused with imperfect speaker) = Last generation speaker.

Simplification = Removal of linguistic complexities.

Reduction = Removal of significant/essential/functionally necessary parts of the language.

ES   SB   SC

| Historical events which lead to uneven distribution of languages in multilingual setting | Complementory distribution of domains | Lexical loss or failure of development in areas where T is favoured |

Increase of collective bilingualism because of restriction of domains → Increase of Interference (contact)

Pressure

Further increase of competence in T if A is stigmatized → Further increase of interference and simplification in A — though A remains functionally intact

Negative attitude towards A

Decision to abandon A → Interruption of Language Transmission by conscious avoidance of LTS for A and prevention of A acquisition (eventually prohibition)

Primary Language Shift

Further loss of domains of A → Language decay: Pathological reduction phenomena in the speech of "semi-speakers"

End of regular communication in A

Use of residue knowledge for specialized purposes = ritual, group identification, joke, secret language

Residue, Substratum knowledge, Continuation of a T_A dialect

Figure 2

4. Revitalization

In this short section we will be concerned with the question of revitalization in different stages of language death. In the preceding section it was proposed to view a language as definitively dead when its use for regular communication has ceased. I think this is the point up to which "natural" revitalization processes are possible. Revitalization could thus be used as justification for this definition.

Before talking about revitalization, let us summarize the different phases of the language death model conceived in section 3. GAM, as outlined above, can be divided into three phases: the primary/secondary language switch, the decay phase, and the terminal phase of death of A and its total replacement by T.

The three phases are summarized in Figure 3.

I. *Primary Language Shift*
$$A/P > A/S \brace T/S > T/P$$ in the entire speech community or in the
    majority of it (stragglers notwithstanding)

II. *Language Decay*

Emergence of Semi-Speakers
Reduction of Style Repertoire → Reduction of Grammatical System
Pragmatic Incompetence → Structural Incompetence

III. a. *Language Death*

Extinction of Communication
in A → Extinction of Cre-
ativity in A

b. *Language Replacement*

Full monolingual Proficiency
in T (possibly substratum phe-
nomena; emergence of a T
dialect on A substratum)

Figure 3

A language is usually called "healthy" before it enters stage I, but it becomes "threatened" immediately after this point. Once a new language becomes dominant in a certain speech community the old one is potentially endangered unless there exists a very strong motivation to retain it. Such motives can easily develop on the basis of an altered political situation, such as the emergence of separatist movements (cf. Basque), support from an ethnically or linguistically related community from outside (cf. Italo-Albanian as supported by Albania), removal of social pressure on the part of the dominant community, migration and gain of new prestige in the new homeland, etc. This may push an endangered speech community during phase I to revitalize A by a renewed reversal of A-T/P-S relationship; i.e. the A language is made primary again by a reinforced interest in its transmission. At stage II, where a language is "in the process of dying", revitalization becomes more difficult. As long as there is a sufficient number of full speakers left, these same speakers may begin to teach their children or grandchildren the language as soon as they observe their renewed interest in it. I have sporadically come across such cases in Arvanitika communities in Greece, where certain young adherents of leftist movements recently started to learn their parents' or grandparents' language (the interest normally decreases when they realize that Arvanitika is quite deviant from Tirana Albanian). When phase II is at an advanced stage, revitalization seems possible only by "creolization" (either by mixture with some related standard language or by mixture with a non-related language, perhaps T, on the basis of semi-speaker material; in extreme cases this is possible by a generation skip (oldest generation still speaks language; middle generation oscillates between semi-speaker and zero; youngest generation acquires language anew). Whether the creation of "regular mixture" (in the sense of Ma'a – module A from language L_1 and module B from language L_2) is possible in the course of this process cannot be examined here.

Revitalization by means of creolization is close on the fringe of natural revitalization. It is questionable whether one should take such cases – if they ever occur – to be continuations of the same language. It would seem more useful to treat them as language renewal ("language birth"), i.e. the creation of an entirely new language. This would enable us to define discontinuation of linguistic tradition in a straightforward way: any total interruption of language transmission results in language death; any revitalization after total interruption of language transmission results in the creation of a new language.

From phase III on, only artificial revitalization on the basis of thesaurus-like, codified material is possible. The most conspicuous example of such

an event is Ivrith, Modern Hebrew, which was created on the basis of the codified holy texts after more than 2000 years of interruption of regular language transmission.

5. Discrepancies and open questions: evidence for alternative models?

Campbell and Muntzel (1989: 182ff.) distinguish between four different types of language death:

1. SUDDEN DEATH: The case where a language abruptly disappears because all of its speakers suddenly die or are killed (e.g. Tasmanian).
2. RADICAL DEATH: Rapid language loss usually due to severe political repression, often with genocide, to the extent that speakers stop speaking the language as a form of self-defense (e.g. Lenca and Cacaopera in El Salvador).
3. GRADUAL DEATH: Language loss due to gradual shift to the dominant language in language contact situations.
4. BOTTOM-TO-TOP DEATH: The so-called "latinate pattern" where, according to Hill (1983), "the language is lost first in contexts of family intimacy and hangs on only in elevated ritual contexts" (e.g. Coptic or Southeastern Tzeltal).

GAM was designed as a model of gradual death because the instances on which it is based are characteristic cases of gradual death. Moreover, gradual death seems to be the prototypical case of which the others are merely variants. Cases of sudden death are of no linguistic interest, since no changes in SB and no SCs are observable. Cases of radical death may be conceived as a gradual variant of gradual death. "Overnight" abandonment of a language characterizes an entire community only in extreme cases of menacing pressure exerted on the whole group or prohibition; in contrast this occurs sporadically in all situations of "gradual" death with which I am familiar (i.e. some people shift more rapidly than others, depending on the strength of the pressure they feel). In other words, the normal situation is a mixture or a continuum between radical and gradual death, where both types of shifters, the rapid and the gradual, are present in a single obsolescent speech community. Rapid shift is characterized by the absence of an intermediate A/P–A/S switch and consequently by the lack of a semi-speaker generation in the sense defined above, but this produces a different type of imperfect speaker whom

Menn (1989: 345) aptly has termed a "rusty speaker", a person whose inter-
action opportunities have been limited for a long time and who has to invest
a great deal of energy in retrieving words and putting sentences together (cf.
Sasse for more on this type of speaker, this volume). In studies of gradual
death usually both types of imperfect speakers are described.[14] It is question-
able whether bottom-to-top death constitutes a separate type at all. In many
cases of gradual death a residue is left which may be maintained for special
purposes ranging from ritual language, secret language and professional jar-
gon to special terminology which remains as "substratum vocabulary" in the
dialect of T that the former speech community of A still uses. For instance,
in certain parts of the formerly Arvanitika-speaking community, Albanian
weaver terminology, plant names and a number of pastoral items have been
retained in the dialect of Modern Greek.[15] I have also observed the continu-
ation of a ritual language in a situation of gradual death among the Kemant,
an obsolescent Agaw community in Central Ethiopia. Kemant is a dying lan-
guage mostly spoken by elders over 40, but younger adherents of the Kemant
religion (a mixture of Christian, Jewish, and traditional Cushitic elements)
still know a number of prayers composed in an archaic variety of Kemant,
even if they are semi-speakers in the modern variety. Thus "bottom-to-top"
phenomena belong to the general field of residual maintenance and do not
contradict the conditions of gradual death: the process of obsolescence in nor-
mal communication may well run according to the usual pattern independent
of what material is continued for a specialized purpose.

    However, cases have been reported where after the extinction of normal
communication the resulting special language forms a hybrid whose mor-
phosyntactic matrix comes from the T language, but whose vocabulary (at
least in part) is a residue of A. These cases deserve special attention because
they raise the question of how and at which point during the extinction pro-
cess such mixtures can arise. A case in point is Krekonika, a secret language
used by masons of the Peloponnese in an area where formerly Arvanitika
was spoken. The morphosyntactic basis of this language is Modern Greek,
but most of the secret vocabulary is Arvanitika (Konstantinopulos 1983). The
Africanist is reminded of Ma'a, the most widely discussed "mixed language",
which is composed of Cushitic vocabulary and a Bantu morphology. A few
more of such languages have been reported in the literature, but no plausible
theory of their origin is as yet in sight, especially due to the fact that we
know very little about the actual history of the hybrid languages involved.[16]
The above considerations lead us to the conclusion that the empirical find-
ings of gradual death situations can in fact be fairly well generalized into
a comprehensive model of "prototypical" language death. What remains is

to test its applicability to a broad variety of cases, especially those where deviation from the pattern described in section 3 are reported. At first sight, most of the instances dealt with in the literature on language death seem to fit rather well, including those treated in this volume. Nevertheless, a number of fundamental questions remain open. In the cases of Suba (Rottland), Gweno (Winter), Kore (Dimmendaal), Yaaku (Brenzinger) and Elmolo (Brenzinger), the ES phenomenology seems to be quite standard: all involve weaker or stronger pressure situations that urge a minority group to develop a more or less negative or "schizophrenic" attitude towards their ethnic identity and decide[17] to integrate into a larger ethnic group. In all cases this results in spectacular changes of SB. The problem is that we do not know very much about structural consequences. It is therefore difficult to draw conclusions with respect to the entire process. There are certain discrepancies which simply cannot be resolved as long as we don't have detailed descriptions of the three separate domains which we tried to disentangle in section 2. For instance, it is said that Elmolo adults seem to have insisted on speaking the language to their children, but that the children refused to speak Elmolo and replied in Samburu (Heine 1982: 177). Does this make a reconsideration of the LTS hypothesis necessary? On the other hand, Heine's (1980) Elmolo, elicited from the last Elmolo speaker, is clearly a semi-speaker product (cf. Sasse, this volume). This should not be the case if imperfect language learning results from the suppression of LTS's.[18] The reverse problem is posed by Yaaku: in spite of the explicit decision to give up the language and to interrupt language transmission, a general lack of semi-speakers is observed. Given the dearth of information we cannot decide whether this is significant[19] or whether a relatively short and not very spectacular decay phase has simply escaped the field workers.

This returns us to the opening considerations of this paper. We are still not sufficiently equipped for a better understanding of the interaction of the three domains of social structure including its political and economical aspects (ES), sociolinguistic patterns (SB), and structural consequences (SC). Despite its general applicability, GAM is dependent on certain specific conditions which are not present everywhere.

I cannot help but conclude this paper with the stereotype dictum that much more work must be done in all areas of research. Africanists will have to exploit the opportunity of carrying out longitudinal studies in endangered but still "healthy" speech communities such as the Dahalo (Tosco, this volume). Furthermore, they will have to be careful not to draw premature conclusions on the basis of limited material, as the entire field of linguistic obsolescence is still too poorly understood to allow for broad generalizations.

Notes

1. I am indebted to Nancy Dorian, Wolfgang Dressler, Mechthild Reh, Rosita Rindler-Schjerve and the participants of this conference for valuable comments on an earlier draft of this paper.
2. It goes without saying that we will not be concerned here with cases of language extinction due to the sudden extinction of speech communities. Where a language disappears because all of its speakers die or are killed is of no linguistic interest. Nor do we mean dead languages as opposed to living languages in the same sense used in schools (Latin and Greek vs. French and Spanish). In our view Greek is not a dead language because it survives in the form of Modern Greek.
3. A clear distinction is not always made even in most recent and otherwise highly interesting studies. A good example is Lanoue (1991), cf. esp. p. 91.
4. I am indebted to Rosita Rindler-Schjerve for drawing my attention to the necessity of an integrated approach.
5. In the model devised in section 3, I have therefore kept the ES part as general as possible. In order to investigate correlations between ES and SB, an extended model will have to establish a number of ES and SB parameters. For instance, it will have to specify the various conditions under which an uneven distribution of languages in a multi-lingual setting comes about, e.g. migration, conquest, intrusion, gradual gain of importance of one language over another, conscious integration, and so forth. In the SB domain, it will have to specify the group-determining features of the two languages, e.g. how language is tied to ethnicity, profession, etc. Finally, the relation of the two languages is of importance, e.g. whether L_1 is a dialect of L_2 or a totally different language, whether L_1 is a written language and L_2 is not or vice versa, etc.
6. A considerable number of structural phenomena connected with language death are being studied particularly for the general linguistic and/or historical issues they give rise to: 1. substratum identification: reconstruction of historical events from linguistic residues that obsolete languages have left in superseding languages; 2. typological and universalistic implications of language contact and decay (e.g. its relation to pidginization and creolization processes); 3. patholinguistic implications of imperfect speech in the decay phase; and many others.
7. The label "Gaelic" here is merely an abbreviation for "East Sutherland Gaelic" (ESG). This has to be stressed for two reasons. First of all, ESG is virtually the only Gaelic dialect whose fading has been investigated in sufficient detail; there isn't even one other Scottish Gaelic dialect that has been studied in a way that parallels Nancy Dorian's work on ESG. That means that her findings aren't even safely generalizable for Gaelic, never mind for other Celtic languages or for non-Celtic languages. Secondly, the label "Gaelic" is not thought to suggest that the language as a whole is currently a fit subject for language death studies, rather than the ESG variety in particular.

8. The use of the terms "primary language" and "secondary language" roughly follows Weinreich (1967: 74 ff.). There, the distinction is based on two criteria, firstly the degree of lexical and grammatical competence, secondly the relative stylistic proficiency, i.e. the degree of pragmatic competence. According to Weinreich the difference is a matter of the order of language acquisition.

9. Tsitsipis (1981) uses the term "terminal speakers". Dorian's "semispeakers", introduced in Dorian (1977), is preferable, because terminal, i.e. last generation speakers must not necessarily be imperfect speakers. Semi-speakers, however, are defined in terms of their imperfect language competence.

10. Regarding certain problems with the notion of simplification cf. also Andersen (1989).

11. For the notion of negative borrowing cf. Sasse (1985).

12. Nancy Dorian (p.c.) has reminded me of another whole category of non-contact-induced change that does "not involve loss of grammatical categories and heavy expression deficits": reduction of syntactic options (e.g. merger of two syntactic constructions for expressing the passive into a single one, or reduction of three negative imperative constructions in one, both in East Sutherland Gaelic). It is disputable, however, whether such "microcosmic style reductions" (Dorian) connected with particular syntactic structures really make up a category of their own. I am inclined to believe they don't because on closer inspection they often turn out to be either style reductions connected with register loss or indirect contact-induced changes (i. e. some sort of "negative borrowing") due to the fact that the subtle conceptual distinctions implicit in these options simply do not match with distinctions found in the contact language. More research in this area is certainly necessary, and I am grateful to Nancy Dorian for having brought this fact to my attention.

13. There are some striking parallels between semi-speaker speech and speech-pathological situations, which are worth being investigated. As far as I know, except for Menn (1989) no serious attempt has been made so far to compare language decay with aphasic conditions.

14. In the Arvanitika case, for instance, rapid shift, reconstructible by the absence of a decay phase and the presence of rusty speakers, is observable mainly in families of inferior social status. This can easily be explained as a strategy of suppressing language as a diagnostic feature of social inferiority (cf. Sasse 1985: 43).

15. Such elements usually do not have a long life because A-influenced T dialects are themselves subject to dialect death being absorbed by the standard variety of T.

16. Although this is outside the scope of our present discussion because it concerns "language birth" rather then language death, a few words about this type of "hybridization" are in order here. Seven cases of linguistic hybrids roughly composed after the pattern "morphology from L_1, vocabulary from L_2" have been found so far: in addition to Ma'a there are three Romani dialects (English, Armenian, and

Spanish), further Michif (Cree and French), Media Lengua (Quechua and Spanish), and Mednyj-Aleut (Aleut and Russian). The most recent summary discussion is found in Thomason – Kaufman (1988). Several models have been proposed to deal with this phenomenon. One is that of "gradual shift" by disruptive borrowing, i.e. a successive replacement of basic elements, especially a replacement of the morphosyntactic frame. This would imply that A borrows (nearly) all of the morphology of T but at first continues using the vocabulary of A. This is then gradually replaced by elements of T until the "normal" state of T is reached. The model is extremely problematic because borrowing of morphology to the extent that entire systems are replaced has never been attested in an observable case and is only assumed for conjecture here. An exception is dialect contact (i.e. contact between very closely related morphological systems), where much of the morphological material is already identical or very similar, so that interdialectal analogies can operate. (Gradual shift between Bantu languages is usually of this kind.) This is not the case in the instances under discussion, the languages involved usually being extremely dissimilar. A more promising explanation (for some of the cases at least) would be to assume relexification of T after the shift has already taken place: assume a speech community where A and T are spoken side by side. The younger generation is quasi monolingual in T, but the vocabulary of A is still "present". Under these conditions, A vocabulary can be freely inserted into the morphosyntactic frame of T, just as modern German jargons use English verb roots in *handle-n* 'to handle', *click-en* 'to click', *flipp-en* 'to flip', *rock-en* 'to rock ', *shift-en* 'to shift', *drift-en* 'to drift', and many more. A hybrid, initiated in this way, can be continued for whatever purpose even after the complete replacement of the original version of A, e.g. as a professional jargon as in the Krekonika case, for the creation of a ritual or secret language for which the disguising character of the forgotten A vocabulary is exploited, or even as a last minute revitalization strategy in a period of increasing group identity (as perhaps in most of the seven cases cited above).

17. A warning is necessary not to take the term 'decision' too literally. Decisions explicitly made by the entire speech community certainly do occur, but these are the exception rather than the rule. Several such cases have been reported for East Africa, the most spectacular one being the Yaaku who decided to give up their language in favor of Maasai in a public meeting sometime in the 1930s (cf. Heine 1982: 30). In most of the cases however, "decision" is to be read as "tacit collective agreement". In the extreme cases of menacing force such a collective agreement may even be collective coincidence due to the fact that all members of the community react to the repression by means of the same survival strategy.

18. There would be a way out of the dilemma if we knew more about SB patterns in the Elmolo community of the 1920s and 1930s when the shift occurred. Experience with Arvanitika has shown that even in cases where the decay phase is initiated by suppression of LTSs for the overwhelming part of the community, there may exist a small group of conservative language users who insist on speak-

ing A, but whose children deliberately refuse to learn it once they internalize the "modern" attitude against it.

19. Perhaps because the socio-economic gap between those elders who still speak the hunter-and-gatherer language and the "modernized" pastoralists who gave it up is so striking that the latter refuse to have anything to do with it?

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Codeswitching as a mechanism of deep borrowing, language shift, and language death

Carol Myers-Scotton

Introduction

The problem which occasions this paper[1] is the following: in some situations of heavy contact between two languages, one language takes on not only cultural lexical forms from the other language, but also core[2] lexical forms (i.e. words for which the borrowing language already has its own equivalents) and even system morphemes[3] (i.e. function words and inflections) and syntactic patterns. Or heavy contact, and the requisite sociolinguistic climate, may lead speakers to shift from their L1 to an L2 as their primary means of communication, carrying with them features of the L1. In East Africa, we have an excellent example of the result of such contact: Ma'a (Mbugu), spoken in northeastern Tanzania. Thomason (1983) offers a thorough discussion of Ma'a as a Cushitic language which has borrowed from a neighboring Bantu language or languages numerous features of its morphosyntax (also see Thomason – Kaufman 1988). Brenzinger (1987), however, sees Ma'a as a result of language shift from a former Cushitic language; that is, he characterizes Ma'a as a Bantu language with a substrate of some Cushitic features, notably much lexical material. Whichever scenario is accepted, there is no question that the resulting language is a composite, leading earlier writers to cite Ma'a as a prime example of a linguistic hybrid which is not a pidgin or creole (Whiteley 1960, Goodman 1971).

But other, if less dramatic, examples exist elsewhere in the world. Some are discussed in Thomason and Kaufman (1988), e.g. Greek as spoken in scattered communities in Asian Minor (Dawkins 1916, although the extent of Turkish grammatical material is less dramatic than the Bantu material in the Ma'a case); Romani spoken by English Gypsies, consisting of a Romani lexicon with English grammar; and Aleut as spoken on Mednyj in the Aleutian Islands, which has had its extensive finite verb morphology replaced by

that of Russian (Menovščikov 1969). Lesser known cases seem to be the Javanese heavily laden with Indonesian lexicon spoken by the Peranakan Chinese of East Java (Wolff 1983) and Media Lengua, an Amerindian contact language spoken in Ecuador, consisting largely of a Quechua base and a Spanish lexicon (Muysken 1981). Further, back in East Africa, there are a number of languages which are still maintained while sustaining inroads from another language, e.g. Dahalo, a Cushitic language, spoken along the northern Kenya coast, but with serious incursions from Swahili (Tosco this volume); and Okiek in Kenya's Narok District, which shows, at the least, examples of deep lexical borrowing from Maa (Maasai) (Kratz 1986).

Thomason (1983) and Thomason and Kaufman (1988) deserve our appreciation for drawing linguists' attention to the facts that cases of pervasive grammatical borrowing exist and that language shifts are often not unitary. Their work is so important because many linguists, under the influence of Sapir (1921)[4] and others, have assumed that the core systems of language (especially the morphology) are relatively impervious to interference. For example, many linguists have dismissed contact studies as of no more than descriptive interest, assuming that most relevant features are cultural lexical forms and that therefore such studies have nothing to offer to the quest for explanatory theories about the internal nature of language. But, given certain types of language contact situations, languages can borrow a good deal more than lexical loans for new objects and concepts. Also, a consideration of the *process* in contact communities showing language shift and language death may suggest that such changes are less en masse than current models concentrating on end products imply. Codeswitching, as a synchronic phenomenon, is also bare-faced evidence that languages are far from single or sealed units, but does suggest some possible modularity or sub-systems. That is, all parts of a language may not march to the same drummer. This likelihood, as well as differences in psycho-sociolinguistic profiles between groups in a community, may result in stages in structural change and discontinuities in community repertoires. This is counter to a general assumption that most change is gradual and is most likely to result in losses for the sociolinguistically minor language. Rule gains and compromises, instead of losses, are distinct possibilities. Denison (1977: 21), for example, raises the issue of whether rule substitution can "if it goes far enough, ultimately amount to 'language death' ".

But it seems unlikely that changes in their structure make languages disappear. They disappear because of changes in language use patterns in the community; their speakers, not the languages, disappear. Mohan and Zador (1986: 317), in invoking the notion of punctuated equilibrium from evolu-

tionary biology to characterize language death, suggest that languages "do not die because of the nature of their linguistic structure" but because of a blow from the outside, a shift in language loyalty in parts of the community. They write (1986: 313) of what we may call a "dying" language as, in fact, already "dead at its source, but with a now finite community of native speakers continuing, like the earlier light of a dead star, to travel its original course and give the illusory picture of vitality".

Surely considerations of what can be borrowed and the processes languages undergo in language shift/death are relevant to general theoretical issues as universals, markedness and the organization of language in the brain, as well as discussions of such specific matters as positive or negative evidence of constituent structure (i.e. what must go with what).

The issue, however, remains, what is the mechanism for the borrowing of non-cultural lexical forms and parts of the core systems of phonology, morphology, and syntax, and for the structural composite found in some results of language shift? Many, of course, have offered "heavy cultural contact" as behind such results; but a moment's reflection reveals that "contact" (and accompanying bilingualism) may be necessary backdrops, but they are not means or mechanisms.

This paper argues that one important mechanism for "deep borrowing" and shift phenomena is codeswitching. It is also suggested that, for the same reasons, codeswitching is involved in language death. Rather than looking upon language death as necessarily a gradual loss of a language's grammatical apparatus, I will suggest that at least some instances of language death may involve the pervasive addition or substitution of the grammar of another language in the codeswitching situation.

Types of borrowing compared with codeswitching

Let us begin by defining some abbreviations which will be used in this discussion. Borrowing (hereafter B) is the incorporation into one language of material from another language. Codeswitching (CS) is the selection by bilinguals (multilinguals) of material from an embedded language (EL) in utterances from a matrix language (ML) in the same conversation. A major difference between B and CS is that under B, EL forms become part of what constitutes the lexical competence of an ML speaker, while EL forms in CS undergo no such incorporation, but are accessed from the EL only to serve the socio-pragmatic needs of the current exchange.

The ML has the more structurally influential role as the language of the "frame" of CS utterances, as will become clearer below. CS can involve units at all levels from a single morpheme up to several or more sentences. Note that this is a different position from that taken by some researchers on CS who would restrict "true" CS to stretches minimally as long as phrases and clauses. As will become apparent, what makes CS an important mechanism in the process of introducing material from one language in another is that CS does apply at the morpheme level, possibly resulting in constituents consisting of system morphemes from one language and content morphemes from another language.

Lexical B involves two types of forms: cultural loans, which stand for objects or concepts new to the B language's culture; and core loans, which stand for objects or concepts already encoded by the B language. Of course, (and in line with the non-unitary approach of this paper), it is an oversimplification to speak of many B forms as loans into the language as a whole; some B forms only become part of the competence of certain groups of speakers, not all; and some B forms never achieve general currency, but are limited to certain styles. Also, the degree of phonological (and even morphological) integration of a B form may differ from speaker to speaker, depending on the speaker's sociolinguistic profile (including degree of bilingualism).

Deep borrowing (DB) will be used specifically for B involving not only core lexical forms, but also system morphemes, and syntax. DB also includes phonological features, but they will not be considered here.

The process of CS facilitates DB between the ML and the EL, it will be argued. If CS took place in a sociolinguistic vacuum, the borrowing could be in either direction; but in a living community the borrowing is asymmetrical: the flow is mainly from the sociolinguistically dominant language to the other one.

Cultural and core lexical B forms enter the borrowing language (the ML) by different processes. There need be only a slender bond between CS and the process of borrowing cultural B forms; because such forms fill a lexical vacuum, they can enter the language without an additional impetus. Although core B forms also may enter a language without widespread CS among its speakers, CS is an obvious mechanism to introduce such loan words. This is because CS displays potential B forms in juxtaposition with material from the B language. The weight of this juxtaposition, over time and many interactions, results in B. That is, a core B form typically starts out as a CS form, meaning there is a continuum between these B forms and CS forms. While some cultural B forms also enter the language through CS, these B forms often

enter the ML abruptly, in the same manner as the object/concept for which they stand.

CS is differentiated from B in two major ways. First, ML speakers may be monolingual and still use B forms, but those who use CS forms must show some degree of bilingualism. Second, B forms have acquired status as part of the grammar of the ML and therefore their relative frequency for encoding the concepts they stand for in a large data corpus is more similar to that for native forms than it is to CS forms. Also, this frequency is predicted to show up across a number of speakers. However, because they have no status in the ML, CS forms have a frequency prediction quite different from that of native ML forms; they may occur only once or twice and possibly only in the speech of a single individual.

Saying that CS is involved in the incorporation of EL core lexemes and morphosyntactic material into an ML is not new, of course. Where this paper claims to make its contribution is in going beyond this general observation to demonstrating the actual mechanisms which seem involved in this transmission of material from one language to another. In order to make these claims with possibly diachronic consequences, I must first sketch the model of synchronic CS outlined in Myers-Scotton (1992).

A frame-based process model of CS

This model follows the premise that CS proceeds in two processing steps (whether simultaneous or sequential) and that the more important is the step which builds the frame for CS utterances. The model applies to intrasentential CS and views such utterances as consisting of three types of constituents: (1) Those constituents of most interest in this paper are constituents composed of morphemes from both the Matrix Language (ML) and the Embedded Language (EL); these are called ML+EL constituents. (2) The remaining two types of constituents are ML or EL islands; these are composed entirely of morphemes from one language only (ML or EL) and must be well formed according to the grammar of that language. The first step in building the frame involves applying two ML hypotheses (discussed below) to ML+EL constituents and specifying which constituents may be islands. Filling in content morphemes is the second step.

Prior to building the frame, the two (or more) languages involved in CS must be differentiated; that is, the ML must be identified. The ML is identified on psycholinguistic and sociolinguistic grounds independent of its role in

CS. The ML tends to be the speaker's more dominant language in terms of proficiency and it is the language for which community norms make it the more unmarked choice for the interaction in question.[5]

Two hypotheses regarding the ML are offered to explain frame building in ML+EL constituents in CS. The Morpheme Order Hypothesis predicts that the morpheme order of the ML prevails in such constituents. The System Morpheme Hypothesis predicts that all productive system morphemes in such constituents must come from the ML.[6]

I. Support for the matrix language hypotheses

Consider the following examples from Swahili/English CS in Nairobi, Kenya. They come from naturally-occurring conversations among second language speakers of Swahili and English who do not share the same first language; Swahili is their more dominant language in terms of proficiency and it is also the more unmarked choice for casual, inter-ethnic conversations. Swahili is the ML in these CS utterances. Examples (1) through (3) show Swahili morpheme order:

(1) *[Mungu anaweza yote muamini ataweza kukubadilisha na utakuwa na]*
     mambo mengi NEW–mapya katika maisha yako.

mambo	*mengi*	*NEW* /nu/	*–mapya*	*katika*	*maisha*	*yako*
things	many	new	cl.6-new	in	life	your

     '[God is able to do all (if) you believe he will change you and you will have] many new things–new in your life.'

     (Myers-Scotton 1989: 4)

(2) *ImeTURN BLACK sana.*

i-me-turn /taən/	*BLACK* /blaek/	*sana*
it-PERF-turn	black	very

     'It had turned very black.'

     (Myers-Scotton 1989: 2)

(3) *H-ao*   *wa-na-taka*   *TIMING PROPER*

H-ao	*wa-na-taka*	*TIMING PROPER*
DEM-cl.2	cl.2.-NON-PAST-want	timing proper

     'Those (people) want proper timing.'

     (Myers-Scotton 1989: 2)

Examples (4) and (5) show that all productive system morphemes in the ML+EL constituents come from the ML, Swahili:

(4) *[... Ukikaa huko Baringo,] u-na-CHANGE, [mazee. Unafikiri kama watu*
     wa huko jo! Ukija huku watu wanashangaa. Unaanza] ku-BEHAVE [ka-
     ma watu wa huko] wa-na-vyo-BEHAVE.

u-	*-na-*	*CHANGE (/čeinǰ/*
2nd sing	PRES	change

ku-BEHAVE /biheiv/	*wa-*	*-na-*	*-vyo-*	*BEHAVE*
INFIN-behave	3rd pl	PRES	MANNER	behave

     '[If you live at Baringo,] you change, [my friend. You think as people
     from there! If you come here (Nairobi) people will be amazed.] You
     [will begin to] behave [as people from there] behave.'

                                              (Myers-Scotton 1989: 5)

(5) *[Haukuona] a-ki-ni-BUY-i-a [beer siku hiyo]?*

a-	*-ki-*	*-ni-*	*BUY* /bai/-	*-i-*	*-a*
3rd sing	PROG	1st sing obj	buy	BENEFACTIVE	INDICATIVE

     '[Didn't you know] he was buying [beer] for me [that day]?'

                                       (Myers-Scotton unpublished data)

II. ML and EL islands

As noted above, in addition to ML+EL constituents, intrasentential CS also
includes both ML and EL islands, constituents entirely in one language.
Which constituents may be islands seems to vary from language pair to pair.
But the principle that such islands exist in CS utterances is universal, and
their specification is part of the frame activated whenever speakers engage
in CS.

   Examples of islands follow. (6) illustrates that a predicate may be an EL
island in English in Swahili/English CS; (7) illustrates what seems to be a
universally possible island, a set phrase (*PEOPLE ON THE MOVE*):

(6)
I-na	*shida*	*ny-ingi*	*yaani*	*ku-SET*
cl.9-with	problems	cl.10-many	that is	INFIN-set

GOOD EXAMPLES	*i-na*	*m-ambo*	*m-engi*
good examples	cl.9-with	cl.6-matter	cl.6-many

     'There are a lot of problems, that is, to set good examples has (requires)
     many things.'

(7) *Wewe*   *u-na-ju-a*   *bwana*
     you (emphatic)   2ndS-NON-PAST-know-INDIC   mister

   hi-i   *FASHION*   *ni*   *y-a*   *wa-le*   *wa-tu*
   cl.9-DEM   fashion   is   cl.9-of   cl.2-DEM   cl.2-person

   PEOPLE ON THE MOVE.   *Sasa,*   *wa-tu*   *kama*   *wewe*
   people on the move.   now   cl.2-person   as   you

   amba-o   *wa-me-baki*   *nyuma*
   REL-cl.2   cl.2-PERF-remain   behind

   ha- mu- wez- i   *ku-APPRECIATE*   *hi-yo*
   NEG-2ndPL-able-NEG   INFIN-appreciate   DEM-cl.9

   'You know, mister, this fashion is of those people, people on the move.
   Now, like–people like you who remain behind, you cannot appreciate
   this.'

   While islands are important components in the process model, they do
not figure crucially in this paper. Rather, it is the Morpheme Order and the
System Morpheme Hypotheses which will be suggested as the explanatory
mechanisms for contact-induced change.

Types of language interference and where they come from

Recognition of the different results for the language in a borrowing vs. a shift
situation is one of the most important insights in the Thomason and Kaufman
(1988) model for interference phenomena. Under B, the ML is maintained,
but sustains incursions from the EL; under language shift, the ML is dropped
and its speakers shift to the EL (their new ML). Basically, Thomason and
Kaufman claim that under B (we will call it the "maintenance condition"),
contact phenomena first (and primarly?) consist of lexical loans; however,
under the "shift condition", ML speakers shift to the lexicon of the EL, but
may bring with them elements from ML phonology and morphosyntax. They
do allow, however, that given certain types of cultural pressure, even under
the "maintenance condition", an ML may borrow from the phonology and
morphosyntax of the EL. For this reason, it seems, they argue that Ma'a, with
its Bantu morphosyntax, can still be considered the result of a "maintenance
condition". This will be discussed further below.
   Thomason and Kaufman cite case after case to illustrate their model. They
and others also offer ample discussion, albeit often only in the most general
sense, of the types of socio-psychological factors which obtain when either