THEORY OF LANGUAGE DEATH

und

LANGUAGE DECAY AND CONTACT-INDUCED CHANGE: SIMILARITIES AND DIFFERENCES

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The following two papers were presented at the International Symposium on Language Death in East Africa, Bad Homburg, January 8 - 12, 1990. These are preliminary drafts of the version to be published in the Proceedings of the conference. Comments are most welcome.
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, because the cultural tradition connected to it and the sociocultural 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 1990:5). 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 very few large ethnic units, the formation of big national states, highly developed transport technology, the spread of supraregional communication media, etc. etc. have led to an enormous increase in the extinction of smaller languages which can hardly be stopped.

It would seem strange that such a frequent and well-known phenomenon has not been studied much earlier; nevertheless it is a fact that the investigation of language death is a new and developing field, which 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.\textsuperscript{1} The title of this paper is

\textsuperscript{1} It goes without saying that we will not be concerned here with cases of extinction of languages due to the sudden extinction of speech communities. The case where a language disappears because all of its
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, which covers all kinds of relevant information including socio-economic factors, historical events which trigger them, linguistic and sociolinguistic details in different phases of linguistic decline and contraction, speech behavior of different layers of imperfect speakers in the phase immediately preceding extinction, is available only for a limited number of European minority languages. 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 the author of these lines, covering approximately 25 years of continuous research, the first volume of which is in print. It will deal with all possible facets of Arvanitika history, from its first attestation till the final phase of 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 examines 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

speakers die or are killed does not provide any linguistic interest. Nor do we mean dead languages as opposed to living languages in the 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.
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 of the European minority communities which speak an obsolescent language has been studied in comparable detail. There are a number of interesting smaller case studies, including those on Breton by Wolfgang Dressler and his students; on Hungarian in Austria by Susan Gal, and several others, 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 (forthcoming) for Italo-Albanian.

In addition to the work on European language death situations, there are a number of scattered studies from other parts of the world, which 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 at this conference. 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 been made so far to give a broad overview of current research in this field (cf. Dressler and 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 without describing the actual linguistic events, others investigate structural phenomena of dying languages without paying attention to the sociolinguistic status of the speech form under consideration, and so on. However, in order to understand the entire process, 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. First of all, there is the entire range of extralinguistic factors, the cultural, sociological, ethno-historical, 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, whose detailed investigation 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 and languages, and so on. These phenomena are best investigated in the framework of an extended and modernized version of Labovian sociolinguistics.

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, Dylirbal), do not differ very much in this respect. African material will serve as an important corrective here.²

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.

² 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 multilingual 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 L₁ is a dialect of L₂ or a totally different language, whether L₁ is a written language and L₂ is not or vice versa, etc.
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 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

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A considerable number of structural phenomena of 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 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.
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 diastatic 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 account of 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 Arvanitika
and Gaelic, I will call it the Gaelic-Arvanitika-Model (GAM).
The 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 and
that, consequently, the question of whether differences in ES
phenomena result in differences in SB and these in different
structural changes, remains open. 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 holds particularly 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 volumes 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, then a change in speech behavior obtains due to or as a reaction to the extralinguistic factors, and 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 being operative throughout the entire process. The simple diagram below 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 which is given 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 with a shift, made simultaneously or nearly simultaneously by a substantial portion of a bilingual speech community, from the A language as a primary (P) language to the T language as a primary language, and consequently from the T language as a secondary (S) language to the A language as a secondary language. The use of the terms 'primary language' and 'secondary language' roughly follows Weinreich (1967:74ff). The distinction is based there 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, but this is not necessarily true; some of the European cases I am familiar with (e.g. Arvanitika, Aromanian) provide evidence for the assumption that the primary language may be learned second, or at best simultaneously with the secondary language, but becomes primary later on by way of socialization in the peer group and by school education, because at a later stage of language acquisition the child is subjected to more subtle linguistic skills (e.g. formation of more complex syntactic constructions, derivative creativity, synonymy, elaborated vocabulary, etc.) in the T language only, even if he still
continues speaking A at home. I propose to call this situation language shift.  

How is 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, partly community-specific (traditional), cf. Ingram (1989:127). In any case, it always seems to involve a special way in which mothers (or other language-transmitting adults) talk to their children, 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 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

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Sometimes the term is used for the entire process of language death, but I think it is better suited to the period of P/S switch. There is also a term language replacement, which other researchers call complete shift. I think this should be reserved for the result of language shift, namely the point where the abandoned language is really abandoned and replaced by T.
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 Aromanian 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, as a consequence of which lexical loss or failure of lexical development in domains where the dominant language is favored, appears. 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 and Wodak-Leodolter 1977, Tsitsipis 1984). 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 1981:342ff., 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.).

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. 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, this volume). I

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5 Tsitsipis (1981) uses the term “terminal speakers”. Dorian’s “semi-speakers”, 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.
will only briefly touch a number of issues which may help us understand the nature of language decay and the way it evolves, and the theoretical consequences these issues give rise to.

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-Schjerke (1989), without, however, 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, 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

6 Regarding certain problems with the notion of simplification cf. also Andersen 1989.
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"7 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 imperfectly 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

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7 For the notion of negative borrowing cf. Saese 1985.
handled with care. For example, the disappearance of the optative in the Arvanitika of the beginning 20th century (Tsitsipis 1981:313ff.; 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 anyhow. So the Arvanitika conjunctive simply extended its meaning to cover optative meaning as well on the model of the Greek conjunctive, and dropped the luxurious 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.

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 not seldom causes serious psychological problems. 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").

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 Ivrit 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 with the cessation of regular communication in the language (hence the bold type line, symbolizing an obituary notice, in table 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 table 2.

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8 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 Henr 1969 no serious attempt has been made so far to compare language decay with aphasic conditions.
Table 2

ES External Setting

Historical events which lead to uneven distribution of languages in multilingual setting

SB Speech Behaviour

Complementary distribution of domains

Increase of collective bilingualism because of restriction of domains

Further increase of competence in T if A is stigmatized

SC Structural Change

Lexical loss or failure of development in areas where T is favoured

Increase of interference (contact)

Further increase of interference and simplification in A - although A remains functionally intact

Decision to abandon A

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

Language Shift

Further loss of domains of A

End of regular communication in A

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

Language decay: Pathological reduction phenomena in the speech of "semi-speakers"

Residue, Substratum knowledge, Continuation of a TA dialect
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.

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 TA, 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 Semi-Speaker) = Last generation speaker.

Simplification
= Removal of linguistic complexities.

Reduction
= Removal of significant/essential/functionally necessary parts of the language.
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 call a language definitively dead with the end of regular communication in it. 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 table 3.

Summary of Phases

I. Language Shift

\[
\begin{align*}
A/P & > A/S \\
T/P & > T/S
\end{align*}
\] in the entire speech community or in the majority of it (stragglers notwithstanding)

II. Language Decay

Emergence of Semi-Speakers
Reduction of Style Repertoire $\rightarrow$ Reduction of Grammatical System
Pragmatic Incompetence $\rightarrow$ Structural Incompetence

III. a. Language Death

Extinction of Communication in A $\rightarrow$
Extinction of Creativity in A

b. Language Replacement

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

Table 3
A language is usually called 'healthy' before its entering stage I, but 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 is 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. Italoalbanian 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 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 by 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 closely 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 Ivrit, 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 SC's 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, but occurs sporadically in all situations of otherwise "gradual" death I am familiar with (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 gradual and radical death, both types of shifters, the rapid and the gradual, being present in a single obsolescent speech community. Rapid shift is characterized by its 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 produces a different type of semi-speaker whom Menn (1989:345) aptly termed "rusty speaker", a person whose interaction 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. In studies of gradual death usually both types of semi-speakers have been described. It is questionable 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 proposes ranging from ritual language, secret language, professional jargon to special terminology continued as "substratum vocabulary" in the dialect of T.

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9 In the Arvenitika 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. Besse 1985:43).
continued by the former speech community of A. 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 continued.\textsuperscript{10} I also observed the continuation of a ritual
language in a situation of gradual death among the Kemant, an
obsolescent Agaw community in Central Ethiopia. Kemant is a
dying language 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 normal 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 morphosyntactic 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
process 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 case
of a "mixed language", which is composed of Cushitic vocabulary
and a Bantu morphology. A few more such cases 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

\textsuperscript{10} 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.
languages' involved. The above considerations lead us to the conclusion that the empirical findings 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 at this conference. Nevertheless, a number of fundamental questions remain open. In the cases of Suba (Rottland), Gweno (Winter), Kore (Dimendaal), Yaaku (Brenziger), and Elmolo (Brenziger), 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 to

11 Although this is outside the scope of our present discussion because it concerns "language birth" rather than 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 L₁, vocabulary from L₂' have been found so far; in addition to these there are three Romani dialects (English, Armenian, and Spanish), further Abkhis (Georgian and French), and two Romani dialects (Georgian and Spanish) and Mednyi-Alut (Aleut and Russian). The most recent summary discussion is found in Thomsen and Kaufmann (1968). 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 it borrows (nearly) all of the morphology of T until at first continues using the vocabulary of A, which 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 herein. An exception is in 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 analogy 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 being quasi monolingual in T, but the vocabulary of A is still 'present'. Under those conditions, a vocabulary can be freely inserted into the morphosyntactic frame of T, just as modern German jargon uses English verb roots in handle - 'to handle', click - 'to click', flip - 'to flip', rock - 'to rock', shift - 'to shift', drift - '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 kinship case, for the creation of a ritual or secret language for which the disassociating character of the formation 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).

12 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 Kassel in a public meeting sometime in the 1930s (cf. Heine 1968). In most of the cases however, 'decision' is to be read as 'exact collective agreement'. In the extreme cases of
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 Elmoolo adults seem to have insisted on speaking the language to their children, but that the children refused to speak Elmoolo and replied in Somali (Heine 1982:177). Does this make a reconsideration of the LTS hypothesis necessary? On the other hand, Heine's (1980) Elmoolo, elicited from the last Elmoolo 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 LTSS. 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 or whether a relatively short and not very spectacular decay phase simply escaped the field workers.

This brings us back 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 (SS), 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 avoid concluding 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). And 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 feel free for generous generalizations.
Bibliography


1. The distinction between language contact and language decay

In the present paper I shall try to establish a number of criteria for a distinction which I think is extremely important, but which is not always easy to make and has therefore been the cause of considerable confusion, namely the distinction between the phenomenology of transfer processes in normal language contact situations and the pathological situation of language decay in the final phase of language death.

Let me first try to explain in a few words why I consider this distinction necessary. First of all, if it could be demonstrated that normal language contact phenomena can be differentiated from language decay, we would have a structural correlate of language death. We could say that a language is dead once it arrives at the phase of decay. As is pointed out in Sasse (this volume), decay status has consequences both for the psychological condition of the speakers involved in the decay process, who tend to hide or disguise their imperfect language competence and avoid speaking the obsolescent language (a condition which accelerates the final extinction of the language), and for the possibilities of revitalization insofar as a decaying language can be revitalized only by way of drastic creolization. Second, it would be desirable for historical linguistic studies to have at its disposal a methodological guide, a heuristic yardstick, so to speak, which could help us distinguish between cases of continuous language transmission and cases of interrupted language transmission. If it were possible to identify language decay as a phenomenon sui generis, closely connected with interrupted language transmission, one could perhaps deal with certain problems of genetic relationship in a more straightforward way. Thirdly - and this is a more practical question but nevertheless of


extreme importance, it is necessary to evaluate the data we obtain when doing field work in language death situations. If we conduct a linguistic investigation in a speech community where only semi-speakers are left, we must be aware of the possibility that most if not all of the elicited material will be distorted speech that has undergone certain processes of reduction with the result, that the original grammatical system of the former full speakers of the language under investigation will be accessible only by way of reconstruction.

The view that borrowing and decay must be kept apart is relatively unusual among specialists on language contact and death. On the contrary, it is often said that the types of change observable in a moribund language do not differ principally from those occurring in other kinds of contact situations. Even Dorian (1981:151) has stressed that the same kinds of changes occur in healthy languages, though the amount and the rate of change may be atypical in the case of language death. A similar view is expressed by Romaine (1989:71ff.). Some authors, while tacitly assuming that there is a difference, draw attention to the fact that in some cases it is hard to distinguish the two kinds of phenomena (e.g. Campbell and Muntzel 1989:195). While this is basically correct (cf. also Sasse, this volume), it can nevertheless be shown that in principle borrowing and interference on the one hand, and irreversible loss and reduction in the system of an obsolescent language on the other, are quite different things.

Before presenting linguistic evidence to substantiate my claim, it is necessary to distinguish the two types of individuals responsible for the two types of phenomena under discussion.

2. Bilingual speaker and semi-speaker

2.1. The bilingual speaker

The locus of language contact, interference and borrowing is the bilingual individual. It is commonplace in the literature on bilingualism to distinguish between coordinate and compound
bilingualism and to discuss at length the psychological and psycholinguistic evidence against and in favor of this distinction, resulting in the conclusion that the reality is too complex to be captured by such a simple dichotomy. Exclusively coordinate bilingualism is a difficult matter because the two languages can never be kept totally apart. On the other hand, given the complex nature of meaning in human language, the differences in the associational networks, etc., it is hard to imagine a bilingual speaker of the compound type with a totally fused semantic system. I shall not go into the complex question of bilingualism here; for further details the reader is referred to such classical works as Weinreich (1967) or the more recent general treatments such as Romaine (1989), and Hamers and Blanc (1989). Suffice it to say here that in cases of long-term collective bilingualism there is usually a drift towards a certain kind of compound bilingualism which amounts to the formula "one form - two substance systems". This is brought about by the fact that, in a totally bilingual community, both languages are transmitted by the same persons over generations in an identical sociocultural setting. The result is that interference phenomena cease to be spontaneous, individual and ad hoc, and begin to be transmitted from one generation to the next. The ideal goal over the long term in such a situation is a total isomorphism of the two languages.

2.2. The semi-speaker

Now to the locus of language decay, the semi-speaker. As a producer of the kind of decayed language we are examining here, he must be carefully set off from other types of imperfect speakers found in language death situations. In the dying speech communities I am familiar with, there were always two types of imperfect speakers, one that had a comparably good proficiency in the grammatical system of the language and a perfect passive knowledge, but suffered from severe memory gaps, especially in vocabulary, but also in more complicated areas of the grammatical system. My longitudinal studies in the Arvanitika speech community in Greece over a period of 25 years
have revealed that these persons mostly develop from former fluent speakers who were on their way to becoming full speakers, but never reached that degree of competence due to the lack of regular communication in the language. These individuals cannot be reckoned among the semi-speakers proper; they are simply "forgetters". Lise Menn coined the catchy term "rusty speakers" which I will use in the following. Rusty speakers may be found in situations of rapid shift, but also in communities characterized by gradual death. In the latter case such persons are probably born and raised in a period where the interruption of language transmission has not been fully operative - several families have begun to quit the language, others still transmit it. The other type of semi-speaker is a person whose command of the language is from the outset imperfect to a pathological degree. This is what we call the semi-speaker proper, the producer of the pathological speech forms we are examining here. The term "pathological" is chosen deliberately in order to express the similarity of this type of distorted speech to certain types of aphasic speech such as agrammatism (cf. Menn 1989). My claim is that these semi-speakers result from the interruption of language transmission. The validity of this hypothesis was tested with positive results in an Arvanitika village of Boeotia in 1978. All residents of this village clearly identifiable as semi-speakers claimed that their parents did not talk to them in Arvanitika and that they learned the language just by listening to and occasionally talking to elder fluent speakers. On the other hand, fluent speakers explicitly stated that they were raised in an environment where Arvanitika was still regularly spoken and where adults with a positive attitude towards further language transmission existed. If one is allowed to generalize the striking results of the Arvanitika survey, there are strong indications that the linguistic input during language acquisition plays a crucial role and that the prototypical semi-speaker is a person who has not learned the language by way of a normal language acquisition process. Given this anomalous language learning process, it is quite clear that there will be differences in proficiency and language production due to several additional factors such as linguistic
talent in general, degree of exposure, and the presence in the family of elders with an exceptionally good proficiency and a positive attitude. Semi-speakers therefore form a continuum a fact which has been referred to several times in the literature. The most detailed classification (though still extremely simplifying because it is not easily possible to quantify a continuum) is given in Campbell and Muntzel (1989). They distinguish between 'nearly fully competent', 'imperfect but reasonably fluent', 'weak' and 'rememberers' (181). Unfortunately, this classification captures only the degree of competence without specifying where the differences lie. In particular, it does not take account of the difference between "rusty speakers" and "semi-speakers proper". It is reasonable to assume that speakers found at the upper end of the continuum, the 'nearly fully competent speakers', are typically 'rusty speakers', while 'imperfect/reasonably fluent' and 'weak' speakers are typically semi-speakers proper. 'Rememberers' may represent the terminal stage of both.

2.3 "Later loss" hypothesis vs. "incomplete acquisition" hypothesis

The difference between rusty speakers and semi-speakers has been treated in the literature as evidence for competing hypotheses regarding language acquisition in language death situations. The "later loss" hypothesis produces different degrees of rusty speakers, whose competence vanishes because of the lack of regular linguistic experience: "complex linguistic structures that are acquired late in childhood will be lost since this is the very time when children in many communities stop fully using the obsolescent language" (Gal 1989:314 after Voegelin and Voegelin 1977). The "incomplete acquisition"

\footnote{I know of several cases where semi-speakers who were clearly at the near-to-full-speaker end of the continuum reported to have had in their family persons sticking to the language with unusual vigor. In one case there was an elderly aunt, monolingual in Arvanitika, said to be very conservative, who forced children to address her in Arvanitika. In another case, the grandmother was a narrative talent and told many fairy-tales to the children, which explains the relative linguistic skill of that particular informant.}
hypothesis, on the other hand, which produces different degrees of semi-speakers, argues that the persons classified as imperfect speakers never learn these structures. Experience has shown, however, that both types of imperfect speakers often exist within the same speech community. This comes as no surprise, since the "later loss" hypothesis and the "incomplete acquisition hypothesis" seem to be mere variants of each other. The notion of incomplete acquisition has three aspects: Those children who do not learn the language at all by way of language transmission strategies (e.g. children of progressive families) are able to learn the language only by chance. Those children who grow up in a subpart of the speech community which still uses the language may be first socialized primarily in the obsolescent language, but shift to the target language in a later stage of language acquisition, with the result that the more elaborate linguistic skills in the obsolescent language are not learnt (i.e. these people stop somewhere in the middle of the natural language acquisition process). Those children who are socialized completely in the obsolescent language may forget it later due to the lack of communication partners, i.e. the regular continuation of language acquisition by intersubjective communication during adulthood does not occur. In other words, the continuum among semi-speakers and between semi-speakers and rusty speakers may be viewed as a continuum between random acquisition as the one extreme, and varying degrees of "regular" acquisition.

In the following we will be mainly concerned with the linguistic output of random acquisition. As argued in Sasse (this volume), random acquisition is the consequence of the interruption of regular language transmission strategies. An infant growing up in a bilingual setting whose one language is recessive, will be confronted with the collective stigmatization of this language from a very early phase of language acquisition. Stigmatization is, as it were, an integral part of the bilingual language acquisition process. The child will not be taught the abandoned language by way of regular language transmission strategies, he will be discouraged to use it ("don't talk L₁, L₂ is better"), he will
soon realize that he is more often addressed in the target language than in the abandoned language, he will realize that elders (e.g. his grandparents) are criticized for using language transmission strategies such as fairy-tales or nursery rhymes, and so on. The result is that such children do not learn the language by way of a normal language acquisition process which accumulates bits of language knowledge gradually which are successively arranged in a system, but what he learns of the language is learned in chunks. No complete linguistic system is established, linguistic competence remains confined to a closed list of short sentences of everyday use, formulaic expressions, phrases, words and different forms whose functions are, for the most part, opaque. This means that linguistic creativity is restricted to putting these elements together in some way; the ability to create new utterances on the basis of principled grammatical patterns and rules is irreversibly lost. The prototypical semi-speaker at the lower end of the continuum is unable to utter a narrative text or to carry on a longer conversation; for such purposes he will always switch to the target language. Passive competence is often considerably higher (Dorian 1981, passim), especially as far as a knowledge of the vocabulary is concerned, but obsolescent categories and complex syntactic structures are rarely fully understood.

Nevertheless, the language is occasionally used. In the final phase where the obsolescent speech community consists nearly exclusively of semi-speakers and regular communication in the language stops, residue knowledge is used as a "phatic symbol of identification" (Tsitsipis). As a matter of fact, the remnants of the language are employed to signal in-group identity in songs, rhymes, jokes, toasts, obscene words and phrases, or occasionally as a secret language. On occasion a kind of pseudocommunication is possible with the help of stereotype phrases and formulaic expressions from a fixed stock learnt by heart.

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2 "I used to tell him fairy-tales in Arvanitika, but his mother didn’t like that". (Grandmother, about 75, in an interview in a Bosnian village).

3 For example, an Arvanitika semi-speaker A may say to his companion: eaut, pnie nje pjetir were ‘Come, let’s have a glass of wine’. B may answer: te hox ty pje te v endfisim ‘Let’s eat and drink and have
3. Linguistic evidence for the distinction between borrowing and decay

We will now consider the linguistic evidence for the distinction between borrowing and decay. In a normal contact situation, when a language is exposed to influence from another language, it tends to borrow not only vocabulary but also structure. We are not interested in the mechanism of borrowing here, what we are concerned with is the results. Due to the tendency towards compound bilingualism in a long-term contact situation, there is some kind of ideal goal (which may never be arrived at in effect) to develop a one-to-one relationship between the morphosyntactic systems of the two languages. In particular, there is a tendency towards an identical category system, and a tendency towards structurally similar means to mark these categories. For example, if prior to the contact situation one language makes a difference between a general present and a progressive and the other does not, either the one that made the distinction will tend to abandon it, or the one that did not make the distinction will develop it. Which of the two languages influences which is a matter of prestige and power; it is also possible that both languages influence each other. Developing new categories and abandoning old ones are necessary parts of the same structural borrowing process. If necessary, we can make a distinction between positive borrowing and negative borrowing. Negative borrowing has nothing to do with reductional loss of essentials, it just follows the practice of the model language in dropping linguistic elements that the model language does not have. This is not confined to categories, it can happen in other areas of the language system, too; if the replica language is of the flexional type and the model language isolating, the replica language will...
tend to lose its morphology. This does not mean, however, that the language becomes defective: loss of morphology will be compensated by imitating the means of the model language, i.e. the lost morphological categories will be replaced by categories marked by means of function words. If the replica language does not possess a sufficient repertory of function words, it will develop new ones by means of rapid grammaticalization or borrowing.

These are indeed all quite well-known facts, hence I need only give a small number of striking examples.

3.1. Examples of borrowing

A case study of extreme contact-induced change is presented in Thomason and Kaufman (1988:215-222), based on Dawkins' 1916 study of Modern Greek dialects spoken in Asia Minor. Turkish interference, especially in the Cappadocian varieties of Asia Minor Greek, was so great that, in Dawkins' view, "the body has remained Greek, but the soul has become Turkish". The entire syntax was remodeled according to the Turkish pattern. Grammatical gender was nearly abandoned. The definiteness system was reorganized: the article is usually dropped, except for cases where it is used to indicate differential object marking, a category imported from Turkish. Periphrastic verb forms were introduced to match Turkish categories. The most striking feature of Cappadocian Greek was the general shift from flexional to agglutinative morphology. The dialect of Ulaghatsh, for example, adopted Turkish verb categories by imitation of the Turkish pattern using enclitic forms of the verb 'to be' as inflectional endings. Further, it developed a totally agglutinating noun morphology by generalizing some easily analyzable endings of one of the neuter paradigms. The following examples are drawn from my own 1968 field work with one of the last speakers of Ulaghatsh in Athens, cf. also Kesisoglu (1951). They represent a slightly more progressed form of the dialect than Dawkins' 1916. The paradigm of neuter nouns ending in -i was a particularly well-suited point of
departure for agglutinative reinterpretation of the case system. In the nominative and accusative the ending -i dropped by regular sound change, thus standard spit-i 'house' became spit. The genitive is regularly spityu, developed from earlier spit-i-u, with the regular genitive ending of the o-declension attached to the stem spiti- (the original nominative was spiti-on). Since the nominative/accusative now had a zero suffix, it looked exactly like a Turkish nominative/accusative form, e.g. ev 'house'. The genitive could now easily be interpreted as an agglutinating suffix and equated with the Turkish model:

<table>
<thead>
<tr>
<th>NOM/ACC</th>
<th>Turkish</th>
<th>Ulaghatch</th>
</tr>
</thead>
<tbody>
<tr>
<td>ev</td>
<td>ev-in</td>
<td>spit</td>
</tr>
<tr>
<td>GEN</td>
<td>gen</td>
<td>spityu</td>
</tr>
</tbody>
</table>

Once identified as an agglutinating suffix, -yu was detached from the neuter paradigm and employed as a general genitive ending everywhere. The genitive of neka 'woman', originally nekas, became neka-yu, the genitive of atropos 'man', originally atropu, became atropos-yu, etc. But analogy didn't stop here. Since the Turkish genitive suffix -in (with its vowel harmony variants -ın/ün/un) is employed in the plural, too, -yu followed this pattern (which is scandalous for an Indoeuropean language). The plural nominative/accusative of neka 'woman' is nekes. The genitive plural must originally have been something like nekon (cf. Standard Modern Greek yinekon). It now becomes nekes-yu. The story still goes on. In Turkish, the genitive suffix -in regularly follows the general plural suffix -ler/lar. When Ulaghatch speakers found it necessary to have an equivalent of -ler/lar, the neuter paradigm again offered itself: the plural nominative/accusative of spit 'house' is spit-ya (regularly from spit-i-a), which again looks like an agglutinative mechanism zero vs. x. The ending -ya was thus reinterpreted as a general plural ending. The plural of atropos, formerly something like atropi, is now atropos-ya, etc. We have now arrived at an exact equivalent of the Turkish declensional pattern:
<table>
<thead>
<tr>
<th></th>
<th>Turkish</th>
<th>Ulaghatch</th>
<th>Standard MG</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG NOM/ACC</td>
<td>adam</td>
<td>atropos</td>
<td>anthropos</td>
</tr>
<tr>
<td>GEN</td>
<td>adam-ın</td>
<td>atropos-yu</td>
<td>anthropu</td>
</tr>
<tr>
<td>PL NOM/ACC</td>
<td>adam-lar</td>
<td>atropos-ya</td>
<td>anthropi</td>
</tr>
<tr>
<td>GEN</td>
<td>adam-lar-ın</td>
<td>atropos-ya-yu</td>
<td>anthropon</td>
</tr>
</tbody>
</table>

In the speech of my informant only a few archaic declensional forms had been preserved (much fewer than in Dawkins' material), which may be an indication that regularization of the declension was a rapidly ongoing process in Ulaghatch prior to the expulsion of Greek speakers from Asia Minor.

Something similar to the events described for the development of noun inflection in Ulaghatch must have happened in the history of Armenian, though the details are less clear and the exact model is unknown. Armenian, probably in contact with Turkic languages, lost its gender and developed an agglutinating noun and verb morphology very similar to Turkic languages. Particularly striking is the similarity of development between Armenian and Ulaghatch noun morphology. Compare the following (indefinite) paradigms of Old Armenian (between 5th and 7th century A.D.), Modern West Armenian, and Turkish:
<table>
<thead>
<tr>
<th></th>
<th>Old Armenian</th>
<th>Modern West Armenian</th>
<th>Turkish</th>
</tr>
</thead>
<tbody>
<tr>
<td>'mule'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG NOM/ACC</td>
<td>ʃor_Private</td>
<td>ʃor_Private</td>
<td>ʃor_Private</td>
</tr>
<tr>
<td>GEN</td>
<td>ʃorwoy_P</td>
<td>ʃor-1_P</td>
<td>ʃor-1_P</td>
</tr>
<tr>
<td>DAT</td>
<td>ʃorwoy_P</td>
<td>ʃor-1_P</td>
<td>ʃor-1_P</td>
</tr>
<tr>
<td>LOC</td>
<td>ʃor/Private</td>
<td>ʃor/Private</td>
<td>ʃor/Private</td>
</tr>
<tr>
<td>ABL</td>
<td>ʃorwoy_P</td>
<td>ʃor-1_E</td>
<td>ʃor-1_E</td>
</tr>
<tr>
<td>INSTER</td>
<td>ʃorwoy_P</td>
<td>ʃor-1_Ov</td>
<td>ʃor-1_Ov</td>
</tr>
<tr>
<td>PL NOM</td>
<td>ʃor-X</td>
<td>ʃor-1-ner</td>
<td>ʃor-1-ner</td>
</tr>
<tr>
<td>ACC</td>
<td>ʃor-X</td>
<td>ʃor-1-ner</td>
<td>ʃor-1-ner</td>
</tr>
<tr>
<td>GEN</td>
<td>ʃorwoq_P</td>
<td>ʃor-1-ner-U</td>
<td>ʃor-1-ner-U</td>
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<tr>
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<td>ʃor-1-ner-U</td>
<td>ʃor-1-ner-U</td>
</tr>
<tr>
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<td>ʃor-X</td>
<td>ʃor/X</td>
<td>ʃor/X</td>
</tr>
<tr>
<td>ABL</td>
<td>ʃorwoq_P</td>
<td>ʃor-1-ner-E</td>
<td>ʃor-1-ner-E</td>
</tr>
<tr>
<td>INSTER</td>
<td>ʃorwoq_P</td>
<td>ʃor-1-ner-Ov</td>
<td>ʃor-1-ner-Ov</td>
</tr>
<tr>
<td>'tool'</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SG NOM/ACC</td>
<td>ʃorc_Private</td>
<td>ʃorc_Private</td>
<td>ʃorc_Private</td>
</tr>
<tr>
<td>GEN</td>
<td>ʃorcwoy_P</td>
<td>ʃorc-1_P</td>
<td>ʃorc-1_P</td>
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</tr>
<tr>
<td>ABL</td>
<td>ʃorcwoje_P</td>
<td>ʃorc-1-E</td>
<td>ʃorc-1-E</td>
</tr>
<tr>
<td>INSTER</td>
<td>ʃorcwoj_P</td>
<td>ʃorc-1-Ov</td>
<td>ʃorc-1-Ov</td>
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<tr>
<td>PL NOM</td>
<td>ʃorc-X</td>
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<tr>
<td>ACC</td>
<td>ʃorc-X</td>
<td>ʃorc-1-ner</td>
<td>ʃorc-1-ner</td>
</tr>
<tr>
<td>GEN</td>
<td>ʃorceaq_P</td>
<td>ʃorc-1-ner-U</td>
<td>ʃorc-1-ner-U</td>
</tr>
<tr>
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<td>ʃorceaq_P</td>
<td>ʃorc-1-ner-U</td>
<td>ʃorc-1-ner-U</td>
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<td>ʃorceaq_P</td>
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<td>ABL</td>
<td>ʃorceaq_P</td>
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</tr>
<tr>
<td>INSTER</td>
<td>ʃorceaq_P</td>
<td>ʃorc-1-ner-Ov</td>
<td>ʃorc-1-ner-Ov</td>
</tr>
</tbody>
</table>

To add just a few more examples: Salar is a Turkic language which came into contact with Chinese and lost a considerable part of its morphology due to imitation of the isolating pattern of Chinese (cf. Tenišev 1963). Arabic dialects of Southeastern Turkey tend to abandon the complex "broken plural" system characteristic of Arabic and generalized the feminine plural ending -at after the Turkish model of -ler/lar.
Moreover, these dialects developed a clause-final copula as all other languages of the area have. These languages also developed an entirely new system of verbal categories (aspect, tense, and mood) on the model of Turkish (Sasse 1971). Amharic developed a complex system of main and subordinate clause verb forms, converbs, etc., on the model of Agaw (Central Cushitic) languages.

All these changes are contact-induced radical rearrangements of the typological make-up of the languages involved, which were achieved entirely by using native material without borrowing grammatical morphemes from the model language. Entire grammatical systems are totally altered; old categories that don't match are abandoned and new categories are built up. The whole process is characterized by impressive innovative creativity. If categories or distinctions are lost in the course of this process, it would be inappropriate to call this "simplification" or "reduction"; the abandonment of these distinctions is simply due to the fact that they are absent in the model language. We don't have to do with any kind of contraction here; none of the languages referred to above is threatened by language death.

3.2. Borrowing and decay: the Arvanitika case

When Arvanitika, the Albanian dialect of Greece, came into close contact with Modern Greek by an increase of bilingualism in the middle of the 19th century, exactly the same thing happened. The verb lost two categories, the Admirative and the Optative, which were not present in Greek, and began to develop an imperfective/perfective distinction in certain subordinate clauses by a very clever exploitation of the subjunctive particle on the Greek model (formerly aspect distinction worked only in main clauses). The five cases of the declensional paradigm were reduced to three on the Greek model, and so on. All these changes were contact-induced and do not represent instances of irreparable loss, as they simply follow the Greek pattern. They involve both positive and negative borrowing, and
those changes which we would consider negative, the loss of categories, did not affect the normal functional capacities of the language. They simply conformed to the tendency to render the category inventory similar to or identical with that of Greek. If Greek, which is a perfectly normal language, can do without such categories as the admitative and the optative, why shouldn't Arvanitika, too?

At the beginning of the 20th century something happened which one certainly would have a right to call a substantial loss. There was a general breakdown of the native derivational system, which ceased to be productive within a very short period of time. This loss, however, did not affect the functional capacities of the language, since it was compensated by the invention of a tricky and complex system of loan word integration, by which the entire Greek lexicon became open to Arvanitika (cf. Sasse forthcoming). Although the language became in no way abnormal, the total replacement of word-formation mechanisms by a loan word integration system is alarming as a possible sign of incipient language death, because the condition of having no derivational system and being forced to integrate Greek vocabulary for all innovative purposes heavily relies on the contact situation. In other words, after this step, the symbiosis became vitally necessary for Arvanitika. Denison (1979:34), who reports a similar case for the German dialect of Sauris in Northern Italy, regards this development as "system-retaining interference". It seems to be a typical concomitant of very intense contact situations with very uneven dominance proportions. In any case, the language still functions as a normal means of communication and is fully functional. In Arvanitika, the integrated loan words were fully assimilated and considered part of the language. Moreover, it was considered part of the linguistic competence of the full speaker to know which Greek items are to be used in Arvanitika and which Arvanitika lexemes should not be replaced by Greek ones.

The terminal phase of language death was reached in the Arvanitika speaking communities not long after that, due to the
interruption of language transmission. When Arvanitika speaking parents ceased transmitting the language to their offspring, a constantly increasing group of semi-speakers emerged. The language of these semi-speakers is totally different from the Arvanitika spoken up to this point. It begins to show pathological phenomena. The entire category system breaks down; important distinctions get lost. This reduction cannot be any longer attributed to negative borrowing, because Greek possesses all the categories that Arvanitika is losing now. Many speakers use only a few verb forms, which are all employed for the same purpose. If past tense forms are remembered at all, they are always in the perfective aspect. This means that aspect distinction, which is of extreme important in Greek and was even in the process of being elaborated in Arvanitika to conform to the Greek model, is now being abandoned. Verb morphology breaks down; The conjugational system, once operating with personal suffixes, is now replaced by whatever verb form the speaker remembers plus isolated pronouns serving the indication of personal reference. Articles are dropped or used incorrectly, subjunctive and future particles are confused, gender agreement is not observed, and so on.

In the following I will try to summarize and systematize the most important characteristics of semi-speaker speech using examples from Arvanitika. Abundant further material can be obtained from Tsitsipis (1981), Dorian's various publications on East Sutherland Gaelic, Dressler on Breton, (1981 and elsewhere), Schmidt (1985) on Dyirbal, Schlieben-Lange (1976) on Occitan, and Campbell and Muntzel (1989) and the literature cited therein.

1) Loss of subordinative mechanisms

Arvanitika semi-speakers do not use gerund forms of the verb in spite of the fact that there is an exactly parallel form in Greek. The most frequent type of subordinate clause is the short relative clause. Adverbial clauses are avoided except for those introduced by 'when' or 'if'. At the phrase level,
modifiers are rare; genitives and adjectives are not frequently used.

2) Loss of systematic integration

The elaborate integration system is lost. Greek words are not assimilated any longer to the morphological system of Arvanitika, but are cited, as it were, in their proper Greek form: 
\textit{ea to some tileorasi 'let us watch television'} (Greek \textit{tileorasi 'television'}, should be integrated as tileoras; the full-speaker version of the sentence would be 
\textit{ea to some tileorases}; \textit{do vi\'n e\'de me to dici\'yoro sot? 'will Michael, too, come today together with the lawyer?'} (\textit{to dici\'yoro}, the proper Greek accusative form with the article, is used here instead of the traditional integrated Arvanitika form \textit{dici\'yarr\'e} definite accusative 'the lawyer'). A further aspect of these Greek citations in the Arvanitika frame is that fully inflected Greek words even occur in cases where good full speakers would use an Arvanitika lexeme: 
\textit{se\'la psarya 'bring fish!'} (the word for 'fish', \textit{pi\'k}, pl. \textit{pi\'c} is never replaced in full speaker Arvanitika by the Greek \textit{psari}, pl. \textit{psarya}; a full speaker would say \textit{se\'la pi\'c}). This phenomenon is akin to code-switching but differs from code-switching proper in that it only pertains to single words at those places where former full speaker would have assimilated loan words.

3) Breakdown of grammatical categories

The entire system of tense/aspect/mood categories is becoming mixed up. Semi-speakers often do not differentiate between the future particle \textit{do} and the subjunctive particle \textit{t\'o}. They either confuse them or use a blend of both, approximately \textit{de or do}. The tense system is usually reduced to the present and the aorist (perfective past). Imperfective past forms are hardly remembered by advanced semi-speakers. The perfect is used only in very prototypical cases (the "experiential" cases such as \textit{kam vatur 'I have been (somewhere)'}, etc.). The imperative is usually best preserved. As far as nominal categories are concerned, plural is often not formed, the singular form being
used instead. Definite and indefinite forms are becoming confused. Case forms are mixed up, the accusative being used for the nominative, and vice versa.

4) Agrammatism

Closely connected with the breakdown of grammatical categories is the total disintegration of the morphological system. Analogy goes in all directions, suppletive forms are not remembered, irregularities are not observed or are applied to forms where they do not belong. Verb forms are confused (3rd person for 1st person, imperative for present 3rd person, etc.). Nominal plural forms become drastically regularized, on the one hand, but on the other a bewildering tendency towards extension of irregularities is observed. The funniest phenomenon is phantasy morphology (something which sounds like an Arvanitika morpheme being attached to a form) or blends of any sort: kñate 'you (pl.) cry' (for regular kñani, -te being the suffix of 2nd pl. aorist), stëpirëra 'houses' (for regular stëpi, to which the mass noun plural ending -ëra is attached and a meaningless -r- inserted), fërijn 'I was sleeping', a funny attempt to make the imperfectly remembered 1st person imperfect form of 'sleep' look more like a 1st person form by attaching a suffix -jn, taken from one of the subclasses of the present of the n-conjugation; etc.

Syntactic rules are not observed either. The connector article system breaks down, agreement rules cease operating, prepositions occur freely with whatever case form comes to mind: ka martuar vajza mixařit 'he married Michael's daughter' (normally ka martuara vajzen e mixařit, nominative vajza instead of accusative vajzen(s), and the connector e of the genitive phrase is dropped), e vuri nde dzepi 'he put it in his pocket' (normally e vu nde dzep, with the regularized 3rd person vuri 'put' instead of irregular vu, and the definite nominative dzepi 'the pocket' after the preposition nde which demands the indefinite accusative dzep).

Since the verb forms are hopelessly confused, personal reference is often unclear and is therefore disambiguated by independent personal pronouns: u jep tì 'I'll give it to you'
(for regular t, jap; jep is 3rd person, the regular proclitic accusative form te 'thee' is replaced by the independent nominative form and placed after the verb like a regular noun object; the confusion of person marking on the verb is somehow compensated by the use of the independent 1st person pronoun u).

It is noteworthy that this extreme agrammatism occurs only in spontaneous utterances, when the speaker is forced to make creative use of the language. There are many formulaic "chunks" which are perfectly grammatical. For instance, a test in a Boeotic village in 1978 led to the strange result that nearly all speakers who had something like u jep ti for 'I'll give it to you' were able to produce the perfectly correct negative form s te jap 'I won't give it to you', perhaps because the latter was learned as an unanalyzed idiom.

5) Word retrieval problems

Semi-speakers usually have problems of word-finding. As soon as they are forced to transform thoughts into words for which no ready chunks are at hand, they will shift to Greek (perhaps with a comment 'how do they call it, damn').

6) Extreme phonological variation and distortion

A few examples may suffice here:

Standard /stapi/ - /stupi/ - /stepi/ - /stlip/ 'house'
Standard /tjɔ ban/ - /tsemin/ - /tsemrin/ 'how are you'
Standard /rɪca/ - /riki/ - /rice / - /riki/ - /riksi/ 'tick'
Standard /maereps/ - /majereps/ - /maireps/ - /majireps/ 'cook'
7) Phonological hypercorrection

Sometimes hypercorrection occurs in order to make some sounds "sound more like Arvanitika". Some young people with a positive attitude, for example, pronounce traditional /h/ before /e/ and /i/ as x. The reason is that Greek doesn't have h, so that the allophony of /h/ was readjusted according to the Greek pattern which has a complementary distribution of x before back vowels and θ before front vowels. Thus, a word like /her/ 'time' became /cher/. Semi-speakers, attempting to imitate the "something different" which they remember from the speech of elder full speakers, try to avoid the sound θ, but, being unable to pronounce h, they substitute x.

3.3. Decay in Kemant

I will now compare some material from Kemant, an obsolescent Agaw language of Central Ethiopia, in order to show that the very same picture obtains in the semi-speaker variant of an African language.

The material was elicited 20 years ago, and not from a perspective of the investigation of obsolescence. Nevertheless, it gives rise to some interesting issues with respect to certain very typical decay phenomena. There are at least 4 regions where Kemant is still spoken, three of which I visited on my Ethiopian field trip in 1971. The sociolinguistic situation differs from place to place. My main informants lived in and around Gondar, the provincial capital, where the dominant language (and the target language for Kemant) is Amharic. They were all in their sixties or seventies and usually had a good command of the language, although some of them had ceased to practice it and showed signs of "rustiness". I have little evidence for semi-speakers in that area, although I remember (impressionistically) that younger people of the village of Wälläqa (5 km north of G.) with whom I tried to communicate with in Kemant, had a very limited knowledge of the language. My impression is that language decay is fairly
radical in that region; shift from Kemant to Amharic is rapid and leaves little room for an extended decay phase, though there may exist some conservative strugglers whom I simply did not encounter during my superficial acquaintance with the speech community. I assume that the rapidity of shift in Gondar is to be attributed to the fact that the town, which has been a social-political and economical center for centuries and the capital of the Abyssinian empire between the 1630s and 1850s has exerted a particularly strong influence during the recent increased Amharization and urbanization process connected with the reign of the last two Ethiopian emperors Menelik III and Haile Selassie I who transformed Ethiopia into a more modern national state. The difference of language maintenance in the other two communities I visited, is largely dependent on the degree of preservation of paganism. The Ethiopian Orthodox church ran two campaigns of enforced Amharization against the Kemant, one at the end of the past century, and a second one after the Italian occupation ended in the early 1940s. Unbaptized Kemant were threatened with loss of use rights to their land (Gamst 1969). The acculturation process progressed at a much faster rate in the eastern Kemant communities, with the effect that the politico-religious center of Kemantland shifted from the traditional area of Karkar to the more conservative western area of Chilga. This was reflected in the language maintenance situation observable in 1971. In Karkar, language transmission was largely disrupted, resulting in a considerable number of semi-speakers, while the language was better retained in Chilga, where it was supported by a reinforced religious zealotism which was made possible by a decree which allowed the remnant group of adherents to the Kemant religion to follow their old beliefs and practices without hindrance (Gaust 1969:122).

Semi-speaker material was collected sporadically in both areas. The most striking deviation from "good" Kemant was the general decline of verbal inflection. A spectacular typological trait of Agaw languages is the presence of special morphophonemically complex verb paradigms for each type of subordinate clause with postposed conjunctions, as it were, fused to the personal endings. Moreover, each paradigm appears
in 4 variants, perfective, imperfective, each affirmative and negative. This amounts to an enormous mass of verb forms (for Bili, Palmer 1957 counts up to 10,000), which were still quite well mastered by elder good speakers of Kemant. Semi-speakers, however, were unable to remember most of the subordinate forms and used the main clause paradigms instead. This is the more striking because the Amharic verbal system is a less complex imitation of the Agaw system which came about by intensive language contact (substratum influence) in the 13th century and thereafter. In other words, equivalents to Amharic categories existed, but they were abandoned due to the lack of normal linguistic skill on the part of the semi-speakers. The loss of the typical subordinate verb forms is a particularly clear example of a process which has been observed in other obsolescent speech communities (Arvanitika, Breton, Gaelic), viz. the general loss of strategies for constructing complex sentences, first observed for Nahuatl by Hill (1973).

Loss of systematic integration with the code-switching-like effect as described for Arvanitika occurs in Kemant, too. One of the many striking examples is ansolawén fāf 'take the blanket away!'. Ansolawén is the Amharic definite accusative of ansola, an Amharic noun meaning 'blanket', which is normally integrated into Kemant as a masculine noun of the a-declension, whose regular accusative is ansolés. The same sample sentence was consequently rendered by full speakers as ansolés fāf.

As in Arvanitika, a general breakdown of the category system was observed. In spite of the fact that Amharic provides good equivalents of the 8 Kemant cases, the case forms are being confused. The 'absolutive' and the 'subject case' are mixed up, indefinite and definite accusative forms are not distinguished. Local case forms are seldom used. There is a general decline of the verb system in addition to the abandonment of subordinate forms: aspect forms are confused and there is a tendency to substitute all negative paradigms by the negative relative forms, perhaps due to the fact that these are more transparent than the main clause forms. Exactly as in Arvanitika, imperatives are remembered best and sometimes used to substitute indicative forms.

Agrammatism is common. Gender agreement rules are disregarded,
plurals are formed incorrectly, and wrong suffixes are attached to verb forms. Hybrid forms such as *daw-yā-nok* n ‘you (pl.) are speaking’ for *d w-yā-nok* (with the plural -n- attached twice) are frequent.

Phonological variation was observed especially with respect to the "unusual" sounds q, y and x, which do not occur in Amharic. y tends to become zero, while the other two tend to be equated with Amharic h.

4. Conclusions

Now I shall briefly summarize the empirical evidence in favor of a distinction between language decay and heavy contact-induced change. The most important similarities between the two is that both involve loss of linguistic material. Theoretically, contact-induced loss can easily be distinguished from loss due to decay, because the former is motivated by the absence of the respective categories in the contact language, while decay involves loss of categories not motivated in this way. There is of course a practical problem which cannot be resolved easily, namely the fact that decay may occasionally pertain to types of reductions which could, in principle, also be attributed to contact: where the obsolescent language possessed a particular category prior to the decay phase and the target language did not, its loss during the decay phase can be explained in either way. Nevertheless, I think this is a minor problem, since the bulk of typical decay phenomena, especially agrammatism, syntactic reduction, and extreme variability, is so different from what happens in normal contact-induced change, that it can clearly be set off from the latter.

It is also clear that the difference between language decay and heavily contact-influenced but functionally intact language reflects the difference between two types of language users - the semi-speaker and the "normal" bilingual individual –, and that this difference is to be explained in terms of the different processes of language acquisition involved. A
language acquired in the usual way, transmitted according to norms established in the speech community, tested in everyday conversation a whole life long, be it as “mixed” as one can imagine (but languages even in extreme contact situations are normally mixed only in a certain sense, as I have tried to show), will have to exhibit a certain degree of stability and will have to conform to certain minimal requirements of a functionally intact language. That is, it will have relatively stable mechanisms of constructing utterances, it will have a paragraph structure, a clause structure, etc., and the appropriate morphosyntactic apparatus necessary to serve them. A language acquired only by chance, however, the competence of which is limited to stereotype fixed expressions and a small stock of ready-made clause and isolated word forms will necessarily not provide an adequate means for fluent communication. A category system is virtually non-existent, and the minimal functional requirements of discourse (relative stability, techniques for combining slots with filler categories, etc.) can no longer be fulfilled. This is the pathological situation in which the prototypical semi-speaker finds himself.

In conclusion I would like to point out some practical consequences of the distinction advocated here. Differentiating loss of categories in a normal process of assimilation to a model structure from the pathological situation of language decay is essential for the evaluation of data elicited from last generation speakers in a language death situation, and therefore constitutes a fundamental question of documentation in such a situation. Dimmendaal (this volume) gives us a nice example of the defective knowledge of Kore, where this problem crucially arises. How reliable is the speech of the last Kore speakers and how much does it reveal of the original structure?

I was confronted with this problem several years ago when I received Bernd Heine’s Elmolo material and attempted to apply it for comparative purposes. I was impressed by the fact that the verbal paradigms were so deviant from those of the neighboring and related Arbore. Moreover, they are inconsistent
in themselves; some verbs have only one form for all persons, others distinguish two or three (not always the same!), still others show the whole array of forms normally found in Cushitic languages. Even worse, the same verb reduces all person forms to the 3rd masculine singular in one tense, and retains them in another! (cf. Heine 1980:189 and 193). In general, Elmolo and Arbore seem to be so closely related that they can be considered dialects of each other. But comparison of Hayward’s (1984) description of Arbore with Heine’s (1980) Elmolo data renders Elmolo a broken-down form of Arbore. Disregarding the fact that Hayward’s material is much more exhaustive and more carefully elicited, the impression remains that Elmolo is much "poorer" than Arbore. For example, the pronominal system of Elmolo is an abridged form of that of Arbore (cf. Hayward 1984:215 and Heine 1980:187). Of six functionally differentiated series only two remained, whose functions have already begun to be blurred, too. Gender distinction in the third person was abandoned, and the form itself is being replaced by the "primitive" circumlocution 'this person'. There is virtually no trace of the case system of Arbore (Hayward 1984:131ff.), which distinguished at least four cases with complex distribution. Subject and object are not distinguished, the predicative form of the noun seems to have been abandoned, and the complex genitive construction, which was both head-marking and dependent-marking (Hayward 1984:150ff.), was replaced by simple juxtaposition of possessed and possessor with or without a linking particle (Heine 1980:184). Further, while Hayward (1984:300-325) reports a relatively elaborate system of forming complex sentences, involving infinitives, gerunds, a considerable number of constituent clause types and coordinative clause combining strategies involving the subjunctive, Heine states that Elmolo has "only few morphological devices to mark embedded constructions. In many cases, embedded clauses which follow their governing constituents are introduced without any formal linkage" (Heine 1980:200).

Drastic functional reduction, agrammatism, reduction of subordinative mechanisms are all well-known symptoms of language
decay. We found them with semi-speakers of Arvanitika, Gaelic, Breton, Dyirbal, Nahuatl, Kemant, and many more obsolescent languages. The conclusion is that the last Elmolo speakers were semi-speakers and Heine's Elmolo material does not represent "original Elmolo" but a pathologically distorted version thereof. For comparison with other Cushitic languages it must therefore be handled with great care. I am convinced that much of the material elicited in obsolescent speech communities in Africa will be of this kind, and I think the pathological nature of this kind of material should be taken into account especially when drawing historical and comparative conclusions.
Bibliography


50. Fachner, Regina (1986): Der Relativsatz im Bambara
52. Reichert, Christoph (1986): Verteilung und Leistung der Personalsuffixe im Ungarischen


3. Haspelmath, Martin (1987): Verbal nouns or verbal adjectives? The case of the Latin gerundive and gerund


5. Haspelmath, Martin (1987): Transitivity alternations of the anticausative type


12. Sasse, Hans-Jürgen (1990): Theory of Language Death; Language Decay and Contact-Induced Change: Similarities and Differences