Contact-induced change in a code-copying framework

Lars Johanson

Abstract

This chapter aims at an integrative approach to the phenomenon of language interaction, dealing specifically with contact-induced language change within a code-copying framework. It gives a short introduction to this framework, discussing global and selective copying, structural accommodation and adaptation, habitualization and conventionalization. The chapter focuses on frame-changing developments through successive copying processes, problems of typological and genetic classification and the roles of code-internal and extra-linguistic factors.

1. Aims

The aim of the present contribution is to sum up some reflections on contact-induced language change as dealt with in this volume. The chapter offers a specific approach to the description of change and a proposal about what may happen to linguistic systems as a result of contact. It will illustrate how phenomena commonly referred to as borrowing, transfer, adaptation, convergence, levelling, koinéization, shift etc. may be dealt with under one “umbrella” by adopting this unified descriptive framework. Reference will be made to the chapters in this volume, as contributions dealing with the explanation of various linguistic phenomena in the areas of change, variation and acquisition.

2. Changes and motivations

First of all, we shall distinguish between the changes themselves (borrowing, calquing, convergence, levelling etc.) and their inducements (motivations, forces). The changes to be discussed are by definition code-internal, occurring in a specific code. The changes may be induced by code-external or extra-linguistic factors, namely the results of contact with other codes in specific socio-political situations. Certain types of change are thought to occur without exter-
nal or extra-linguistic motivation, namely through internal factors such as drift, typically leading to simplification, e.g., loss of irregularity and elimination of categories. Some may be universal tendencies present in all languages at all times.

In what sense do external factors interact with internal ones? Internal factors should probably not be regarded as "reasons" or "forces", but rather as inherent proclivities or tendencies. Linguistic elements possess structural properties which make them more or less "attractive" in change, acquisition and variation. The definition of "attractiveness" relies upon tendencies empirically attested in the history of languages. Cases in which the data seem to admit both external and internal motivations – in the sense of "multiple causation" (see Jones, this volume) – are often instances of externally motivated internal tendencies. Clearly, it is also possible for linguistic change to be solicited by structural tendencies, but extra-linguistic social, cognitive or psychological factors may thus be reconciled – as it were, as options and triggers – in a single explanatory framework.

3. Linguistic structures

It should also be stressed that the object of discussion will be structures of specific linguistic systems rather than their possible representations in the mind of speakers. Psycholinguistic facts will be kept apart from the linguistic structures themselves. Note that the difference between mental and linguistic structures is not seen as one between competence and performance.

A speaker's mental representations of two given codes in contact may partly overlap, influencing each other through cross-linguistic association and leading to the identification of similar, "shared" or "language-neutral" elements. There may be various degrees of isomorphism or merger between the two mental systems, of convergence in the brain (see the chapters by Watson and Deuchar and Viñihan, this volume). However, overlap of mental structures is not tantamount to fusion of the code-specific linguistic structures themselves.

What we refer to as "code-copying" certainly reduces the differences between the codes involved, thus enhancing their compatibility and easing the tension between them. The changes may even be partly motivated by mental preferences for uniformity in arranging information. However, in spite of increasing similarities and apparent compromise phenomena, the codes in contact remain distinct and autonomous. The code-specific elements still contribute to meaning in idiosyncratic ways. Code-copying thus involves no blending, no amalgams, no mixing in the sense that two codes interface to produce mixed clauses with different components. The autonomy of the linguistic systems is not affected by the issue of whether or not mental representations are distinct across two interacting codes (Watson, this volume).

These basic assumptions about two different kinds of structure are by no means conflicting. In the following sections, changes due to code-copying will be discussed exclusively in terms of observable linguistic structures. It will not be claimed that copies are psycholinguistically produced or processed in the steps discussed.

4. Code-copying


The following overview can only briefly outline the principles of classification and some issues involved in copying processes. Examples of a number of code-copying phenomena will be given in the study on Karaim presented by Csató (this volume).

Code-copying is to be distinguished from code-alternation. The latter mode of code interaction means shifting from one code to another, juxtaposing elements belonging to different systems. Many cases of so-called "code-switching" imply alternate choices of codes. The following discussion will disregard cases of alternation and be restricted to cases where the basic structural pattern can be ascribed to a specific code.

The linguistic modelling to be outlined here deviates in essential points from the well-known taxonomies of contact-induced phenomena formulated by Uriel Weinreich and Einar Haugen. It takes into account, synchronically, the complex variational patterns of "donor" and "recipient" languages and, diachronically, their developmental stages. The model aims at an integrated description of all kinds of copying from a foreign code, all the way from individual, momentary copying up to complex cases of language change over time.

The framework is intended as a unified model for describing various aspects of dynamics in language encounters. It enables us to treat closely-related phe-
nomena together, to study their interrelations and to typologize the processes involved. The notion of copying is construed in a rather wide scope. It includes various phenomena such as borrowing and calquing and deals with them as similar types of interaction within one and the same paradigm. The model connects synchronic and diachronic aspects, accounting for both variational patterns and developmental stages of the structures involved and highlighting the productive and creative aspects of copying. A classificatory apparatus of this kind seems to be a necessary prerequisite for determining the conditions of contact-induced linguistic change. If it proves descriptively felicitous, clarifying the interconnections between various aspects of change, it may also contribute to our general insights into contact processes, serving as a basis for coherent analysis, typological comparison and considerations of a more explanatory nature.

The terminology used is simple and self-explanatory, intended to mirror the classification in a straightforward way. Needless to say, it is not a proposed set of new terms for traditional notions. Terms of traditional contact linguistics such as “borrowing”, “transfer”, “switching”, “interference”, “language-mixing”, “integration” and “substitution” are avoided because of their vagueness and often misleading metaphors, which easily influence the way linguists conceive of the processes involved.

The term “borrowing” is already based on a deceptive metaphor. Nothing is borrowed in language contact: the “donor language” is not deprived of anything; and – more importantly – the “recipient language” does not take over anything identical with anything in the “donor language”. Terms such as “transfer” pose the same problem, since they also suggest identity of originals and copies. Non-identity of originals and copies is a fundamental principle of our framework.

The term “interference” is inadequate because of its connotation of “unserious” development, undesired deviation from monolingual norms, causing impaired communication, e.g. the negative effects of a first language (L1) on the acquisition of a second language (L2). Such terms may contribute to prejudices against contact-influenced varieties seen as “mixed” or “contaminated”. The term “code-copying” implies no more than the insertion of elements copied from one code within the context of another code, without specifying the degree of acceptability at a given stage of development.

5. Dominance relations

The dynamics involved in language contact depend on asymmetrical dominance relations between a sociolinguistically-dominated or “weak” code A and a sociolinguistically-dominant or “strong” code B. Code B enjoys prestige among A speakers because it is associated with some kind of power or status. Typically, more prestigious donor languages influence less prestigious recipient languages. The relation between dominating and dominated codes may vary considerably according to the setting. Contact situations may be more or less asymmetrical. Dominance relations may also fluctuate in the course of long-term contacts.

The codes may be languages or varieties of languages such as geographical dialects and sociolects. Whether the codes are genetically related or not is irrelevant for the classification. The term “code contact” thus encompasses both “language contact” and “dialect contact”. The difference between languages and dialects pertains to the diffusion of codes and belongs to the dimension of conventionalization (see below). Note that genetically or politically defined dialects are not necessarily the same as “dialects” in the sense of mutually intelligible varieties.

A number of contributions to the present volume discuss relations between more prestigious and less prestigious languages, e.g. English versus the Norman French dialect of Guernsey (Jones), Anglo-Norman and Medieval Latin versus English (Wright), Latin and Arabic versus Romance and Arabic vernaculars (Cremona). Others deal with more prestigious and less prestigious dialects, e.g. standard English versus dialects of English urban centres (Kerswill and Williams), Jordanian versus Palestinian dialects in Amman (Al-Wer), katharevousa versus dimotiki and Standard Modern Greek (Holton). Relations between standard and non-standard French are reflected in the linguistic behaviour of one individual (Esch), the roles of French and Picard in the Lille urban area (Pooley) and the development of the dialect of a northern French town (Hornsby).

6. Basic and model codes

The central concept of code-copying is that linguistic elements – units and patterns – are copied from one code to another. Copies of elements from a foreign model code are inserted into a basic code. The basic code sets the basic frame, or the structure into which copies are inserted.
To be ready to accept copies, the frame contains, as native or nativized elements, combinational structures and function units. In particular, relators are required to code syntactic, pragmatic and other functions on the global copies in order for them to function within the basic code. For example, clauses possess a basic morphosyntactic frame with combinational structures, e.g. morpheme order elements, and relators that link constituents together and mark their functions.

The possibilities of defining the basic code will be discussed below. In certain cases, it will be a futile attempt; see, for instance, the two-word utterances produced by developing bilinguals and analysed by Deuchar and Vihman in this volume. These “mixed” utterances consist of one word from each code being acquired, one content word and one function word, e.g. more kūpsis ‘more cookie’ (English/Estonian). In this type of early child language, function words tend to be neutral to the linguistic situation context, whereas the content words tend to match it. We regard this as an embryonic stage to establishing basic-code specific frames, a stage limited to the period before the appearance of inflectional morphology. Later, definable frames will develop, assuming code-specific functional categories.

Furthermore, we distinguish between “primary codes” (typically “mother-tongues”) and “secondary codes” of individuals and groups. Using the indexes 1 and 2, we refer to a sociolinguistically-dominated primary code as A₁, a sociolinguistically-dominant secondary code as B₂, and a sociolinguistically-dominant primary code as A₂.

7. Adoption, imposition and shift

Dominance relations produce different kinds of linguistic dynamics with respect to directionality. The crucial distinction is the one between adoption and imposition. Both are unidirectional convergence phenomena. In the case of adoption, speakers of a sociolinguistically-dominated code A insert copies from a sociolinguistically-dominant code B.

In the case of imposition, speakers of the sociolinguistically-dominated code A insert copies from it into their own variety of the sociolinguistically-dominant code B. In the first case, copies are “adopted” or “taken over”; in the second case, they are “imposed” or “carried over”. Adoption is traditionally referred to as “borrowing”, “calquing”, etc. In historical linguistics, imposition is mostly called “stratigraphic influence”.

For speakers of an A₁ code dominated by a B₂ code, three moves are possible:

1. “B moves A” = adoption. A₁ is influenced but maintained. The speakers’ secondary code brings about changes in their primary code. The insertion of copies into the basic code A₁ makes the latter more similar to the model code B₂.

2. “A moves B” = imposition. B₂ is influenced. The speakers’ primary code brings about changes in their variety of the secondary code. The insertion of copies into the basic code B₂ makes the latter more similar to the model code A₁.

3. “B removes A” = code shift. A₁ is not maintained, but rather given up in favour of a B variety, which therewith turns into B₁. The speakers cease to use A as a basic code and replace it by a variety of B. Code shift may, in principle, occur without any appreciable imposition from the abandoned code. If imposition does take place, elements once copied from A₁ remain operative as a “stratum influence”. Well-known effects of this kind are observed when large numbers of speakers of different languages have learnt to speak the language of a foreign ruling power such as Latin.

Combinations of adoption and imposition may be seen as a kind of bidirectionality. Note, however, that imposition normally only affects one variety of B. The code interaction observed on Guernsey (Jones, this volume) thus means that speakers of Guernésiais adopt elements from English, whereas they impose elements of their native Guernésiais only on their own kind of English, the variety spoken on the island. Note also that imposition is observed in various kinds of bilingual situations and does not necessarily imply code shift.

8. Global, selective and mixed copies

Linguistic codes are open to copies at different levels. The elements copied can be both (1) segmental units as “blocks” of qualities and (2) individual qualities as such. The copies are global, selective and mixed. Our model treats the corresponding copying processes as closely related and differing only in terms of their scope.

Global copying means that a unit of the model code is copied as a whole, including its form and functions. Units are segmental items that possess a material shape: stretches of speech, morphological, lexical, phrasal and phraseological items of various kinds. They may be morphemically simple or complex, comprise one or more words, belong to different word classes, to bound or free, lexical or derivative, open or closed classes. A unit does not simply represent the phonemic shape of a word and its meaning” in the sense of Haugen (1953:
90) but, rather, constitutes a block of different properties: material, semantic, combinational and frequentational.

Copying is selective when it does not involve segmental units, but only selected structural - material, semantic, combinational or frequentational - properties of foreign blocks. These extrapolated structural properties serve as models for copies which are applied to units of the basic code. Influence of these kinds is traditionally known as "loan phonology", "loan semantics", "loan syntax" etc.

Mixed copying combines both techniques, thus yielding selective - typically combinational or frequentational - copies that comprise at least one global copy. This type has been called "loanblend" (Haugen 1972: 85) when it occurs within the lexicon. In the framework of code-copying, mixed copying also encompasses phrases, clauses, sentences and other formats.

9. Kinds of selective copies

One type of selective copying is termed material copying. Phonic properties of model code units - sound features, phonotactic patterns, accent patterns etc. - serve as models and are copied onto units of the basic code. Selective copying can also be restricted to non-material aspects.

Semantic copying means that denotative or connotative content elements of model code units serve as models and are copied onto units of the basic code. (The content is specified in communication by applying pragmatic and interactional rules that take into consideration relevant elements from the context).

Combinational copying means that combinational properties of model code units - features of their internal constituency or their external combinability with other units - are copied onto units of the basic code. This may lead to redistribution in the sense of new constituent order patterns, phrase structures, complement structures, word-internal morphemic patterns and so forth. Combinational properties may also determine the degree of complexity and thus induce simplification or complication.

Frequentational copying means that frequency patterns peculiar to model code units are copied onto units of the basic code so that the latter undergo an increase or a decrease in frequency of occurrence. For example, elements which already exist in the basic code, though they are more "normal" in the model code, may gain ground and become less marked.

As is well known from language contact, similarity in shape between a unit of the model code and its equivalent in the basic code - that is, between relatively homophones "false friends" - may favour selective copying of phonic properties, accent patterns, semantic properties and frequency patterns.

In traditional contact linguistics, certain semantic and/or combinational non-phonic copying is referred to as "calques" and "loan translations". However, these labels do not cover the whole range of phenomena discussed here. In the older paradigms, non-phonic copying is often inadequately characterized as "substitution", as if phonemic properties of copied units had actually been replaced. For cases where no global copying has taken place, this terminology is misleading. If no whole block including material properties has been copied, there are no phonemic properties to replace. It is sometimes even claimed that lexical "loan translations" retain their source language shape, while showing "morphemic substitution".

10. Insertion of copies

The globe below (Figure 1) symbolizes a global block of structural properties. M(aterial) properties concern the shape of the item in the code, S(ematic) properties its content, C(ombinational) properties its word-internal and word-external combination patterns, and F(requentational) properties its frequency of use.

![Figure 1. Synopsis chart of code-copying options](image)

The roles of the basic and model codes are obviously opposite to each other in cases of adoption and imposition. With adoption, A is the basic code into which copies from the model code B are inserted. With imposition, B is the basic code into which copies from the model code A are inserted.
Insertion of copies occurs on the basis of some equivalence. Thus, global copies are inserted into those slots – equivalence positions, insertion points – that their "equivalents" in the basic code may fill. The decisive criterion of equivalence is the speaker's subjective assessment of what or she feels to be close enough. Lack of real typological equivalence does not prevent insertion. Some allegedly universal constraints as to the insertion points of global copies have been shown to represent nothing more than tendencies.

The present volume contains numerous examples of global and selective adoption and imposition. Examples of adopted global copies of morphological units are the copies of pronouns, tense forms and the negative particle from standard French at the expense of non-standard forms in the Lille urban area (see Pooley, this volume). Other examples of global copies are given in the discussion of katharevousa influence on dimitiki in modern Greek morphology and lexicon (see Holton, this volume).

There are also several examples of adopted selective copies. Adoption of material copies is illustrated by the loss of vocalic and consonantal features, word-final consonant devoicing and other phonological features through copying of new phonic features in the course of linguistic levelling (see Pooley, this volume). Another case is the katharevousa influence on the phonology of standard Modern Greek (see Holton, this volume). Material copies in vowels and consonants is also one of the points discussed in the chapter by Kerswill and Williams. Adoption of a combinational pattern of standard French is demonstrated by the loss of the use of qui il 'who' as a relative pronoun in the Lille urban area, e.g. Cet homme qui il est là 'the man who is there' (see Pooley, this volume). In her chapter, Jones cites instances of English influence on Guernésiais, lexical calquing as well as semantic and combinational copying of other kinds: the tendency to prepose adjectives, selective copying of the syntax of passive constructions, the use of the affirmative form oui instead of si under the influence of English yes, and copied features of prepositions, e.g. the use of one single form corresponding to English with instead of separate comitative and instrumental forms. Adoption of semantic copies is illustrated by the change of meaning and connotations of Guernésiais verbs due to formal similarities with English verbs. Frequential copying is also discussed: the increase of a pattern already attested, a type of change that involves greater statistical frequency of a pattern more isomorphic with the structure of English than the more traditional Guernésiais construction.

As regards imposition of selective copies, Jones cites examples of semantic-combinational copying. The preposition to in Guernsey English is also used to express position or static location on the model of its Guernésiais equivalents, e.g. the preposition à. In this case, properties of A units have been copied onto their B “equivalent”. The definite article in Guernsey English appears in contexts in which it is not normally used in standard English. The present tense is used instead of the present perfect for which the subject had begun in the past and continued up to the present (cf. Johanson 1999d: 85, 117). Imposition of combinational copies is also illustrated by the individual linguistic development sketched by Esch. Initially, copies from a non-standard code A are imposed on a standard code B, a combinational pattern that allows the auxiliary avoir 'to have' to occur in compound tense forms where the standard has retained être 'to be', e.g. Je suis arrivé 'I (have) arrived' instead of Je suis arrivé (cf. Johanson 1999d: 124–127).

Semantic-combinational copying may cause loss of former distinctions, thus leading to underspecification and simplification. On the other hand, not all cases of simplification are due to copying. Several cases of simplification are discussed in the present volume, especially by Cremona, Hornsby, and Kerswill and Williams. Simplification in morphology may mean the loss of morpho-phonematic irregularity and a corresponding increase in invariable word forms. It may involve the elimination of bound markers through the introduction of analytical structures. It may also lead to simpler rules of syntactic agreement in terms of gender or number. Finally, it can also mean the actual loss of functional categories. It is often difficult to decide whether or not simplification is caused by copying. Speakers of A codes may impose simpler structures on their B varieties. On the other hand, A speakers learning a B code may prefer those forms which are easiest to learn and thus select simpler structures even if these are not present in their primary language.

11. Accommodation of copies

The frames provided by the basic code serve as matrices for insertion. Global copies are classified, on the basis of "equivalence", into morphosyntactic categories in order to be inserted into their specific slots. They are thus accommodated in grammatical structures and provided with morphological grammatical function markers. Lexical copies assume grammatical morphology of the basic code, free or bound function units. Global copies may sometimes be morphologically adjusted to fit the morphosyntactic frame. In order to be inserted as predicate cores, copies of verbs may need to be morphologically accommodated by some word-formation device – e.g. pro-verbs of the type to do – which is syntactically compatible with the native devices and capable of carrying inflectional markers.
The insertion of global copies into slots marked by clause-syntactic markers is often called “morphological integration”, “substitution”, “switching” or “suspension of the source grammar”. In the code-copying framework, accommodation in grammatical structures is not a change from one code to another, since the frame of the basic code is already present, and is ready to accept the copies. The absence of certain grammatical elements, such as gender and number inflection, or articles in copies of nominals, does not necessarily represent “simplification”. No unit of this kind is “lost” or “deleted” if it cannot be shown to have been part of the element copied. The fact that the originals may need these and other elements of syntactic cohesion when used in the model code does not mean that they form part of the elements copied. If there is no need for their equivalents in the basic code, there is no reason to claim that the grammar of the model code is “suspended”. Many copies may have never had any “fuller structures” to be syntactically simplified or any function elements to be deleted.

12. Adaptation of copies

In global as well as in selective copying, originals and copies are never identical but, rather, display various kinds and degrees of difference with respect to their properties. The differences may be more or less significant, but there is always some adjustment involved. Copies are never genuine replicas of their models. They are always to some degree adapted – phonologically, grammatically, semantically and so forth – to the system of the basic code. Adaptation limits structural conflicts between the codes.

Global copies are subject to adaptation – modification in the direction of the system of the basic code – with respect to their material, semantic, combinatorial and frequentational properties. The same is true of material, semantic, combinational and frequentational properties which are copied selectively. In all cases, we reckon with a sliding scale, a continuum ranging from relatively faithful “reproduction” – relatively close similarity to the original – to extensive adaptation by means of “substitution”, i.e. the replacement of model code properties by basic code properties. Haugen’s term “importation” for “successful” copying (1972: 82) is again misleading since it suggests a possible identity between the copy and its model.

The material adaptation of global copies may mean more or less comprehensive phonic, phonotactic and morphological restructuring. Native properties are substituted for properties of the model code. In cases of adoption, the substitution largely depends on how segments of the model code are perceived and classified in terms of the basic code. Semantic restructuring yields differences in denotative or connotative content. No copy will be totally similar in meaning to its equivalents in the model code. Semantic properties of the model code replace those of the basic code. Restructuring may also affect combinational properties, substituting patterns of the model code for those of the basic code. The substitution determines the combinability of global copies or their internal organization. Finally, copies are restructured with respect to frequentational properties.

Both global and selective copies may differ essentially from their originals as a result of heavy restructuring. There may be highly creative formations. Some of them presuppose the ability to analyse the originals, to copy them or parts of them, and to rearrange the copies in a creative way.

The differences between the originals and the copies are thus often structurally motivated. It is also certainly true that typological distance between the two codes may favour restructuring, whereas the differences may be smaller in the case of relatively similar codes, such as mutually intelligible and structurally similar dialects. However, this does not necessarily mean that the differences are the result of “imperfect learning”.

During the linguistic development over time, we may observe different stages with respect to adaptation. Some stages show relatively high tolerance towards foreign structures. Others display more intolerance, leading to strong and often unpredictable reshaping. At certain stages, we may find more systematic substitution. It does not seem possible to distinguish consistently, on formal grounds, between newer and older copies. Thus, certain copies of Turkish words in Macedonian function as fully naturalized borrowings and show phonological and morphological adaptation to Macedonian grammar. The adjective kor ‘blind’ ⇔ Turkish kör inflects for gender and number as is normal in Macedonian. On the other hand, certain copies function at the same level without being morphologically adapted, e.g. uninflected adjectives such as ‘guzel’ ‘beautiful’ ⇔ Turkish güzel (Friedman 1995: 63).

13. Autonomy of codes

Let us summarize some important points. It follows from the definition of code-copying, as distinguished from code-alternation, that the process always affects the structural characteristics of the basic code. The use of a copy in the basic code represents more than just a “switch”. Copies are not just juxtaposed to elements of the basic code, but become part of this code. Copies and origin-
als belong to different systems. Copies are "foreign" only in an etymological sense, that is, with respect to their origin. Global and selective copies are, as we have stated, always adapted to the system of the basic code to some degree. Although code-copying may be motivated cognitively by mental preferences for uniformity of the two codes, and although the devices of the two codes actually become more similar, this does not lead to a fusion of the linguistic systems involved.

This view relies on the conviction that codes constitute systems with specific and strict structural economies, in which the categories are defined by internal relations. No element corresponds completely to an element of another code. Each synchronic stage has its specific structural properties. No change remains without consequences for the rest of the system.

This does not imply that the code systems are static or possess "a rigidity which is not characteristic of human behavior" (Haugen 1972: 303). On the contrary, we assume a versatility that allows copying and integrating all kinds of new elements into a system at each stage. It is important to stress the successive character of code-copying processes and the permanent dynamism involved in them. Codes constantly incorporate new elements, both material items and structures, whereby new systems are created. Successive processes of continuous copying lead to ever-changing systems. At every stage of development, the basic code must be defined anew. According to the code-copying model, separate grammars must be posited for them in order to make the dynamic aspects visible.

14. Habitualization and conventionalization

In the diachronic dimension, earlier and later stages of development must be distinguished. As we have stated, code-copies may develop along the lines of adaptation from structurally less integrated to more integrated copies. This is often seen as a parameter of "nativization". A different kind of "integration" or "nativization" pertains to extra-linguistic developments.

Copies may be more or less viable and have more or less lasting diachronic effects on the basic code. This occurs along the lines of habitualization and conventionalization. What starts as a momentary instance of copying, the result of a singular individual act, may end up in contributing to a new linguistic norm. More or less habitualized copies occur frequently, regularly or normally in individuals and/or groups. New elements that are initially felt to be "alien" to the basic code may become normal and even oust older ones.

A case in point may be seen in the individual development described by Esch in this volume. The individual in question initially imposes a combinational copy of an auxiliary in his non-standard code A₁ on an equivalent used in his standard code B₁. Due to the continued process of acquiring standard French, there is a drop in the rate of use of these copies. A₁ imposition on the written B₁ decreases under the influence of better acquisition of the standard code. This case might possibly also be interpreted in terms of adoption. It would be interesting to know what effects the better mastery of the standard code had on the development of her father’s spoken A₁ code, though this falls outside the scope of Esch’s chapter. To what extent did he adopt standard features in his non-standard code? Did he habitualize the combinational copies from B₁ as a result of improved mastery of the use of standard French auxiliaries?

Conventionalization means "integration" with respect to acceptance in speech communities. More or less conventionalized code-copies are the result of dynamic processes with more far-reaching and lasting effects on the role of the copy in the speech community. Deviations originally perceived as "interference" may establish themselves, become socially "unmarked" and even replace their indigenous equivalents. One sign of conventionalization is psycholinguistic "integration" in the sense that a copy is recognized as "native" and not perceived as "foreign". Conventionalization may be limited to small groups of speakers, or it may have a wider scope. Deviations originally perceived as "interference" phenomena may establish themselves as new sets of norms, and may even replace their native equivalents. In bilingual communities, the copy in question may become part of a more general bilingual norm. The final stage may be reached when the copy also occurs in the utterances of monolinguals and is not perceived as "foreign" by them. For example, Jones (this volume) shows that what may have been at the outset non-conventionalized phenomena ("simple transference phenomena") have become an integral part of English as spoken on Guernsey.

Under favourable sociopolitical conditions, norms may be set for more general deviant codes and accepted by constantly expanding groups. Even a high-copying variety may become the socially unmarked way of speaking in successively larger linguistic networks. Finally, there may be language birth in the sense that a former high-copying variety becomes the specific code of a whole speech community, including monolinguals.

Habitualization and conventionalization of copies are procedures interrelated with frequency of use. Note, however, that a copy may be accepted and become part of a norm in spite of a relatively low frequency of use. Through habitualization and conventionalization, frequent copies, which produce
changes in frequency, may undergo the same developments as all other copies. A contact-induced increase or decrease in frequency may thus either be ephemeral or stabilize and assert itself as part of a new norm.

The process of conventionalization is a continuum of changes in sociolinguistic status with gliding transitions between degrees of acceptability for individuals and for speech communities. It seems meaningless to pose absolute distinctions, e.g., to try to determine when a copy has actually become a “borrowing.” The procedures in question have sometimes been seen as transitions from “use” to “system” or from “performance” to “competence.” What Weinreich called “nonce-borrowing” (1953: 11) relies on the basic difference between parole and langue. Within the present framework, we shall not apply traditional dichotomies of this kind to the processes of conventionalization.

Acceptance in terms of the psycho- and sociolinguistic parameters of habitualization and conventionalization is different from linguistic adaptation in terms of code-internal structural parameters. These processes of “integration” or “nativization” are, in principle, independent of each other and do not necessarily run parallel. Nevertheless, further research may reveal deeper systematic correlations between structural and extra-structural developmental stages.

15. Code development

The historical development of copies is, from the very beginning, code-internal. Copies are placed in systemic contexts which they affect and by which they are affected. New copies are conventionalized and are passed on to new speaker generations as part of the inherited inventory. Their difference from “indigenous” elements is merely etymological. Once a copy is conventionalized, it forms an integral part of a synchronic system, undergoes normal internal change and is subject to grammaticalization processes of the basic code. Innovations due to code-copying should thus be dealt with in the same way as noncopied innovations, i.e., within monolingual grammars.

Particular attention must be paid to continuous and successive copying processes and the dynamism involved in them. Codes permanently incorporate new elements. At each stage of development, the basic code must, in principle, be defined anew. New systems offer frames for further insertion of copies. They may develop their own norms and constitute new codes in their own right, for which separate grammars must be posited. Each given new norm may be deviated from by new “marked” copying. Each stage contains dynamic elements of variation, bearing witness of ongoing linguistic change and pointing forwards to new dynamic processes.

16. Frame-changing developments

Under conditions of sustained intensive contact, speakers may progressively restructure a basic code on the model of other codes and thus change the frame for the insertion of copies. Considerable frame-changing developments may be produced by the following devices:

1. Global copying of function units (grammatical markers, relators) into the basic code. Whole units, free or bound, including their material and functional aspects are copied in abstraction from the items they mark in the model code.

2. Selective copying of the semantic and combinational properties of function units onto units of the basic code.

3. Selective copying of combinational patterns (for the arrangement of morphemes, words, phrases, clauses and sentences) onto units of the basic code.

The copies are used along with, or instead of, the native devices already present in the basic code. The devices often interact to create frames which are rather different from the original ones. Copied constructional patterns may combine with copied function units, e.g., a clause pattern with a subordinator. Through the selective copying of combinational patterns, new equivalence positions for global copying are created, which might even be a motivation for this kind of copying. Generalized combinability patterns may lead to the emergence of new distributional classes, e.g., “word classes”, in the basic code. The copying of combinational patterns is often preceded by the global copying of function units. It may start with mixed copies, i.e., copied combinational patterns including global copies of function units.

These kinds of structural copying are well-known contact-induced phenomena, frequently attested in the history of languages and contradicting Givón’s peculiar assertion that “it is relatively unlikely for languages to borrow grammar” (1979: 26). It is sometimes thought that morphosyntactic copies such as function units are only used as conventionalized “borrowings”. However, established “borrowings”, “loans”, “calques” and so forth bear witness to stages prior to conventionalization. All must once have been non-habitualized, non-conventionalized momentary copies.
17. Deviations and genetic classification

Extensive copying from one model code or from a group of similar model codes may lead to considerable deviations from the original typological habitus of a basic code. Even if innovations depend on already existing structures, it is possible for a code to copy elements that appear typologically inconsistent with the rest of its structure. For example, it is often assumed that prepositions cannot be copied into a basic code that lacks these function units. However, as shown by Karaim, the possibility of inserting prepositions into a typically postpositional code is just a matter of time and intensity of the contact (Csató, this volume). Partial change of ordering rules may lead to disharmony within the basic code (see Csató 2000a).

High-copying codes include numerous nativized copies from foreign codes. They represent several historical layers, reflecting successive contacts. In retrospect, it becomes increasingly difficult to distinguish between copies and non-copied elements. It is often impossible to trace copies back to their origins, unless their history is clearly documented. One complex case is represented by Salar, whose different layers of copies from other Turkic and non-Turkic codes are discussed by Dwyer (1996, 1998). Some of its features suggest a genetic relationship with the Oghuz branch of Turkic, with Turkmen in particular. A number of lexical items have been copied from South Siberian and Kipchak Turkic, certain phonological and lexical features from Uyghur. Finally, there are more recent lexical, phonological, morphological and syntactic copies from Chinese and Tibetan.

Can developments of these kinds cause problems with respect to the genetic classification of high-copying codes? Let us exemplify the issue with the Ottoman literary language. Since any Ottoman text offers an overwhelming number of lexical elements copied from literary Persian and Arabic, we may ask whether the language is actually "Turkish" or merely of Turkic origin. The intuitive answer will be the same as to the question whether English is "Germanic" or merely of Germanic origin. Despite the fact that any text by Dickens abounds in copies from Romance, English is still not a Romance language. Although languages must be described with respect to their actual habitus and not merely in terms of their origin, we would obviously classify Ottoman as Turkic and English as Germanic. Similarly, in spite of all their contact-induced changes, varieties such as Gagauz, Karaim and Salar have all remained Turkic and there is no reason to term any of them "mixed" or "transitional".

Purely quantitative criteria are not sufficient to determine code-assignment. The defining criterion of the basic code is not that the number of non-copied morphemes exceeds the number of copied ones. Virtually all the lexical materi-

al may be copied without bringing about a shift of the basic code. Even in cases of heavy copying, the code that sets the frame for the copies is discernible. The ultimate criterion of code-assignment are the non-copied core elements of the morphosyntactic frame. The basic code may normally be identified at the clausal level: though we may insert all sorts of elements, there are, ultimately, certain stable function units which are left intact. These non-copied core elements form our criteria for determining the frame-providing code. Even an Ottoman sentence overloaded with lexical copies is, as a whole, defined as Turkic according to its basic grammatical morphemes. Compare Gal's characterization of a Hungarian variety spoken in Austria: "Regardless of the number of such words in a sentence, it continues to function as a Hungarian sentence if the affixed grammatical elements (the number and case markers, person and tense markers, articles) remain Hungarian" (1979: 81).

The least copiable units may determine the frame-providing code. They seem to include a few relators of the simple type: copula units (personal markers, finite predicate markers), case markers with generalized meanings and reduced shapes, tense-aspect markers, certain pronouns and auxiliaries such as pro-verbs.

The study of which linguistic elements are least susceptible to copying and conventionalization has, therefore, consequences for questions of reconstruction and genetic relations; see the discussion in Johanson 1992, 1999c, 1999c, 2000b. Similarities between languages in these domains may offer arguments in favour of relatedness.

The study of ongoing processes allows the researcher to observe the dynamics of code contact from the very beginning, which may be important for historical reconstruction and for the understanding of the ways in which systems have emerged. Conversely, evidence from linguistic history concerning previous copying processes and their results may shed light on current developments.

18. Code shift, substratum effects and code death

It is sometimes claimed that heavy code-copying may lead to a shift of the basic code. It has even been thought that morphosyntactic copying may only occur in connection with shift. The idea is that, by incorporating more and more copies, the basic code would gradually develop into the model code. Speakers would copy larger and larger blocks and end up by copying whole sentences. This is a highly improbable and unattested shift scenario. There is
no empirical evidence that a code ontogenetically turns into the very code from which it has copied extensively.

Contact may indeed result in shift in the sense of “B removes A”. A high-copying code may well be replaced by a more prestigious model code. However, this is a radical qualitative leap rather than a quantitative process within the basic code frame. A code shift is the result of extra-linguistic factors rather than of gradual structural changes. The basic code is maintained unless its speakers shift to the model code and use it as their basic code.

As stated above, when a speech community has shifted to a dominant code, former impositions – pronunciation habits, syntactic structures and so forth – may remain as substratum effects. Old copies of A1 elements, once imposed on B2, continue their existence in B1. Traces typically consist of selective copies, whereas global lexical copying, which is always involved in adoption, is not necessarily represented. Extensive non-lexical convergence may thus be indicative of imposition. If dominance relations change, imposed copies may also spread to native B1 speakers. One example is Guernésiais imposition on Guernsey English, which is found in the speech of many of the Guernsey-born (older) local population, regardless of their ability to speak Guernésiais (Jones, this volume).

In the case of code shift, the old A1 code will either be maintained or become obsolete. It vanishes if the intergenerational chain of transmission is broken, that is, if its speakers cease to transmit it to new generations. Death is not caused by the very existence of prestigious contact codes or by extensive copying from them. Dominated codes may well co-exist with strongly dominant codes over long periods.

Prior to obsolescence, A1-dominant bilinguals typically continue both adoption and imposition, whereas B-dominant bilinguals, mostly of a younger generation, only adopt copies from B in their A1 code. Death may be more or less sudden. In the case of Guernésiais, studied by Jones in this volume, numbers of speakers had started to decrease from the beginning of the twentieth century, however, the dialect’s fortunes declined abruptly after the Second World War and it is now undergoing rapid obsolescence. The older speakers have all but stopped speaking Guernésiais to the younger generations. Interestingly enough, Jones states that the linguistic changes in Guernésiais are also found in “healthy” languages. It seems that there are no linguistic changes exclusive to code death.

19. Codes as registers

Interacting codes may be used as different registers with “higher” and “lower” positions in the variation continuum. One example is the duality of standard and non-standard codes (Johanson 1989). A dominant standard code may be used in formal speech and writing – i.e. for official purposes, in science and education etc. – whereas the dominated code serves as a spoken and more informal register for everyday and conversational purposes – informal writing etc. Standard languages, promoted in order to build up national identity, are usually mediated via school systems as secondary codes B2. Certain standard codes are the products of linguistic engineering, sometimes due to language reforms. Holton (this volume) deals with Greek diglossia, which officially ceased to exist in 1976 when, as the result of sweeping political developments, a change in the official language of the Greek State was declared.

Esch (this volume) claims that standards are often conservative because of the levelling involved and that enforcement of their norms may thus slow down linguistic evolution. Her case study of auxiliary selection in Alsace suggests that the transmission of the norm via the school system may actually “act as a brake to the speed of change”. On the other hand, there are also examples of establishment and promotion of progressive norms which speed up linguistic development. A case in point is the well-known language reform of Turkey. On language policies in the new Turkic republics of Central Asia, see Johanson and Ragagnin (forthcoming).

The linguistic repertoire of individuals may embrace different stylistic options. Esch (this volume) reports that her father developed a form of “bidialectalism”, which was a positive outcome: controlled use of a competence for stylistic effect when interacting with persons within his family. In immigrant situations, code-copying may be typical of functional varieties used for in-group communication. The same speaker will behave differently depending on the type of interlocutor involved. In communication with other bilinguals who share the same linguistic background, a high-copying variety may be used. It may be avoided in other situations, since it would cause a breakdown in communication. The social consequences of the choice are thus predictable. Young bilinguals of the second generation of immigrants may use high-copying varieties with each other and relatively low-copying varieties when speaking to first-generation members with a more limited B competence. A high-copying variety reserved for in-group conversation between Dutch-Turkish bilingual peers has been described by Backus (1989).

One important point is to determine the actual source of a given code-copy. Which variety of which language serves as the model code? Is it a standard var-
urity, a dialectal variety or some “makeshift” communicative variety between
speakers of different languages? In immigrant settings, we have to reckon with
the possibility of a multiple input, which may contribute to complex patterns
and provide options that can be used for situational and stylistic variation.

20. “Code-internal” factors

What kinds of factors favour copying, habitualization, conventionalization,
convergence and other processes? Internal and extra-linguistic factors are dis-
cussed at length in some of the contributions to the present volume. Here we
shall only touch briefly upon some of the issues involved.

The first question regards code-internal properties. One important factor af-
flecting the outcome of contact is the typological distance between the codes in-
volved. Copying may be easier when the codes have essential structures in
common. There is a preference for elements that “fit” well into the existing
structure of the basic code and do not cause much structural resistance. Com-
mon ordering principles providing equivalence positions favour copying. An
element is also more easily copied if the type it represents is an alternative al-
ready present in the basic code. Features already present may spread at the ex-
 pense of others through frequent copying. Another factor is the transparency
of equivalents in the codes involved. The copiability of function units seems to
be correlated with their stage of grammaticalization as reflected in degrees of
saliency of meaning and shape. The most copiable ones seem to be those with
relatively specific meaning and relatively elaborated shape (Johanson 1993b,
1996). Pooley (this volume) suggests that levelling may affect morphology
sooner and more radically than syntax. Among the features studied by him,
those of grammatical morphology are both more frequent and of greater per-
ceptual salience than the syntactic ones.

21. “Extra-linguistic” factors

Linguistic influence cannot be studied in isolation from its setting. In order to
explain and possibly predict the complex phenomena of copying and develop-
ment of copies, sensitivity to extra-linguistic factors such as dominance re-
lations in terms of social, political and/or economic strength must be taken into
account. However, as Kerswill and Williams (this volume) stress, individual
linguistic features must be viewed more explicitly in terms of their social em-
bedding and evaluation.

The extremely complex issue of extra-linguistic factors will not be dealt
with systematically here. The developments largely depend on the contact set-
tings, the specific social networks and environments in which the interaction
occurs. Social factors determine variational patterns in individuals, domains,
subgroups and generations. The social relations between dominant and domi-
nated groups may vary considerably. One important variable is the degree of
social asymmetry.

The sociolinguistic profiles of the dominated speech communities strongly
affect the outcome. Open social networks, often connected with a relatively
high population mobility, favor rapid change. Close-knit, more stable social
networks with strong local ties are less open to change. Geographical and so-
cial isolation may promote linguistic conservatism. One crucial variable is the
strength of internal bonds and group identity. Another one is the strength of
extra-linguistic bonds, the parameter of high-contact versus low-contact situa-
tions. Hornsby (this volume) explains differences in koinéization pro-
cesses—“simplification” as opposed to “levelling”—in terms of this distinc-
tion. As regards diaspora varieties, their openness towards innovations often
depends on whether their speakers identify themselves with the main bulk of
“mother tongue” speakers and maintain close contacts with them, or if they are
relatively self-sufficient as a separate group on some ethnic, cultural, religious
or political basis.

To define the determinants of linguistic change we need socio-demographic
facts on age, gender and class distribution, social strata, numerical strength, de-
grees of urbanization and industrialization, population density and so forth.
Generational differences, especially those between adolescents and post-adoles-
cents, are crucial.

Important extra-linguistic factors are the length and intensity of contact, the
extent of bi- or plurilingual ability, the degrees of competence and proficiency
in the codes involved etc. Does the use of a given copy presuppose competence
in both codes? Differences between originals and copies are often attributed to
low proficiency in the model code, so-called “imperfect learning”, particularly
difficulties experienced by post-adolescent learners and their tendencies to se-
lect easier learning paths. However, copies do not always reflect the proficiency
directly. Thus, Karaims of Halich use the form uče instead of uče ‘already’,
though they have been fluent speakers of Ukrainian and Russian for centuries.

One determinant is the degree of awareness of the limits between the two
codes. This often depends on language policies, the possibilities of linguistic
education, the existence of normative language control and training. There are
crucial differences between literate and non-literate groups. Many speech com-
unities possess a written language that functions as a source of high-status el-
ments. This dominant code may, however, be less available to certain layers of the community. For example, Holton (this volume) states that the katharevousa variety of Greek was largely impenetrable to people without secondary schooling. Wright (this volume) shows an example of social dominance expressed through the script: English spellings associated with prestigious French or Latin forms. Another important point is the presence of puristic awareness and tendencies towards the strict separation of codes. The amount of code-copying may be limited due to factors such as social stigmatization: instead, less stigmatized alternative modes of code interaction may be preferred, such as switching between two basic codes, thereby yielding a "mixed discourse". For this kind of code interaction among Turkish immigrants in the Netherlands, see Backus (1996).

The domains available to a given code are decisive for its use and vitality. The possibilities of using it may diminish, Jones (this volume) mentions the decreasing possibility of speaking Guernésiais and the increase in contexts for speaking English. When code contact results in code shift, it is preceded by loss of functional domains. Few social functions are left for the dominated code, since the dominant code serves virtually all purposes. Increasingly fewer speakers use the code; children do not learn it, or acquire a partial knowledge of it. All this may lead to the attrition and erosion of the code, delay and stagnation in its acquisition, fading norms and so forth. An important factor in the fate of the code is whether, in this situation, the speech community itself makes any active efforts at language maintenance and/or receives institutional support.

Acceptance or rejection of copies is also influenced by cognitive, psychological, pragmatic, interactional and other factors, which may be relatively language-independent. As stressed above, they should not be confused with the code-internal structures themselves.

22. The interplay of "internal", "external" and "extra-linguistic" factors

Certain data discussed in the present volume seem to admit "external" or "internal" explanations. They might be due to contact or to universal tendencies such as simplification. Can they be the result of both factors at the same time, namely in the sense of multiple causation, with one kind of factor reinforcing the other? Very often, it is difficult to decide whether a new feature is contact-induced or simply a linguistic development which the code in question could have undergone had contact not existed (Al-Wer, this volume). It is certainly right not to preclude external motivation simply due to the presence of internal motivating factors. As stated above, the present writer is more inclined to conceive of internal factors as tendencies that may become the object of external causation. Even "simplification" in the sense that one of two devices to express a particular function is generalized at the expense of the other may be an instance of external motivation, i.e. code-internal predisposition activated through copying.

Saliency is a central explanatory concept in recent dialectology, combining code-internal factors with extra-linguistic — sociolinguistic and psycholinguistic — factors. A "salient" linguistic element is in some way perceptually or cognitively prominent, having properties that lead to speakers becoming aware of it. Thus, "salient" dialect features are thought to be relatively susceptible to change, whereas less "salient" features are more resistant. Pooley (this volume) uses the distinction between higher and lower "perceptual salience". He suggests a hierarchy of factors which determine levelling processes: geographical range, linguistic level, frequency (or distributional range) and perceptual salience. Kerswill and Williams (this volume) discuss a number of studies which have used "saliency" to explain change and other linguistic phenomena. While accepting it as a potential explanatory factor, the authors claim that careful argumentation is necessary in order to avoid the danger of circularity and loss of explanatory power. According to them, circularity can only be avoided if "saliency" is defined against extra-linguistic criteria, a combination of cognitive, social psychological, pragmatic and interactional factors.

In any case, it is impossible to predict, on the basis of code-internal structural factors alone, which elements will be copied and which ones will be rejected. In previous work, the present writer has tried to launch the concept of "attractivity" — empirically manifested susceptibility to code-copying — in change, acquisition and variation. Linguistic elements may be attractive for speakers because of a particular patterning, relatively simple, regular and transparent structures or other properties that make them easy to learn and understand. Less attractive elements are those which have empirically proved to be copied less readily. An "attractive" property is a code-internal predisposition for copying, whereas extra-linguistic factors are decisive in actual copying, habitualization and conventionalization.

In a recent study on structural factors in situations of Turkic language contact, I have tried to determine the interplay of factors and their influence on copying. One result seems to be that social factors can overcome considerable structural obstacles to copying. Under appropriate social circumstances — particularly in intense and long-lasting contact situations — almost any feature from one code can ultimately be copied into another. The copiability of a par-
ticular structure into another code is determined in part by the prestige of the model code and in part by “attractive” structural properties. “Attractive” properties may be copied even in the absence of strong social pressure, but the presence of such pressure can ultimately promote copying even of “unattractive” properties. The presence of a copy in a basic code may mean (1) that it has “attractive” properties, (2) that the prestige of the model code has overcome its “unattractiveness”, or (3) that both “attractiveness” and social influence have been at work. Examples considered in isolation often do not allow to distinguish between these cases, but in many instances it seems possible to establish degrees of “attractiveness” independent of social factors (Johanson 1992, 2000a; cf. Comrie 1995).

References

Backus, Ad

1996 Two in One. Bilingual Speech of Turkish Immigrants in the Netherlands. (Studies in Multilingualism 1.) Tilburg: Tilburg University Press.

Boeschoten, Hendrik

Comrie, Bernard

Csáti, Eva Ágnes


Dwyer, Arienne M.


Friedman, Victor A.

Gal, Susan

Givón, Talmy

Haugen, Einar


Hayasi, Tooru

Johanson, Lars

1992 Strukturelle Faktoren in Türkischen Sprachkontakten. (Sitzungsberichte der Wissenschaftlichen Gesellschaft an der J. W. Goethe-Universität Frankfurt am Main, 29, 5.) Stuttgart: Steiner.
Contact-induced change in a code-copying framework


Johanson, Lars and Elisabetta Ragagnin

Kiral-Shahidi Asl, Filiz


Menz, Astrid


Weinreich, Uriel