Utterance modifiers and universals of grammatical borrowing*

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Abstract

Members of a functional category that I tentatively call "utterance modifiers" are the most vulnerable items to contact-related linguistic change in grammar. Utterance modifiers regulate linguistic-mental processing activities that can be attributed to a "grammar of directing." Bilinguals, when faced with the tension of choosing among the systems at their disposal in what is a highly automaticized operation, are tempted to reduce the overt representation of the "grammar of directing" to just one set of elements. Preference is given to the pragmatically dominant language. Contact-related change in the area of utterance modifiers is therefore not due to lack of equivalent functions in the indigenous language, nor is it due to the prestige effect that the integration of L2 items may have on the overall flavor of the discourse. Rather, I attribute synchronic variation in the speech of bilinguals to the cognitive pressure exerted on them to draw on the resources of the pragmatically dominant language for situative, gesturelike discourse-regulating purposes, and the diachronic change that arises from such variation to the establishment of a permanent licensing for speakers to do so.

1. Introduction

Interest in language contact is on the rise among language typologists and historical linguists, a fact perhaps best reflected in the attention that contact has been receiving in recent years within general accounts of language change (e.g. Anttila 1989: chapter 8; Hopper and Traugott 1993: 209–221; McMahon 1994: chapter 8; Harris and Campbell 1995: chapter 6; Lass 1997: chapter 4; see also Fisiak 1995). For the most part, contact as a trigger of change has appeared less predictable — among other things due to the multiplicity of imaginable contact constellations — than many of the long-recognized and well-documented internal mecha-

nisms of change. This may explain why recent discussions of contact have often centered upon the search for constraints that restrict language mixing in its various synchronic and diachronic manifestations. Insofar as such constraints have been postulated and successfully tested, however, they only provide a partial answer to the question whether anything in particular is LIKELY to change in a contact situation.[1]

With the current trend in contact studies leaning toward an "anything goes" hypothesis (cf. Thomason and Kaufman 1988: 14; Harris and Campbell 1995: 149–150), the question whether some components of language have a natural susceptibility to contact-related change is worth pursuing, for several reasons: first, it inevitably stipulates an investigation of the relations between structure-oriented borrowability hierarchies and social and communicative motivations for language mixing. Moreover, in order for such relations to be spelled out in detail it is necessary to formulate just how the linguistic structures involved contribute to fulfilling speakers' motivations and needs. Such a focus on the communicative functions of linguistic categories might help explain their behavior in contact situations. At the same time it is also possible to turn things around and approach categorization in language from a contact perspective, the point of interest here being whether contact can reveal any hidden properties of grammatical categories that are less easily accessible to analysts in a monolingual setting.

The focus of the present paper is directed toward this latter potential of contact situations. Chemists, I am told, may use controlled contact situations to test the reactions of substances and so establish some of their characteristic properties. Linguists, by virtue of their dealing with an aspect of human behavior, are limited in the extent to which they can evoke reactions in controlled settings, particularly when it comes to constructions and elements that are tightly embedded into speakers' real-life interactional intentions. Language contact acts as a natural laboratory of language change where properties may become transparent that are otherwise obscure, and so it may allow deeper insights into the functions of grammatical structures and categories. I deal here with a class of items that I will call "utterance modifiers" — an extended grouping of various discourse-regulating elements, discourse markers, and focus particles. I propose that the appearance of these elements at the very top of the borrowability hierarchy in situations of conventional, interactional language contact[2] is conditioned by their cognitive properties, that is, by the mental processing operations they trigger as part of their inherent function. In support of this claim I discuss evidence from diachronic change, ongoing change, and accidental "change" ("slips") in the linguistic behavior of multilinguals.

1.1. *Implications, constraints, and explanations*

Weinreich (1968 [1953]: 35) summarizes his own and earlier observations on borrowability of grammatical elements in the statement, "the fuller the integration of the morpheme, the less likelihood of transfer." This notion partly resurfaces in Moravcsik's (1978) implicational constraints, interpreted in (1):

(1)   Hypothesized constraints on borrowing (after Moravcsik 1978)
   a.   lexical > nonlexical (= lexical item > nonlexical grammatical property such as linear order)
   b.   free morphemes > bound morphemes
   c.   nouns > nonnouns
   d.   derivation > inflection
   e.   the rules of linear ordering that apply in the donor language will accompany grammatical elements borrowed from that language
   f.   inflection within a class of constituents cannot apply only to borrowed items

The hierarchical statements in (1a)–(1d) suggest preconditions for the borrowing of grammatical categories: thus, no nonlexical properties are borrowed unless lexical items are borrowed too, (1a); no elements that are not nouns are borrowed unless some nouns are also borrowed, (1c); and so forth. Although there has been considerable critique of Moravcsik's borrowing constraints in the literature (cf. Thomason and Kaufman 1988: 11–34; Campbell 1993; Harris and Campbell 1995: 122–136), they still point out a number of tendencies that cannot be regarded as entirely coincidental.[3] The general theme in (1) is in line with Winter's (1973) claim that the paradigmatic part of morphology is the most stable component of grammar and is less likely to be affected by borrowing, while the lexical and stylistic sides of language appear at the opposite end of the scale. We might therefore reduce Moravcsik's constraints to a single impression that elements that show structural autonomy and referential stability are more likely to be affected by contact than those that display stronger structural dependency and referential vagueness or abstractness.[4] This would bring us one step beyond Weinreich's idea of a mere correlation between structural integration and borrowing and toward a more explanatory statement, implying that stable, autonomous elements are pragmatically more salient and so more likely to be added to a repertoire of borrowings based on just occasional impressions of the donor language.[5]

The borrowing scale proposed by Thomason and Kaufman (1988: 74–75) is an attempt to place structural borrowing hierarchies in such a societal context of intensity of contact. The result is a scale that, unlike Moravcsik's (1978) constraints, is not necessarily implicational, but traces the progression of structural manifestations of contact along an historical continuum of cultural contacts. Thus, casual contact will lead to lexical borrowing of content words (category 1); slightly more intense contact may result in some borrowing of function words with minor phonological, syntactic, and lexical-semantic features (category 2; see below); more intense contact can give rise to structural borrowing of adpositions, derivational suffixes, and phonemes (category 3); strong structural pressure will condition borrowing of word-order patterns, distinctive features in phonology, and inflectional morphology (category 4); and finally, very strong cultural pressure could show significant typological disruption and phonetic changes (category 5). Throughout, features gradually spread from borrowed vocabulary, to which they are initially confined, to the native lexicon.

Both accounts — by Moravcsik and by Thomason and Kaufman — nevertheless contribute little to an understanding of motivation behind the hierarchical arrangement of grammatical features on the contact continuum (setting aside the lexical borrowing of content words). Consider that Thomason and Kaufman (1988: 74) include "function words: conjunctions and various adverbial particles" in category 2 of their borrowing scale, that is, at the very first stage in which change is found to affect grammar. Structure-oriented interpretations of borrowing phenomena have attributed the borrowability of such function words to their status as unbound, uninflected morphemes. In this connection, Campbell (1993: 96–97) challenges Weinreich's (1968 [1953]: 41) assumption that borrowed free morphemes would generally replace counterpart indigenous morphemes that are bound and cites the example of structural doubling in some Mesoamerican languages, where Spanish particles may appear alongside indigenous bound morphology (cf. Brody 1987; Stolz and Stolz 1996). The Mesoamerican case, Campbell argues further, illustrates that incompatibility between languages will not necessarily restrict borrowability, but that on the contrary differences in structure might indeed motivate structural borrowing.

Campbell's argument, while giving some backing to the idea that grammatical borrowing could be motivated by grammatical gaps in the recipient language,[6] also implicitly underscores the tendency of languages in contact to change in such a way that would SUPPORT compatibility in this particular area of grammar. While the gap hypothesis is disputable, it is strongly suggestible that the vulnerability of utterance modifiers

(included in various studies as "conjunctions," "adverbial particles," etc.) to borrowing is related to their function, less so to their form or structure. In numerous contact situations reported on in the literature, the donor language is the language of the community that exerts extensive cultural pressure — a colonial language, typically Arabic or a European language. Both use unbound morphemes for most key discourse-regulating functions. The general impression that early borrowing of such elements is a product of their structural features may easily be biased by the nature of the data corpus. While I cannot yet fortify this argument by providing alternative data from a pressure-exerting language that has passed bound discourse markers on to other languages within its sphere of influence, it is arguable that numerous languages will have had nothing to gain from a strictly structural point of view by adopting counterpart expressions from a contact language. The "gain," I propose, must be formulated in functional-communicative terms.

1.2.   *Bilingual speech and discourse markers*

American Yiddish utterances like *nit er bʌt ix* 'not he but I' lead Weinreich to suggest that "it is to be investigated whether forms belonging to some classes are more subject to transfer than others" (1968 [1953]: 30). The universal vulnerability of coordinating conjuctions to contact is pointed out by Mithun (1988: 351–353), who raises the question of how to interpret the fact that so many languages had previously existed without them. Her conclusion that "it may not be a coincidence that the source languages for these [borrowed] conjunctions have literary traditions" is another contemplation in the direction of the gap hypothesis, which attributes new items to the acquisition of new functions. While is it not at all my intention to challenge Mithun's interpretation of conjunction as a novel type of coordination unknown before contact in some languages where juxtaposition had prevailed (but see Stolz and Stolz 1996 for a critical view), the sociolinguistic gap between a literary and an oral language may seem to be of greater significance that the functional gap, if one exists, between conjunction and juxtaposition.

Rather than attribute borrowing of conjunctions to the acquisition of literacy itself, I prefer, even before considering contact without any literacy at all, to characterize the donor language simply as a PRAGMATI-CALLY DOMINANT language. This has first of all the advantage that literacy may be decoupled from the process of borrowing without downplaying its overall significance to the web of relations between the two languages. In addition, it allows an on-the-spot, situation-bound analysis of the

roles both languages play for an individual at any given moment of linguistic interaction, thus enabling an interpretation along similar lines of comparable phenomena in the speech production of bilinguals (such as "slips"). In other words, "pragmatically dominant" pertains to the role of a given language in regulating mental processing activities. A language with a tradition of literacy may become pragmatically dominant to a speaker in contexts involving argumentation, reasoning, etc. It may as a result infiltrate oral usage in the native language when it is used to replicate those linguistic activities. Similarly, the language of a mono-lingual majority may become pragmatically dominant to bilingual speak-ers of a minority language; "dominant," since the strain of keeping languages apart is sustained when communicating with the monolingual majority but can be relaxed when interacting within the bilingual group. Increased control and so maximum effort are therefore applied to the majority language. The question remains how and why pragmatically dominant languages lend their discourse markers, and why this might have a long-term effect on the recipient language.

Both sociolinguists and historical linguists now widely hold the view that the origin of historical change can often be traced to synchronic variation. This notion is represented in contact linguistics by investiga-tions of the relation between code switching and longer-term language change (e.g. Clyne 1987; Silva-Corvalán 1994; Savić 1995; Boeschoten and Backus 1997). Thomason and Kaufman (1988: 96) equally suggest that the type of preferences involved in synchronic bilingual behavior will also determine the historical progress of language convergence. Discussions of bilingual behavior, however, do not generally grant dis-course markers any particular function-oriented consideration (excep-tions are Salmons 1990; Maschler 1994; De Rooij 1996; see discussion below). Clyne (1987) considers conjunctions in connection with the trig-gering of syntax-level switches, as does Savić (1995: 487–488) for English *so* in her Serbian–English data. Though examples such as (2) from Savić (1995: 486) suggest that switched discourse markers have their own separate status:

(2)   *I do think* on treba   da   bude *like* malo   ljepše obučen od   to.
       I do think he should that be   like a-little nicer dressed than that
       '*I do think* he should be *like* dressed a little better than that.'

Whereas the first switch occurs at the syntactic break between matrix and embedded clauses, the discourse particle *like* shows a switch at an entirely different level of utterance management, namely that belonging to an interactional dimension, where hesitations and other effects on the "contract" between speaker and addressee are processed. The limitations

of a syntactic analysis can be seen in Azuma's (1993: 1077) attempt to explain (the numerous) counterexamples to his categorical claim that closed-set items do not participate in code switching. In pointing out that English *and* occasionally takes the place of its Japanese equivalent, Azuma relates pauses and hesitations surrounding switched conjunctions to the discourse-related functions of these elements but derives no conclusions from the fact that such discourse-related switches breach what is otherwise claimed to be a syntactic constraint.

Some insights into the position of discourse markers can be gained from quantitative accounts of code switching. In Poplack's (1980: 602) data from Puerto Rican Spanish–English bilinguals in New York City, discourse markers, which include the syntactic categories tags, inter-jections, and fillers as listed by Poplack, are the leading type of code switches, amounting to altogether 29% of all code switches in the corpus.[7] By comparison, the next category in line is "sentences" with 20%, fol-lowed by "single nouns" with 9%. But these total figures obscure the real picture somewhat. In reality, switched discourse markers in the corpus are predominantly English items in Spanish discourse, rather than vice versa: there are 503 Spanish-to-English switches with discourse markers, but only 44 such English-to-Spanish switches. Such a clear case where switches into English by far outnumber switches into Spanish (by more than 11 : 1!) cannot be found for any other syntactic category in Poplack's data. Poplack provides no absolute token figures for syntactic categories in the corpus and so there is no way of determining the extent to which English discourse markers could be replacing their Spanish counterparts altogether. There is nevertheless sufficient evidence to suggest not only that the use of English discourse markers is a salient feature of Puerto Rican Spanish discourse in New York City, but that Puerto Ricans might even show a certain degree of preference for English discourse markers, which are gaining ground in their speech.

Poplack (1980: 605–608) argues that English "taglike constructions" (including tags, interjections, fillers, and idiomatic expressions) require less proficiency in English and are therefore more widespread among Spanish-dominant speakers than among balanced bilinguals. While we have no basis to actually challenge this impression, the statistical rele-vance of discourse markers might indeed decrease for balanced bilinguals simply because of their ability to switch elsewhere as well. Rather than view the use of English discourse markers by Spanish-dominant speakers as strictly "emblematic" (Poplack 1980: 614) serving to demonstrate speakers' ability to switch, we might therefore take it as an indication that the native grammar is infiltrated selectively by elements from the (pragmatically dominant) contact language. Discourse particles are the

first category for which exposure to English is echoed by active replication of English items in Spanish discourse.

It is not always easy to draw comparisons among quantitative analyses with regard to the behavior of discourse markers. Studies concerned with structural aspects of code switching classify items according to sentential, not functional categories. Discourse connectors such as *and* or *so then* are counted as "conjunctions" and "adverbs" respectively. It is often impossible to isolate them from other items included in these categories, such as relative pronouns or lexical adverbs, whose behavior in bilingual discourse, however, is quite different. In addition, different communities may have different motivations for switching, which in turn might be reflected in different patterns of switching behavior. The proportion of fillers and tags in Bentahila and Davies's (1995) corpus of Arabic–French switches in a Moroccan community for instance is far lower then that of Poplack's "taglike" elements. French, however, has a different role among educated Moroccans than English for immigrant, working-class Puerto Ricans in New York; it may carry prestige in certain domains, but it is not pragmatically dominant in the sense that it needs to sustain exposure to the conversational scrutiny of a neighboring native French-speaking community.

Another survey of bilingual behavior in an immigrant community, Berk-Seligson's (1986) study of Judeo-Spanish and Hebrew in Jerusalem, ranks the category of "exclamations, idioms, tags, interjections" with 21% of all Spanish-to-Hebrew switches second only to that of "single nouns" (40%). Here too, grammatical infiltration by the surrounding majority language can be said to start in the domain of elements that modify utterances as interactional events. Berk-Seligson (1986: 323) assigns parallel status to code-switched nouns and code-switched discourse particles in the following example:

(3) A: Ke   dixo el   *rav*?
         what said the rabbi
     B: La mísma *parašá* ke   avía en šabát.   *Avál parašá, tefilá*
         the same portion that was on Sabbath but portion prayer
         ke áze al   *beyt aknéset*, al   kal,   *az* todos
         that does at-the synagogue   at-the synagogue so all
         ya   saven kwalo es.
         already know what is
     A: 'What did the *rabbi* say?
     B: The same *scriptural portion* that there was on Sabbath. *But*
         (the) *scriptural portion*, (the) *prayer* that is done in the *syna-
         gogue*, in the synagogue, *so* everybody already knows what
         it is.'

All the switched lexical items (i.e. content words) are vocabulary items pertaining to religious life, which for this particular speaker apparently takes place outside the Spanish-speaking circle.[8] But it is evident that the discourse particles *avál* 'but' and *az* 'so' have a very different role. They do not establish points of reference to cultural institutions and so to shared knowledge that is retrievable specifically via Hebrew but are part of the functional-operational frame of the discourse. Moreover, they have Spanish equivalents that are both structurally and semantically compatible. What then is the special effect gained by drawing on the elements of a contact language for discourse-regulating functions?

1.3. *Convergence and communication*

Maschler (1994) interprets Hebrew discourse markers in Israeli–English discourse as a strategy applied in order to "metalanguage" (i.e. to mark out on language, via language) discourse boundaries.[9] This notion of a discourse strategy differs from Poplack's (1980) idea of "emblematic" switches. It focuses not on the mere bilingual flavor achieved by inserting switched items, nor on the overall social effects that this creates, but on the connection between switching and the internal, communicative function of the items themselves: language alternation is seen as a way of highlighting the function of discourse markers in framing units of talk (cf. Schiffrin 1987). De Rooij (1996: 168–171) follows Maschler in suggesting a strategic usage of French discourse markers in Shaba Swahili. Language switch, he argues, contributes to the saliency of discourse markers and so reinforces their contrastive function. But this explanation is partly obscured by the fact that French items are gradually taking over an entire set of discourse-marking functions at the expense of their Swahili counterpart expressions, as seen for instance with markers of "progression" (De Rooij 1996: 148). If language differentiation is functional for contrastive purposes, why and how do speakers allow the spread of one system at the expense of another?

An attempt to combine the pragmatics of communication with aspects of change in contact situations is found in Stolz and Stolz's (1996) discussion of Spanish borrowings in Mesoamerican languages. They propose a scenario according to which borrowing begins at the level of discourse and gradually makes its way to the level of word grammar, along roughly the following progression: {discourse > text > paragraph > clause combining > clause grammar > constituent combining > word grammar}. Basing their arguments on the diffusion of Spanish conjunctions and discourse particles, Stolz and Stolz dismiss the gap

hypothesis on the grounds that items of equivalent or similar function existed before borrowing and often continued to exist alongside Spanish elements (cf. also Brody 1987; Campbell 1993). Instead they rely largely on the role ascribed to Spanish as a prestige language in Mesoamerican contact situations and so on a "very general socio-communicative motivation" (1996:112) for grammatical borrowing. In line with numerous other sudies, Stolz and Stolz interpret Spanish markers in Amerindian discourse as prestige signals that give the discourse a Spanish "feeling" and allow the creation of a prestigious register and so also for register variation.[10]

This idea of an underlying STYLISTIC motivation is not essentially different from Poplack's (1980) idea of the flagging nature of English discourse markers in Puerto Rican Spanish in New York. And so, although Stolz and Stolz's generalizations concerning the progression of contact-related change can certainly be supported (cf. Matras 1996), they fail to provide a framework that would allow for an explanation of the hierarchical character of the process. Their claim that discourse particles are borrowed first because they do not entail problematic adaptation processes (1996: 111) is a structural argument, not one that is function-based. Overall, Stolz and Stolz's approach to communication is wholesale, that is, it relates to the discourse as a whole, while categories continue to be defined in terms of their structural properties.

An explanatory account of the progression of change in contact situations must in my opinion consider the communicative functions of the classes of items affected by the change. It must arrive at an explanation as to why certain groups of items are more attractive for borrowing at earlier stages than others. In this respect, Salmons's (1990) work is an important breakthrough. In his investigation of American English discourse markers in American varieties of German, Salmons argues for a coherent reason for an entire class of transfers. English discourse markers in the varieties considered are frequent enough to be regarded as well-established borrowings rather than code switches into English. But they generally retain their original functions and follow the rules for syntactic placement of discourse markers in English. Moreover, the wholesale adoption of the English system of discourse marking coincides with the loss of the German system of modal particles, whose functions in German are similar or at least related. Salmons concludes that the systems of grammatical elements with discourse-regulating functions in the two languages have undergone *convergence*. He relates this structural convergence to the mutual adaptation of general communicative patterns in language-contact situations.

What Salmons leaves unanswered — despite this idea of a general merger of communicative patterns — is the internal, item-specific motivation for convergence and the pathways that the process takes. Both these issues will be taken up in this paper, where I argue that *fusion* — as I shall refer to the process which Salmons calls "convergence" — is motivated by the need to reduce overload in the mental monitoring of hearer-sided language-processing activities in bilingual communicative interaction.[11] In this respect, fusion in fact runs contrary to the strategic employment of the L2 system for metalanguaging purposes. It follows that switching for the purpose of metalanguaging, as discussed by Maschler (1994), and the reduction of processing overload caused by the availability of two linguistic systems are two separate and perhaps even competing bilingual tendencies, though both are connected to the bracketing function that discourse markers have in conversation. While metalanguaging profits from the contrast of parallel systems, overload reduction will lead to fusion and so to the elimination of parallel systems.

Evidence for this interpretation is sought in the fact that change leading to lasting fusion is not only gradual but also gradational, being sensitive to various operational properties of the grammatical elements concerned. Further evidence is given from unintentional, counter-strategic switching involving discourse markers and related elements in speech-production errors ("slips"), which shows attempts by speakers to reduce processing overload. This leads me to posit that the likelihood for diachronic replacement of a native element correlates with functional properties that make it cognitively inconvenient for speakers to differentiate between their respective linguistic repertoires. The shared behavior of a set of linguistic items in this regard — seen in both diachronic and synchronic perspective — suggests the existence of a broader, functional category that I tentatively call "utterance modifiers." It implies further that utterance modifiers regulate linguistic-mental processing activities that can be attributed to what I call the "grammar of directing." Bilinguals, when faced with the tension of choosing among the systems at their disposal in what is a highly automaticized, gesturelike operation requiring a maximum mental concentration effort, are tempted to reduce the overt representation of the "grammar of directing" to just one set of elements. Preference is then given to the pragmatically dominant language. Given sociolinguistic admissibility, such on-the-spot cognitive triggering may produce a sediment of established borrowings.

2. The stratification of borrowings: utterance modifiers in Romani

Romani is known to have a unique history of contact. It is the only Indic language spoken by significant populations in Europe since the Middle

Ages, its dialects are dispersed throughout the continent, codification is only very recent and is restricted to an extremely small group of intellectual enthusiasts, and, most importantly — wherever it is spoken, Romani is always a minority language, and there are virtually no monolingual adult speakers. Moreover, migrations have led to recurring shifts in the dominant contact language of some groups. Structurally this is often reflected in the presence of various layers of borrowings, thus enabling a stratification of grammatical borrowings and a reconstruction of the successive progression of the borrowing process.

Despite some considerable structural differences, Romani dialects may be said to share the most essential morphological formations as well as a number of basic syntactic features (see Bakker and Matras 1997). The most noticeable grammatical differences in fact appear in the area of unbound, uninflected particles. Consider the following examples, showing native speakers' translations into (a) the Lovari/Kelderaš dialect as spoken by a family whose ancestors originated from Romania and had lived for one generation in Poland, which now lives in Germany and Sweden (see Matras 1994); (b) the Gurbet dialect of a speaker from Negotin in the former Yugoslav Krajina; and (c) one of the dialects of the *Polska Roma* or 'Polish Gypsies' as spoken in the vicinity of Lodz:[12]

(4) Lovari: Si voj vorta   *vaj* bangi?
                is she straight or crooked
     Gurbet: Si voj pravo   *ili* banđi?
                is she straight or crooked
     Polsk.:   Sy mišto *čy* banges?
                is good or crooked
                'Is it straight *or* crooked?'

(5) Lovari: Vov šudelas manro po drom, *feri ke* e   čiriklora xale
                he   threw bread on road only that the birds   ate
                o   manro.
                the bread
     Gurbet: Vov thoda marno po drom, *ali* e   čiriklja xale le.
                he put   bread on road but the birds   ate it
     Polsk.:   Čhurdełys maro pro drom, *ale* čirikłe vyxane o   maro.
                threw   bread on road but birds ate   the bread
                'He scattered bread along the road, *but* the birds ate it.'

It should be pointed out that the translators were aiming at translations that would retain the grammatical particularities of each of the dialects but would be as compatible as possible in their lexicons. The variation seen for conjunctions in (4)–(5) is also apparent for focus particles in (6)–(7).

(6) Lovari: *Vi* man si jekh mustaca.
              also me is a   mustache
      Gurbet: *I*   man si mustaka.
              also me is moustache
      Polsk.: Man *tyž* sy čhorja.
              me   also is moustache
              'I *also* have a mustache.'
(7) Lovari: Adžes *feri* šaj arakhel pe   lenge kokala.
              today only can find   REFL their bones
      Gurbet: Aďive šaj arakhel pe   *samo* lenďe kokala.
              today can find   REFL only their bones
      Polsk.: Ki dadyves manuša rakhen *tylko* lengre kokaly.
              at today   people find   only their bones
              'Nowadays one can *only* find their bones' (=about dino-
              saurs).

Gurbet and the Polska Roma dialect show items from Serbian and Polish respectively — the current contact languages — throughout. Lovari is a somewhat more complicated case. Of all three dialects it is the only one that shows inherited Indic items for *vaj* 'or' and *vi* 'also, too'. The heavy layer of Romanian influence surfaces in *feri* 'only' and *feri ke* 'however', though the speaker has no current knowledge of Romanian. Inasmuch as (4)–(7) constitute a miniature sample corpus, they illustrate that there is a class of grammatical items in Romani that are at least potential candidates for contact-related change.

2.1. *The class of utterance modifiers*

From a structural point of view, the "vulnerable" expressions in (4)–(7) belong to different categories. Moreover, although they may share (perhaps to different degrees) with one another the property of being vulnerable to borrowing, they do not appear to share this property with their respective fellow members of the same structural category. Thus, contrastive conjunctions as in (5) are borrowed, but we rarely have borrowed temporal conjunctions; adverbial expressions as in (6)–(7) contrast with numerous classes of basic adverbs of time, manner, or location, to name but some, that are not easily borrowed. The "unbound function words" that do participate in the class of contact-vulnerable items in Romani can be grouped together to include roughly the following;
   – adversative (and partly other) coordinating conjunctions;
   – sentence particles, such as 'well', 'so', 'anyway';

– fillers, tags, and interjections;
– focus particles, as in (6)–(7), including phasal adverbs, such as 'still', 'yet', 'already'.

What are the typical properties shared by these elements? The first two classes clearly adhere to the category of "discourse markers" as defined by Schiffrin (1987) in that they provide the contextual coordinates for utterances. They are syntactically detachable from sentences, are commonly used in initial position in a sentence, and have a range of intonation contours and a rather vague meaning (cf. Schiffrin 1987: 328). Fillers, tags, and interjections only partly fulfill these criteria. Fraser (1990: 391) for example excludes them from the class of discourse markers as they fail to match the necessary structural criteria; they are grammatically peripheral (in the sense that they do not enter into constructions with the sentence content), and they may contain phonological segments that do not otherwise appear in lexical items. One can nevertheless argue that fillers and tags provide INTERACTIONAL coordinates for utterances, and so in this sense they too participate in the bracketing and framing functions of the discourse, each having a "core pragmatic meaning" rather than a content meaning (cf. Fraser 1990).

Focus particles and phasal adverbs certainly fail the detachability test even though they provide an inventory of elements that are likely to become discourse markers following the Schiffrin (1987) definition. They also tend to fail the vague-meaning test. On the whole, it is difficult to assign to them framing and bracketing functions on units of discourse without stretching the definition of the latter functions considerably. However, there are reasons to extend the notion of "contextual coordinates" to a level beyond the type of interrelations between participants and between propositions considered by Schiffrin (cf. "participant coordinates" and "textual coordinates"; Schiffrin 1987: 324). Thus König (1991) places inferential connections between new propositions and existing assumptions in the center of his analysis of focus particles. Blakemore (1987) even recognizes functional similarities among items included in the class of discourse particles, focus particles, and discourse connectives or markers, interpreting them as elements that act to constrain the contextual relevance of the utterance that contains them.

There are therefore properties shared by the group of vulnerable-to-contact items beyond their structural features. They are not only (in some Indo-European languages) morphologically simple and thus easily adaptable, but they all display the function of modifying the utterance in a way that would take into account contextual and presuppositional factors and so prepare hearers for "temporary disruptions of their expectations for upcoming coherence" (Schiffrin 1987: 316). In doing so, these

"utterance modifiers" participate in a regularized, closed set of structures on which speakers draw in order to direct hearer-sided processing of the propositional content of utterances and ensure the acceptance of propositional and interactional coherence in discourse. With interactional coherence I mean the harmonious continuation of negotiated speaker–hearer roles in a particular position in the discourse. Utterance modifiers thus contribute to a component of grammar that the speaker uses to DIRECT the hearer's reactions (cf. Rehbein 1979: Ehlich 1986).

2.2. *Successive replacement*

One explanation for the diversity of utterance modifiers across Romani dialects is that Proto-Romani or its Indic ancestor(s) had no, or only possessed certain elements belonging to this class and needed to borrow them from other languages in order to fill functional gaps.[13] Alternatively, one might suggest that the language indeed still has gaps, and speakers need to code-switch into their contact language in order to perform the relevant linguistic operations. This, however, may be dismissed first on the basis of the frequency and integration of the items in question (cf. Salmons 1990: 466–469 for a methodological discussion), and second drawing on the stratification of borrowings in Romani. Thus, in examples (5) and (7) above a Lovari speaker with no knowledge of Romanian uses the Romanian particle *feri* 'only, just, except'.

Consider, however, adversative conjunctions. Although they differ strikingly across Romani dialects, they all share structural properties — as clause-initial, unbound, and indeclinable elements, and semantic properties — all Romani dialects possess a "main adversative connective" that signals a break in the causal chain (Rudolph 1995) and a consequent denial of hearer expectations. Dialects that have once acquired a main adversative connective but have shifted to a different contact language as a result of migrations are unlikely to hold onto their "old" main adversative connective.[14] What happens with such "migrant" dialects is a successive replacement. Consider two very closely related varieties of the Lovari dialect in (8)–(9). Speakers of the first, in example (8) (from Matras 1994: 167), left Transylvania two generations ago and settled in Poland (whence they later continued to Germany and Sweden). Speakers of the second, in (9) (from Gjerde 1994: 104) left the same area via Hungary earlier this century, then settled in France before moving to Norway, where the example was recorded:

(8) No ta   atunči phendas lenge   nevimata, *ale* romane nevimata,
     well and then   he-said to-them news   but Romani news

antregi histori.
whole stories
'And so then he told them news, *but* Romani news, whole stories.'

(9)   But   vorbi ačaras,   *me* na sako vorba, ha.
many words we-understand but not every word
'We understand many words, *but* not every word, right.'

Both dialects have acquired a main adversative connective from their recent contact languages, in equal function and with comparable structure: "Polish" Lovari in (8) has Polish *ale*, "French" Lovari in (9) has French *me*. It seems curious that these closely related varieties should both have lacked an equivalent expression, yet were motivated into borrowing one within one generation upon relocating and encountering a new coterritorial language. I suggest that whatever expression existed before the diversification of the dialects through migration has been pushed aside by its functional equivalents that are part of a new layer of borrowings. Successive replacement of grammatical items in Romani enables a stratification of borrowings that, I shall argue, allows insights into a feature-based hierarchy of borrowability.

2.3.   *Evidence for fusion*

In dealing with discourse-regulating functions we are not concerned simply with single expressions, but often with entire framing operations that may involve more than one item, with linear ordering rules, and with intonation contours. My data for German Lovari (as opposed to Polish Lovari in Germany) in (10) show a mix throughout an entire portion of the sentence during which the utterance is modified in German. In (11), data for Bugurdži (from Boretzky 1993: 165) show that the framing of a sequence of discourse units may consistently be carried out in Serbian. And in (12), from a story in the Polska Roma dialect, the Alien's reply to the Human shows a Polish correlative construction, accompanied by the Polish rules for the positioning of the correlative expression:

(10)   Sa kamas   te   bučazinas kethane, sako savo vorbinda ži
all we-want that we-work together each which spoke   till
akanik. *Aber genau wie* tume žanen phares si e   Rom te
now   but exactly as you   know difficult is the Roma that
dikhen   kethane.
they-see together

'We all want to cooperate, all those who have spoken so far. *But as* you *well* know it is difficult for the Rom to unite.'

(11) *Posle* mange rimozom   o   purano kher *pa* kerdzom mange
then to-me I-tore-down the old   house but I-made   to-me

nevo.
new
'*Then* I tore down my old house *and so (then however)* I built myself a new one.'

(12) Human: Dava sy tylko paramiši kaj   pro marso manuša sy.
                this   is   only   fairy-tale that on   Mars   people   is

Alien: *A*   me *to*   či   som?
            and/however I   then nothing am

Human: 'It's just fairy-tales that there are people on Mars.'
Alien: '*So* am I nothing?'

While a classification as a code switch rather than a borrowing may be attractive for the mix in (10), at least in (11) and (12) we appear to have an intertwining of Romani utterances with entire frames from the contact language. It is true that the borrowing of function words tends to be accompanied by an adoption of the rules for the linear ordering of those words (cf. Moravcsik 1978; and see [1e] above). But in (10)–(12) it seems as though the organization of units of talk is carried out in the contact language, while the propositional side remains in Romani. In other words, what these Romani dialects are doing is SHARING THE RESOURCES for utterance-framing functions with the respective contact language on a wholesale basis. It is this type of phenomenon that Salmons (1990) defines as "convergence."

Language convergence involves the reduction of potential structural conflict and the reinforcement of compatibility between patterns of form–function mappings among two or more languages. Hock (1986: 492–512) defines convergence as the increasing agreement of languages in regard to features of their overall structure, while Silva-Corvalán (1994: 4–5) focuses on the achievement of greater similarity in a given aspect of the grammar of two or more languages. McMahon (1994: 213) distinguishes convergence and borrowing as follows: convergence requires long-term bilingualism while borrowing can occur with little degree of bilingualism; convergence usually affects syntax and morphology whereas borrowing usually pertains to lexicon; convergence is a mutual process affecting both languages, borrowing is unilateral.

Applying these considerations to the Romani cases, the changes are first of all unilateral, affecting only Romani but not the respective contact language. Though we are often dealing with long-term bilingualism, we

have seen above that change can take place even within a single generation. As for the structural properties, we are indeed dealing with an aspect of grammar rather than lexicon, but the wholesale change, what Salmons (1990) terms the "coherent transfer of a set of items," involves both expressions and syntactic rules, as well as intonation (not considered in the notation presented here).

Recall also that convergence in typical linguistic areas such as the Balkans (Sandfeld 1968 [1930]; Joseph 1983) or South Asia (Emeneau 1956; Masica 1976) usually involves the adaptation of an INTERNAL element in L1 in such a way that it should match the structure and scope of an external element in L2 that is perceived as its functional counterpart. Not only is convergence thus potentially mutual, but it typically involves changes to internal elements of inherited stock. What Salmons (1990) refers to as the convergence of discourse-marking systems, however, is in fact characterized by a unilateral replication of both material and functions from L2 in L1, with the result that speakers of L1 no longer differentiate between the respective operations of either language. I will use the term *fusion* to refer to this type of change. I understand fusion as a nonseparation of the two systems.[15] In particular, the fusion of discourse-regulating systems shows a merger of both the mental-processing operations and the inventories of linguistic items (= phonetic representations) that trigger them (cf. Matras 1996).

2.4.   *The gradual and gradational character of fusion*

The notion of fusion enables resolution of the apparent contradiction between the retention of earlier layers of borrowed utterance modifiers as exemplified for Lovari Romani *feri* (from the older contact language Romanian) in (4a), and the rapid adjustment of discourse-regulating operations to a new contact language, as shown for the Lovari varieties in (8)–(9). While Salmons's (1990) concept of convergence depends on the wholesale adaptation of a class of items and so is by necessity a reconstructive analytical notion, fusion can be regarded as a functionally predetermined, hierarchical progression of change. Fusion is gradual, as it will extend to encompass a maximum scope of items in a class through prolonged contact. This extension, however, is not random but gradational in the sense that it is sensitive to different qualities and degrees of qualities present in the elements affected by change.

What exactly these qualities and features are is the subject of section 3 below. But consider here examples from Romani dialects that have been in contact with one particular language for many centuries: in (13), the

Romungri dialect of Hungary (from Görög 1985: 90), and in (14) the
Sinti dialect of Germany (from Holzinger 1993: 322):

(13) *Akkor* del pānji *čak. De akkor iš* *čak* jek dive.
 then gives water only but but then even only one day
 'He gives water *only then. But even then, only* for one day.'

(14) *Ach* kai *denn*? Kon dšajas *denn* koi hin, me *doch* gar!
 oh where PART who went PART there to I PART not
 '*So* where? Who (*in the world*) went there, I *certainly* didn't!'
 Naja. *dann* his *noch* mire gešvistre ap o vurdi pre.
 oh well, then was still my siblings on the wagon up
 'Oh well, *then* there were *still* my siblings on the wagon.'

Fusion of discourse-regulating procedures in these varieties — with
Hungarian and German respectively — has reached the stage where
discourse chunks in which speakers rely heavily on utterance modifiers
are hardly comprehensible to speakers of other dialects with different
contact languages.

If we return to the two varieties of the Lovari dialect already considered
in (8)–(9), we see that despite very close resemblance and a shared
history of contact languages until approximately two or three generations
ago, some differences appear involving discourse-regulating items from
very recent and current contact languages. In (15) and (16) we have
examples from Lovari speakers now based in Norway, whose parent
generation was raised in France and who still travel frequently to France
and French-speaking Belgium (from Gjerde 1994: 24, 44). Examples
(17)–(18) come from a speaker of Lovari who was born in Poland and
raised in Germany (from Matras 1996: 73):

(15) *Bon*, gel' andre and' i khangeri, rudjin, o rašaj andre.
 good went inside in the church they-pray the priest inside
 '*Well*, they went into the church, they pray, the priest is inside.'

(16) Mindik te miškis le grastes, mindik miškis les te n'
 always that you-move the horse always you-move it that not
 ašel p'o than, *alors*, konik našti dikhel ke phurdel o gras.
 stay on place that-is nobody can't see that breathes the horse
 'You should always move the horse, you should always move it
 so that it does not stay in one place, *that is*, so that nobody can
 see that the horse breathes [hard].'

(17) Laki familija sas *also* kesave sar te phenav, artisturi, *nə*?
 'Her family were *like* such how shall I say, showpeople, *right*?'

(18) Taj žasas ande veša taj rodasas, taj dikhasas,
 and we-went in woods and we-searched and we-saw

khelasas ame *halt, nə.*
played   we   like   right
'And we used to go into the woods and search, and look around,
we *like* used to play, *right.*'

Utterance modifiers in these examples — from French and German
respectively — illustrate that dialects with only a moderate period of
contact of one to two generations already show an infiltration of pro-
gression markers, hesitation markers (fillers), and tags.

If we were to postulate a scale of vulnerability of utterance modifiers
based on the discussion so far, a picture somewhat resembling Stolz and
Stolz's (1996) hierarchy would emerge, with sentence-external discourse
operators of the type shown in (15)–(18) preceding clause-internal items
such as the focus particles included in (13)–(14). While this is hypothe-
sized here on the basis of a comparison of different dialects with different
intensities of contact, the same conclusion can be drawn, based on the
L2-stratification method, from the history of single dialects. In order to
stratify grammatical borrowings in "migrant" dialects of Romani I pro-
pose a distinction between three potential layers: (1) the *older L2*, which
is no longer spoken in the community but which has exerted considerable
influence on the dialect in the past; (2) the *recent L2*, the principal contact
language of the older generation in the community; and (3) the *current
L2*, which is spoken by all members of the community and is, especially
for the younger generation, pragmatically dominant, as it serves all
interaction purposes outside the Romani-speaking group.

Consider once more example (8), repeated below, from the Lovari
dialect (from Matras 1994: 167). Recall that the ancestors of this group
left Romania some three generations ago; the older generation was raised
in Poland, the younger generation in Germany.

(8)   *No* ta   *atunči* phendas lenge   nevimata. *Ale* romane nevimata,
      well and then   he-said to-them news   but Romani news
      anteregi histori.
      whole   stories
      'And *so then* he told them news. *But* Romani news, whole stories.'

The older L2 Romanian is still represented in *atunči* 'then' (as well as in
antregi 'whole') while the recent L2 Polish is the source for the progression
particle *no* and the adversative conjunction *ale*.

In (19) from the dialect of Ajia Varvara in Athens (from Igla 1996:
271), the Romani speech of a group whose ancestors immigrated from
Turkey some three generations ago shows the older L2 Turkish as a

source for the phasal adverb *daá* 'still' and the current L2 Greek as the source for the adversative conjunction *alá*:

(19)   Manglé   me čheá,   *alá daá* in   phendám 'va'.
       they-asked my daughter but still not we-said   yes
       'They asked for my daughter's hand, *but* we didn't say "yes" *yet.*'

An interim summary thus returns us to Stolz and Stolz's (1996) scale. What Stolz and Stolz postulate on the basis of a quantitative distribution of Spanish items in a sample of Amerindian languages can be confirmed for Romani dialects, with reference to the particular items encountered so far, on the basis of a method of L2 stratification. The progression of contact-related change influencing the class of utterance modifiers is as follows: {sentence-external particles such as hesitation markers, fillers, and tags > adversative clause-conjoining elements > potentially clause-internal, adverbial elements such as markers of temporal succession ('then'), phasal adverbs, and focus particles}.

3.   The vulnerability scale: diachronic and cross-linguistic evidence

In arguing along the lines proposed by Stolz and Stolz (1996), our interim summary highlights the degree of structural integration of elements into the clause. In our attempt to postulate a function-based explanation for the scale, however, the hierarchical arrangement of elements of equal structural and syntactic status is of special interest.

3.1.   *The contrast scale in coordination*

Unlike in some languages considered by Mithun (1988), Campbell (1993), or Stolz and Stolz (1996), conjunction appears to be a well-established technique of coordination in Romani; yet coordinating conjunctions nevertheless form part of the class of items that are vulnerable to borrowing in the language. Table 1 presents a sample of coordinating conjunctions in some Romani dialects.

The L2-stratification method allows us to detect greater vulnerability among these structurally and syntactically equivalent elements. Working our way from top to bottom and from the right margin inward, we note that 'but' may correspond to the immediately recent L2 in communities where the current L2 has only recently gained ground, as in the case of Hungarian *ham* in the Roman dialect of the Austrian Burgenland, currently with German as a principal L2, as well as Polish *ale* in the Lovari

Table 1.   *Coordinating conjunctions in some Romani dialects*

	'and'	'or'	'but'
Roman (Halwachs 1996)	taj	vaj	ham
Lovari (Matras 1994)	taj, aj	vaj	ale
Lovari (Gjerde 1994)	taj, aj	vaj	me
German Lovari	taj, aj	vaj	aber
Ajia Varvara (Igla 1996)	ta	ja, i	alá
Romungri (Görög 1985)	taj	vadj	de
Gurbet	taj, a, i	ili	ali
Bugurdži (Boretzky 1993)	i, a, ta	ili	ali
Manush (Valet 1991)	un, te	otar	me
Manush (Rao 1976)	un		aver
Sinti (Holzinger 1993)	und	oder	aber
Polska Roma	i	čy	ale

variety described in Matras (1994), spoken by first-generation immigrants from Poland in Germany and Sweden. In most cases, however, 'but' corresponds to the current L2: French *me* in French/Norwegian Lovari, German *aber* in German Lovari and in Sinti, Greek *alá* in Ajia Varvara Vlax, Hungarian *de* in Romungri, Serbian *ali* in Gurbet and Bugurdži (both former Yugoslavia), Polish *ale* in the Polska Roma dialect. Note also the differences between the older description of Manush (Alsace) by Rao (1976), where Alsatian-German *aver* appears, and the more recent one by Valet (1991), where it is replaced by French *me* following a shift in the balance of pragmatic dominance among the two contact languages.

In the 'or' column, both Roman and Lovari retain Indic *vaj*. Ajia Varvara has forms from both older L2 (Turkish) and current L2 (Greek), while all other attested dialects show current L2 forms. Notice that Valet's (1991) Manush dialect has a French 'but' but an Alsatian-German 'or' (*otar*). For 'and', retention of Indic *ta/taj/te* is quite extensive; in Lovari *aj* is added, perhaps under earlier Slavic influence, and is integrated into the structural pattern of the language, probably by analogy to *taj* and *vaj*. In Gurbet, Serbian *a* and *i* appear alongside *taj*, while in Bugurdži the Serbian forms are more frequent. *Te* appears to have survived marginally in Manush as described by Valet (1991), while other forms of Manush, along with Sinti and the Polska Roma dialect, show, as with the other conjunctions, full fusion with the current L2.

Table 1 thus shows on the one hand a scale of dialects that behave differently with regard to the degree to which they exhibit fusion with their contact languages in the domain of coordinating conjunctions. But more significantly, it allows for the postulation of a hierarchy of coordinating conjunctions as regards the likelihood of fusion with L2 elements.

On this hierarchy, 'but' appears at the very top, with 'or' following, and 'and' at the bottom. The hierarchy is implicational, in that dialects that show 'and' replacement will also show 'or' replacement, and dialects that show 'or' replacement will also show 'but' replacement: {'and' < 'or' < 'but'}.

Romani is not unique in this regard. Table 2 offers a sample of languages in the Islamic sphere of influence. All have at one point or another been exposed either directly to Arabic as a language of trade, literacy, or administration, or to one of the languages that itself experienced such exposure to Arabic. Table 2 summarizes the spread of Arabic coordinating conjunctions in these languages.

Arabic *ammā* is a particle of contrastive focus best translated as 'whereas' or 'as for'. Arabic *lākin* is in Rudolph's (1995) terminology the main adversative connective 'but', while modern Arabic *bæs* 'only' is currently gaining ground as a main adversative in colloquial Syrian-Palestinian Arabic, hence the source of the expression in Náwari (or Middle Eastern Gypsy, an Indic language remotely related to Romani, spoken by the Dom of Syria, Jordan, and Palestine). Thus, all languages in the sample have Arabic-based adversatives, albeit derived from different source expressions. In the 'or' column, a mixed picture emerges. Arabic focus particles occur marginally in Somali and Swahili. Arabic *aw*, the main disjunctive connective, appears in Swahili and in Náwari, while most sample languages show a form derived from the Arabic exclusive disjunctive construction *yā ... yā* 'either ... or'. The Arabic additive connective *wa* appears marginally in Lezgian, in the Turkic languages, and in its colloquial form *ū* in Náwari, while for Turoyo (Neo-Aramaic) an underlying indigenous Semitic form is more likely.

Table 2. *Coordinating conjunctions in some Islamic-sphere languages*

	'and'	'or'	'but'
Hausa (Abraham 1959)	kumā	kō	àmmā
Ful (Klingenheben 1963)	'e, bē	ma	'ammā
Somali (Berchem 1991)	-na	mise, ama	lakiin, -se
Punjabi (Bhatia 1993)	te	jaa, ki	lekaṇ
Swahili (Brauner and Herms 1979)	na	au, ama	lakini
Hindi	aur	yā	lekin
Lezgian (Haspelmath 1993)	-ni, wa	ja	amma
Turoyo (Jastrow 1992)	w	ya	amma
Turkish	ve	veya, ya	ama
Uzbek (Sjoberg 1963)	wa	yɔ	ammɔ
Náwari	ū	aw	bæs

As pointed out above, not all languages considered are in a strict sense "Islamic," and their relation with Arabic as a language of culture and literacy differs. Punjabi, Hindi, and Turoyo, as well as some of the African languages, have non-Muslim speakers. The source language for the items encountered is not necessarily standard Arabic, but whichever variety of Arabic was used as the language of administration and trade during the Islamic colonization of these linguistic areas. Moreover, some languages will have borrowed Arabic items from secondary sources; thus Turoyo *amma* is probably from Turkish or Kurdish, Lezgian *amma* and *ja* are probably Turkish, etc. The sample appears to suggest a regional distribution, with African languages showing the least influence, Indian languages occupying a position in between, and Turkic languages at the top of the list of extensive borrowing of Arabic conjunctions. Finally, it should be pointed out that the tendencies observed here are by no means absolute; Kurdish and Persian for example both have disjunctive *ya*, but have both retained their adversative connectives *lê* and *valī* respectively. This being said, however, our sample shows that Arabic adversatives tend to be the most widely spread, followed by disjunctives, which in turn are followed by additives, confirming as an overall tendency the implication {'and' < 'or' < 'but'}.

Let us finally turn to one more sample, that presented by Stolz and Stolz (1996) for Mesoamerican languages. Consider Table 3. For 29 languages from the sample the following results were obtained: 21 languages borrow *pero* 'but', 16 borrow *o* 'or', 12 borrow *y* 'and'. The results are by and large implicational: if a language in the sample borrows *y*, it also borrows *pero*. There are no exceptions to this rule. If a language borrows *y*, with only two exceptions it also borrows *o*. If a language borrows *o*, it is also very likely to borrow *pero*, there being only three exceptions. And so once more we tentatively get {'and' < 'or' < 'but'}.[16]

On the semantic scale, therefore, it appears that the weaker the coexistence of two propositions, the more vulnerable the conjunction that points out the coexistence relationship. I suggest that this vulnerability of the linguistic item to change in contact situations is connected to the discourse vulnerability of the speaker to the hearer's interactional scrutiny. Consider Schiffrin's (1987) analysis of *but* as a speaker's return to a previous position in the discourse, or Blakemore's (1987) conclusion that *but* leads the hearer to abandon an existing assumption thereby affecting the contextual relevance of part of the utterance. In breaking what Rudolph (1995) calls the "causal chain," the speaker is under extreme pressure to maintain assertive authority. Moreover, his signalling of a break in the chain amounts to a direct infiltration of hearer-sided processing activities, which in turn requires an intensified monitoring activity of

Table 3. *Spanish conjunctions in Amerindian (Mesoamerican) languages (after Stolz and Stolz 1996:100)*

Conjunction		Languages[a]
pero	'but'	A, CH, CR, H, IX, KQ, MM, MP, MZ, N, O, PC, PI, PO, Q, TL, TO, TZ, Y, Z, ZA
o	'or'	CH, H, KQ, MA, MP, MX, MZ, N, O, PI, PO, TO, TZ, YA, Z, ZA
y	'and'	CH, H, KQ, N, O, PC, PI, PO, TO, TZ, Y, Z

a. Abbreviations for languages: A = Achi, CH = Chontal, CR = Chorti, H = Huatek, IX = Ixil, KQ = Kaqchiquel, MA = Mayo, MM = Mam, MP = Mopan, MX = Mixtek, MZ = Mazatek, N = Nahuatl, O = Otomí, PC = Pocomchi, PI = Pipil, PO = Popoloca, Q = Quiché, TL = Tlapanek, TO = Totonak, TZ = Tzutujil, Y = Yukatek, YA = Yaqui, Z = Zoque, ZA = Zapotek

the hearer's reactions and likely assumptions. The gradation in the borrowing scale for coordinating conjunctions matches the degree of intensity with which the speaker is required to intervene with hearer-sided mental processing activities: the more contrast is involved, the more the speaker is asking the hearer to suspend possible interpretations of the content and intentions of preceding utterances.

3.2. *Change and restriction in focus particles*

Let us examine the vulnerability scale for a further set of linguistic items with equal structural-syntactic status: focus particles. König (1991) identifies as the most important semantic distinction in focus particles the opposition between restrictive (exclusive) and additive (inclusive) particles, representing the speaker's inclusion and exclusion respectively of alternatives to possible (hearer-sided) assumptions. Table 4 shows two pairs of focus particles in which this opposition is reflected. The particles 'too' and 'only'/'just' are perhaps classic representatives of addition and restriction respectively. The phasal adverbs 'still' and 'already' represent a contrast of continuation of a familiar state of affairs, a 'continuative' relation in van der Auwera's (1998) terminology, and a change into a yet unfamiliar state of affairs, or an "inchoative" relation in van der Auwera's terms. Consider the Romani forms shown in Table 4.

On the whole, for the first pair of focus particles, 'too' retains more conservative features, while 'only' is borrowed rather early. Among the phasal adverbs, no hierarchy can be defined, though 'already' is often either missing from the dialect or unattested. Applying once again the L2-stratification method, Lovari has an inherited Indic form for 'too',

Table 4.   *Focus particles in some Romani dialects*

	'too'	'only'	'still'	'already'
Lovari (Matras 1994)	vi	feri, numa	inke	aba
Lovari (Gjerde 1994)	vi	feri	inke	aba
Roman (Halwachs 1996)	te	čak	meg	(i)ma(r)
Sinti (Holzinger 1993)	nina	blos	noch	
Ajia Varvara (Igla 1996)	-da	sáde	daá	
Bugurdži (Boretzky 1993)	i, -da, isto	samo	još	već
Romungri (Görög 1985)	iš	čak	mēg	mā
Gurbet	i	samo	još	
Polska Roma	tyž	tylko	ješče	

while all other items, including 'already', derive from its older L2, Romanian. The Roman dialect of the Austrian Burgenland has an internal innovation for 'too', *te*, derived from the inherited Indic additive conjunction. All other Roman forms derive from the recent L2, Hungarian. Sinti as spoken in Germany also has an internal innovation for 'too', *nina*, probably a positive reanalysis of 'not ... either' (cf. *nina* in this latter meaning in Roman; Halwachs 1996) akin to *našti* 'cannot' > *našti gar* lit. 'cannot not' > *naše* 'can' (cf. Boretzky 1996: 6). Ajia Varvara has borrowed all the forms from its older L2, Turkish. Bugurdži has for 'too' both current L2 forms from Serbian and an older L2 form from Turkish, postposed *-da*, while the other items are current L2 forms. All other dialects show current L2 forms throughout: Hungarian for Romungri, Serbian for Gurbet, and Polish for the Polska Roma dialect.

Thus for the first pair of focus particles, additive 'too' and restrictive 'only/just', an implication can be formulated along similar lines to those proposed above for coordinating conjunctions: if an additive form is replaced, then the restrictive form is replaced as well, or {additive < restrictive}. Summing up the implications for both conjunctions and focus particles in one statement, we might conclude that {change, contrast, restriction > continuation, addition, elaboration} as far as the vulnerability of items of equal structural status to borrowing in contact situations is concerned.

The evidence for a similar relation between the phasal adverbs 'still' and 'already' as presented in Table 4 is not conclusive. Van der Auwera (1998), however, divides phasal adverbs into continuative (*still*), inchoative (*already*), discontinuative (*no longer*) and continuative negative (*not yet*). For a series of properties including borrowing, phasal adverbs are found to follow an "accessibility hierarchy" as postulated by van der Auwera (1998: 37): {discontinuative > continuative and continuative

Table 5.   *Percentage of European languages that borrow phasal adverbs (after van der Auwera 1998: 71)*

Adverb		%
'no longer'	(discontinuative)	12.06
'still'	(continuative)	29.38
'not yet'	(negative continuative)	30.74
'already'	(inchoative)	44.14

negative > inchoative}. Consider the figures presented in Table 5. I suspect that the percentages for the negative forms (discontinuative and negative continuative) may be related to their structural complexity; languages are perhaps more tempted to draw on combinations of internal elements here. If we consider just the "simple," positive items then it is clear that positive change (Van der Auwera's "inchoative") is more vulnerable to contact than positive continuation (Van der Auwera's "continuative"). Overall of course, Table 5 confirms the general vulnerability of phasal adverbs as part of the class of utterance modifiers to contact-related change.

One thing that is apparent from van der Auwera's data (1998: 71) but receives no explicit attention in his study is that minority languages with less established written traditions are likely to borrow phasal adverbs from surrounding "dominant" majority languages. Examples are Spanish borrowings into Basque, French into Breton, Danish into Faroese, Russian into North Finnic and Caucasian languages, Italian into Maltese, and Arabic into languages of Asia Minor and via Turkish to the Balkan and partly the Caucasian languages. To these we can add, of course, the cases of Romani dialects considered in Table 4. Hence pragmatic dominance can be considered the necessary background factor for the borrowing of focus particles, as in the case of coordinating conjunctions, while the internal mechanisms of borrowing follow, again as in the case of coordinating conjunctions, a function-related hierarchy. This hierarchy suggests that contact-related borrowing is sensitive to the disruption of assumptions in discourse and so to the intensity with which a speaker will need to intervene with internal hearer-sided processing in order to maintain assertive authority.

3.3.   *Pragmatic detachability*

The function-related hierarchy considered in section 3.2 takes us beyond Stolz and Stolz's idea of a structural-syntactic borrowability hierarchy,

which roughly runs as follows: {discourse level > clause integration}. To the semantic aspects of contrast, restriction, or change considered above I wish to add a hierarchy of "pragmatic detachability." Detachability in a pragmatic sense refers not to the degree of structural integration into the sentential frame, but to the extent to which items operate exclusively at the level of regulating interactional relations between speakers and hearers — Schiffrin's (1987) plane of participants — and the degree to which they can consequently be regarded as detachable from the propositional content or message of the utterance.

Table 6 shows Romani clause-initial connective particles corresponding somewhat to English 'then' of temporal succession (in the formula 'and then'), and to the markers of responsive or resultative progression 'well' and 'so'.

I draw once more on the L2-stratification method: in dialects that have experienced a shift of principal contact language in recent generations, 'well'/'so' is more likely to derive from the current or recent L2, while 'then' is more likely to be retained from an older L2. This is clearly the case for French Lovari, with Romanian *atunči* for 'then' but Polish/Hungarian *no* and French *alors* for 'well/so'; for Polish/German Lovari, with Romanian *atunči* for 'then', but Polish/Hungarian *no* alongside German *also* for 'well/so'; and for Ajia Varvara, with Turkish *soná* for 'then' but Greek *lipón* for 'well/so'. The origin of *toska* in Bugurdži, which according to Boretzky (1993) is rare, remains obscure. Sinti and the Polska Roma dialect both have current L2 forms throughout.

While in general the replaceability in contact situations of the adverb 'then' must be seen in connection with its function as a discourse marker, its affinity to the temporal adverb 'then' with a deictic component has a stabilizing effect. Table 6 thus suggests that discourse markers with some lexical or deictic properties are less likely to be replaced as early as items

Table 6.   *Connective particles in some Romani dialects*

	'then'	'well'/'so'
Lovari (Gjerde 1994)	atunči	no, alors
Lovari (Matras 1994)	atunči	no, also
Ajia Varvara (Igla 1996)	soná	lipón
Roman (Halwachs 1996)	akor	hat
Romungri (Görög 1985)	akkor	no, hāt
Bugurdži (Boretzky 1993)	posle, toska	dobro, pa
Sinti (Holzinger 1993)	dann	also
Polska Roma	(to)	no

with a purely operational function. When speaking of "detachability," I am therefore arguing for a different kind of property than the one characterized by Brody (1987) as "detachable, lexical." Brody's notion is an attempt to group together the structural detachability of unbound grammatical particles on the one hand and the borrowability of lexical items on the other. I use the term here with reference to processing functions. I propose that the less lexical the character of a discourse operator, the more it is detachable from the propositional content of the utterance and, in a diachronic context of language change through contact, from the language chosen to convey content.

3.4. *Principles of fusion*

In pursuing the question of motivation, I have presented the internal hierarchical arrangement of borrowable items with equal structural-syntactic status as evidence for the existence of function-related principles of fusion that operate at a level beyond that of structural clause integration. The likelihood of contact-related change with utterance modifiers is on the whole a reflection of several scales — a semantic scale, (20); a category-sensitive scale, (21); and a pragmatic, "operational" scale, (22):

(20)   contrast, restriction, change > addition, elaboration, continuation
(21)   less lexical or deictic > more lexical or deictic
(22)   more turn-related > more content-related

The conclusion from (20)–(22) is that structural integration or prestige alone cannot be held responsible for borrowing likelihood (cf. discussion of Stolz and Stolz's [1996] view above). Instead, borrowing likelihood correlates with the communicative functions that are inherent to the elements under discussion. On the basis of these impressions from the diachronic data considered so far I hypothesize the following principles of fusion of grammatical operations in language-contact situations:

(23)   *The principle of pragmatic detachability:*
       Grammatical elements that organize the speech event are perceived as gesturelike, situation-bound devices and are therefore detachable from the content message of the utterance.

Pragmatic detachability also makes these items detachable from the linguistic system chosen to represent the content of the utterance, and so they are more likely to show fusion with an external (L2) system. The reasons for this are further considered in (24b):

(24)   *The tight-mapping principle:*
   a.   The stronger the expected clash between the content conveyed by an utterance and the hearer's assumptions, and thus the weaker the likelihood that the hearer will accept the speaker's move, the more gesturelike is the linguistic-mental device applied in order to intervene and help the speaker maintain assertive authority.
   b.   The more gesturelike, situation-bound an expression is, the tighter the form–function mapping in the linguistic device and thus the greater the pressure on bilingual speakers to employ just one set of expressions.

The tight-mapping principle generally suggests that some mental processing operations are more form-dependent than others. In the area of conjunctions and focus particles, it is hypothesized that gesturelike properties go together with the semantics–pragmatics of contrast, change, and restriction. In the domain of sentence particles, hesitation markers, fillers, and tags, it can be assumed that the less lexical content an expression has and the less analyzable it is to the speaker, the more gesturelike and situation-bound it is likely to be.[17] The reason greater gesturelike features should correlate with borrowability is hypothesized in (25):

(25)   *The load-reduction principle:*
   The more intense or automaticized the attempt by the speaker to monitor, infiltrate, and exercise direct control over the hearer's processing of turns and contents in the discourse, the greater the load imposed, due to the tight-mapping principle, on the bilingual speaker who has two systems at his disposal, and thus the greater the pressure to reduce this load by allowing for a fusion of the two systems.

Principles (23)–(25) thus suggest a cognitive motivation for fusion, which can be summarized once again in (26):

(26)   *The principle of fusion of oral communication patterns:*
   Given sociolinguistic admissibility, that is to say secured maintenance of both efficiency of communication and prestige, in oral communication in a situation of intense language contact bilingual speakers will tend to adopt patterns of the pragmatically dominant contact language and, in accordance with the detachability principle, the tight-mapping principle, and the load-reduction principle, will license themselves to draw on L2 resources to perform discourse-regulating functions while interacting in L1.

4. Some typological implications

Before going on to examine on-the-spot fusion in synchronic data and to substantiate the principles hypothesized in (23)–(26), there is one more diachronic aspect of fusion that I wish to mention: the significance of fusion for the typology of clause combining in a language. Mithun's (1988) statements on the introduction of conjunction into languages where clause combining was previously based on juxtaposition already imply that borrowing may lead to an overall restructuring of the typology of coordination and other discourse-regulating functions. Consider here the example of the Macedonian dialect of Turkish. Like Standard Turkish, it is descended from Ottoman Turkish and so very closely related to the official language of contemporary Turkey. All Turkic languages have been influenced to some degree or other by the borrowing of conjunctions and other utterance modifiers of Arabo-Persian origin (cf. Johanson 1992). On the whole, Turkic languages tend to enrich their inventory of connective devices through borrowing, rather than reducing or simply substituting it. Arabic-derived coordinating devices thus exist alongside Turkic converbal constructions. In Macedonian Turkish, however, converbs have virtually disappeared. Instead the language relies entirely on the set of coordinating conjunctions borrowed from its principal current contact language, (Slavic) Macedonian. One of these is the additive conjunction *i*, which connects the sentences in (27):[18]

(27) ... anladılar   ki,   benim için *i*   başladım ben bu
          they-understood PART me   for and I-began   I   these
     işleri   katarliyim, *i*   o zaman dört göze geldim biraz önce
     works I-lead   and then   four eyes I-came little before
     anlattık şeye,   Şerafettin'le
     we-told to-this Şerafettin-with
     '... they were convinced in support of me, *and so* I began to lead these activities, *and* then I met alone, as I told a little while ago, with what's his name, Şerafettin.'

Alongside *i*, Macedonian Turkish also employs *a*, a conjunction that in most Slavic languages is used to indicate semantic opposition:

(28) ... birinci Demonstration ne zaman yapmıştık ... *A*   kim yapar?
          first   demonstration when   we-made   and who does
     Düsseldorf ve   Duisburg sade. *A*   Oberhausen yapiyor Fest.
     Düsseldorf and Duisburg only and Oberhausen makes   party
     Biz Demo yapariz, onlar Fest   yaparlar.
     we demo we-make they party they-make

'... the first time we organized a demonstration ... . *And* who organizes it? Only Düsseldorf and Duisburg. *Whereas* Oberhausen is having a party. We are having a demonstration, they are having a party.'

Notice that the Turkish additive conjunction *ve*, itself an Arabo-Persian borrowing, is used in (28) for the conjunction of two constituents in *Düsseldorf ve Duisburg sade* 'only Düsseldorf and Duisburg'. In fact, it is not uncommon for languages that have borrowed conjunctions to restrict their use to interclausal conjoining while continuing to use indigenous forms for constituent conjoining (cf. Stolz and Stolz 1996: 94). We have here a further indication that the replacement of conjunctions is triggered by mental-cognitive factors that are relevant for utterance-planning operations, and not by structural properties.

Finally, the main adversative conjunction *ama* serves to indicate the denial of hearer expectations:

(29)   Bülân: "O içmezse   ağzi   oynamaz!". *Ama* doğru.
       Bülân   he drink-NEG-COND his-mouth play-NEG   but   true
       Söz   söylemiyim. *Ama* içtim   mi,   hemen   patlardım.
       word I-can't-say   but   I-drank QUE immediately burst
       'Bülân says: "If he doesn't drink his mouth doesn't play." *But* it's
       true. I can't sing. *But* if I've had a drink, I burst immediately.'

Curiously, Macedonian Turkish *ama* corresponds to the main adversative of (Standard) Turkish, though as it is high on the contrastive hierarchy we would expect it to be more likely to be affected by contact-related change. The answer to the dilemma is simple: Macedonian has itself borrowed Ottoman Turkish *ama*. Macedonian Turkish *ama* thus corresponds, as do the additive connectives *i* and *a*, to the pragmatically dominant, principal contact language Macedonian. The dialect has thus experienced two significant changes to its typology of coordination owing to the process of fusion of utterance modifiers: it has eliminated all converbal constructions and now relies entirely on clause-initial connectors instead, and it has adopted the Slavic overt distinction in the system of adversative conjunctions between, to use Lakoff's (1971) terms, "semantic opposition" and "denial of expectation."

As a further case consider Michif, a mixed language of the Canadian prairies, which has, generally speaking, a lexicon derived from French and a grammar derived from Cree (Bakker 1997).[19] It is the fact that Michif belongs to a mixed language type that is of interest to our discussion. If lexicon and grammar in a mixed language have different sources, which of the sources is responsible for unbound utterance modi-

fiers? And, if a language already possesses a hybrid character and if speakers are on the whole conscious of this character, would they still be under pressure to integrate discourse-regulating structures from yet a third, pragmatically dominant contact language?

If the principles of fusion hypothesized above are universal, then we should not expect mixed languages to behave any differently from "conventional" languages. And indeed, Michif utterances show an ongoing adoption of discourse-regulating expressions from English, the majority language with which it is currently in contact. Consider the following example (adapted from Bakker 1997: 5–6):

(30)   un vieux ana ayi/ un vieux opahikêt ê-nôhcihcikêt, *you see,*
       an old   this uh an old   trapper   trapped
       êkwa ayi/ un   matin   êkwaniskât ahkosiw, *but* kêyapit ana
       and uh   one morning woke-up be-sick   still this-one
       wî-nitawi-wâpahtam ses pièges.
       want-go-see   his traps
       'An old this uh/ an old trapper was trapping, *you see*, and uh/one morning he woke up sick, *but* he still wanted to go and see to his traps.'

The expression *you see* is analyzable to speakers on the basis of its lexical content and could indeed be part of a metalevel (cf. Maschler 1994) of discourse, relating here to the global interactional relations between the speaker and the interviewer, who, outside their controlled interaction in Michif, would normally address one another in English. The adversative *but*, however, is highly grammaticized and tightly embedded into the automaticized production-and-control side of the utterance. Rather than being part of a metalinguistic comment on the utterance, it is a clear candidate for fusion as described above. Bakker (1997: 113) mentions both French *mais* and Cree *ma:ka* as possible adversative connectives, both appearing in clause-initial position. Fusion with English in this area does not therefore appear to affect the syntactic typology of Michif, but it does affect its contact typology, questioning whether an absolute division of sources for lexicon and grammar is still tenable.

Moreover, the fact that Michif employs both Cree and French items alongside the recent layer of English discourse markers raises the question whether discourse markers as a category are at all attributable to one of the parent components of the language. The potential layered character of Michif discourse-regulating structures is clearly illustrated in (31), from Bakker (1997: 169–170):[20]

(31)   Les Canadiens *come across*/ les Suavagesses   mâci-wîsamêwak
       the Canadiens   the Indian-women they-started-marry

> *and then* puis êkwa les enfants ê-ayâwâcik.
>   then and   the children they-had
> 'When the French Canadians *came* (from across the ocean)/ they
> started to marry Indian women *and then* [and then] they had
> children.'

In discourse particles of succession and progression, at least, we have a
coexistence of English *and then*, French *puis* '(and so) then', and Cree
êkwa 'and'. All three sources participate in establishing the link between
the two utterances.

Examples (30)–(31) thus illustrate that mixed languages are not exempt
from the principles of fusion, and furthermore that fusion in the area of
discourse-regulating functions will even override some general typological
tendencies in what Bakker (1997) terms "language intertwining" — the
emergence of a new language deriving grammar and lexicon from two
different parent languages. Thus, Cree *ma:ka* 'but' appears alongside
French *mais*; Cree *êkwa* 'and' combines with French *puis* 'then'; and both
items may either yield to or coexist with English expressions.

The specific question raised by example (31), however, is why, if our
hypothesis concerning load reduction in (25)–(26) is correct and bilingual
speakers aim at a fusion of their systems of discourse-regulating struc-
tures, do languages retain "double" systems? The answer is that load
reduction leading to fusion must not be regarded as structural simplifica-
tion, but rather as a LICENSE to speakers to draw freely, conveniently,
and regularly on the resources of the pragmatically dominant language
for discourse-regulating purposes. In this respect, the L2 utterance-modi-
fying system is allowed to interfere with linguistic performance in L1.
Whether or not the L1 system will occasionally make way for or will
yield completely to that of L2, in other words whether fusion is partial
or whole, will depend on the individual case under consideration; recall
in this connection that fusion is both gradational and gradual.

I have started this discussion in reverse order by looking first at the
diachronic outcome of fusion. What happens in the intermediary and
finally in the initial stages of fusion is the topic of the next two sections.

5.   Synchrony, variation, and overlap

Since fusion is gradual and gradational, we would expect a synchronic
picture to show variation with alternating usages of both indigenous and
borrowed utterance modifiers. Example (32) is taken from a native Low
German speaker in his early 50s who immigrated from northern Germany
to the United States at the age of 16:[21]

(32) *And* as   ik in Clinton ankeem, den haa'k fiif Dåler nåå, und
      and when I in Clinton arrived   then had I five dollars left and
      den hef ik se   dat jüst wiist,   ob he mi nåå dedore Adres
      then have I them that just showed if he me to   that   address
      dor   för fiif Dåler hen dee. Den is de gude Man nåå't
      there for five dollars to   does then is the good man to-the
      telephone gåån *and* het de   anropen *and* secht, dat ik hiir
      telephone gone and has him called   and says   that I   here
      weer und dat he mi bringen dee. Dat *normally* wor   fillicht
      was and that he me bring   does that normally would maybe
      foftein Dåler   kossen, *but* he dee dat för fiif.
      fifteen dollars cost   but he did that for five
      '*And* when I arrived in Clinton I had five dollars left, and then I
      just showed it to them, if he would bring me to that address for
      five dollars. So the good man went to the *telephone and* he called
      him *and* said that I was there and that he would bring me. That
      would *normally* cost maybe fifteen dollars, *but* he did it for five.'

English *and* alternates regularly with (Low) German *und*; English *but*
appears as well, though with no indication of whether it has replaced an
earlier expression entirely. The variation attested here again illustrates
that fusion is motivated neither by grammatical gaps nor by structural
simplification, as we are dealing with the alternate use of functionally
and structurally equivalent items. Salmons (1990: 469) suggests the term
"overlap" to distinguish cases such as (32) from actual diachronic "con-
vergence." Since fusion as defined above is gradual and gradational, there
is no need for a distinction of terms. But does synchronic variation help
clarify the course of progression that fusion takes?

   Anders's (1993) documentation of German dialects from Russia[22]
allows at least a tentative synchronic hierarchization of borrowed utter-
ance modifiers. The frequencies for some Russian borrowings are
illustrated in Table 7. Russian items were counted only if they appeared
in an entirely German environment, or were followed or preceded by
repairs. One speaker's transcription was left out as it was not clear
whether her use of *no* (transcribed by Anders as Russian *no* 'but') might
in fact be a German dialectal particle *nå* (cf. also Anders 1993: 61). Apart
from that, this speaker's utterances often show gaps in the documentation,
so that the actual contextual embedding of the particle could not always
be checked. The figures provided in Table 7 thus differ somewhat from
Anders's (1993: 61) own figures, though the overall pattern remains
the same.

   Unlike the diachronic data discussed above, the scale provided in
Table 7 need not of course be regarded as pertaining to borrowability

Table 7.   *Some Russian discourse particles in Anders's (1993) German corpus*

Form	Meaning	Frequency
nu	emphatic progression and motivation	31
no	'but'	22
etot	interruption/hesitation < 'this'	13
vot	'like'	6
daže	'even'	3
potom	'then'	2

alone. Indeed, it reflects primarily the function-related frequency of usage in the corpus. However, high frequency is assumed to correlate with integration into the German dialect. Thus the more frequent the occurrence of a Russian item in German discourse, the higher the degree of fusion affecting this item.

In this regard, Table 7 presents a somewhat mixed picture. On the one hand, items that are less analyzable lexically — pragmatically more detachable items — are high in frequency. This pertains especially to *nu*. However, in the case of the adversative conjunction *no*, contrast overrides weaker detachability. Likewise, in the case of *etot*, literally a deixis 'this' but used in the corpus exclusively as a marker of interruption/hesitation, the strong gesturelike quality overrides the underlying deictic properties as regards the ease with which it is adopted into German speech. Consider the following (from Anders 1993: II-8):

(33)   Es war schon, ich mein *etot* ·· da   han ich schon/ da/   da
       it was already I   mean   there have I   already there there
       han ich schon   geschafft dort (in)/ der Brigade.
       have I   already worked   there in   the brigade
       'It was already, I mean *uh* ·· I was already/I was already working
       there (in)/in the brigade.'

Etot is used by the speaker to "save face" when the progression of the utterance is not satisfactory, much like hesitatives based on Spanish *este* 'that' in Amerindian discourse (Stolz and Stolz 1996: 97). All usages of *etot* in Anders's corpus are followed by a break and repair, confirming its situation-bound character. It is this feature that makes it pragmatically detachable.

The most salient Russian item, which occurs in all the discourse transcriptions presented by Anders, is *nu*, a typical gesturelike filler. It is not analyzable in terms of content; it is highly situational and so highly detachable from the content component of the utterance. *Nu* can be characterized as a marker of emphatic progression and self-motivation

to continue an interrupted utterance. Anders's (1993: 65) definition of *nu* as a resultative marker with back-reference functions covers cases such as (34c), where the speaker returns to his role as narrator in a previous position in the discourse (from Anders 1993: III-3):

(34) T: a. Der Mann war krank und wir konnten doch   nicht.
          the man   was ill   and we could   PART not
     P: b. Ja.
          yes
     T: c. *Nu*   und · · wie er gestorben ist, und dann · · · hat es
          PART and   as he died   is and then   has it
          nicht so lang gedauert.
          not   so long lasted
     T: a. 'The man was ill and so we couldn't.
     P: b. Yes.
     T: c. *See* and · · when he died, and then · · · it took so long.'

It is important to note, however, that back-reference with *nu* is not to the content of what has been said, but to the role of the speaker as narrator in the interaction, that is to say to the continuous maintenance of assertive authority and so once more to the situation-bound, gesture-guided mode of directing the interaction flow.

Example (34) shows the employment of *nu* in the context of fluent progressive planning of the discourse. But *nu* can just as well help maintain authority when the utterance has been interrupted due to a temporary failure on the part of the speaker to ensure progression, as in (35) from Anders (1993: I-6):

(35) Die hat das alles/[pounds on table] *nu* ... die war/ die hat das
     she has this all   PART she was she has this
     alles gewißt!
     all   known
     'She/all that/[pounds on table] [*what-do-you-call-it*] ... she was/
     she knew it all!'

The stops, repairs, and extralinguistic gestures such as the pounding on the table all testify to the gesturelike, situative nature of the particle *nu*.

In using *nu*, speakers draw on a device that has no direct equivalent in German. But I argue once more that it is not the gap in the German system that motivates fusion, but the INCONVENIENCE OF SEPARATING GESTURES when choosing between the languages. Russian is pragmatically dominant to these speakers in the sense that it is the surrounding majority language in which everyday interaction outside the closer circle of family and ethnic German friends takes place. Moreover, integrating Russian

items into the local German dialect will not entail loss of prestige. I regard prestige in this connection negatively: items are not borrowed BECAUSE their use is prestigious. Rather, speakers will ultimately give in to the cognitive pressure to borrow them, UNLESS this process entails a loss of prestige.

Consider the case of the Russian adversative *no* 'but', which alternates with German *aber* in the corpus (from Anders 1993: III-1):

(36)   T: Sie wollen jetzt noch Brot   holen? *No* ich hab etwas zu
               you want   now still   bread get   but I   have some at
               Hause!
               home
         B: *A*, ich han   Brot. Aber auf morge.
               oh I   have bread but   for tomorrow
         T: 'Do you still want to get bread now? *But* I've got some
               at home!
         B: *Oh*, I've got bread. But for tomorrow.'

Adversatives are high on the borrowability scale, but their independent word status and perhaps also the presence of an equivalent indigenous expression will slow down the process. Table 7 shows that both *nu* and *no* are clearly accepted features of these varieties of German, while the other elements can be explained on the grounds of frequency alone as occasional infiltrations from Russian. However, in instances where *no* is functionally and structurally compatible with German *aber*,[23] the two forms show exactly an equivalent number of occurrences — 22. Distribution varies among speakers, with some showing a preference for one or the other, but all speakers appear to be using both. So again, integration of *no* cannot be regarded as the replication of a function that is not available among the resources of the German system — that is to say the closing of a gap. Rather, we have a case of ongoing load reduction, with speakers licensing themselves to draw freely on the resources of the pragmatically dominant contact language.

To what extent does the availability of indigenous structural and functional equivalents constrain fusion? In the following Yiddish example (from Reershemius 1997: 336), a speaker now in her early 60s who was born in Vilna but immigrated to Israel in her early 20s recalls an episode from her wartime experiences in Europe. Hebrew, the pragmatically dominant contact language for the past four decades, surfaces in *az* 'so then' in segment (b) (compare also example [3] above):

(37)   a.   ( ) un   ix ho   ni gəkent gejn.
                  and I   have not could   go
         b.   *Az* plutsim   ejner fun di   vermaxt   hot gəšrin   tsu mir
               so suddenly   one from the Wehrmacht has shouted to me

un er zugt tsu mir "Kum her!"
and he says to me come here

a. '( ) and I couldn't walk.

b. 'So *then* all of a sudden somebody from the Wehrmacht shouted at me and he says to me: "Come here!"'

One could argue that Yiddish has no equivalent expression available, *azoj* 'thus, so' having a much stronger deictic function, and inversed word order, which is common in Yiddish consequential and resultative constructions, requiring an alternative approach to the planning of the entire utterance. But it is precisely the planning operations of the utterance that merge with the contact language (cf. Matras 1996): *az* in (37b) allows the speaker to employ the same planning strategies she would in Hebrew discourse. The speaker uses it frequently in her speech, and it can be considered well integrated into her own usage of Yiddish.

The same Hebrew resultative *az* appears in (38), from a native speaker of Judeo-Spanish born in Saloniki who immigrated to Israel in his teens:[24]

(38) a. I   esto eyos lo izieron los ɣrexos para ke   puedian los
         and this they it did   the Greeks so   that could   the
         ɣrexos partir en l'Amerika ( ).
         Greeks leave in America

      b. I   kedó   esta ley.
         and stayed this law

      c. *Az* los e/ avokatos džudiós tomaron esta ley i/   i   así lo
         so the uh lawyers Jewish took   this law and and so it
         izieron.
         did

      a. 'And this the Greeks did in order that the Greeks could leave for America ( ).'

      b. 'And this law remained.'

      c. '*So* the e/ Jewish lawyers took this law and that's how they did it.'

Here too, *az* is well integrated into the Judeo-Spanish discourse and sentential structure, replicating the resultative functions it has in Hebrew. As we encounter the same item in both Yiddish and Judeo-Spanish discourse, one is inclined to assume that pressure from Hebrew, rather than gaps in the recipient languages, motivates its adoption.

But compare the usage of *az* in (38) with the following example from the same Judeo-Spanish speaker, where *az* is immediately followed by a self-repair:

(39) H: a. Los eh/ *mekomiyim,* los lokales, eran relasiones midžores
               the uh locals   the locals   were relations   better
               de   los ɣrexos ke   vinieron de   la Turkía.
               from the Greeks who came   from Turkey
       b. Por ke los   ke   vinieron de   Turkía eran ublixados
               because those who came   from Turkey were obliged
               de tomar lavoros de   los eh/ sitadinos/ siudadinos, si.
               to take jobs   from the uh citizens   citizens   yes
    Y: c.   Mhm, mhm.
    H: d. *Az*/ eh es/ entonses empesó la/ la kel/ la enemistad la
               so uh   then   began the the that the hatred   the
               más grande.
               greatest

    H: a. '[With] The uh/ *locals*, the locals, there were better relations
               than the Greeks who came from Turkey.'
       b. 'Because those who came from Turkey were obliged to take
               jobs from the citizens/ citizens,   yes.'
    Y: c.   'Mhm, mhm.'
    H: d. '*So then* uh/ th/ then the/ uh/ the greatest hatred emerged.'

In displaying a resultative connection to the preceding content, the
speaker H in segment (d) resorts to Hebrew *az*, then hesitates before
finally choosing Spanish *entonses* 'then'. Now, it can be argued that
Spanish *entonses* has a much weaker resultative quality than Hebrew *az*.
Nevertheless, it seems that when monitoring his own speech, the use of
a Hebrew discourse particle appears inappropriate to the speaker, who
then substitutes it with the closest available indigenous item.

The ambivalent status of L2 discourse markers for bilingual speakers
is pointed out by Salmons (1990), who recalls that the items in question
are frequent and integrated, but that bilingual speakers are at the same
time aware of their L2 origin. For the speaker in (39), Hebrew *az* might
be considered as semiintegrated. The attempt to override its spontaneous
usage by substituting a related Spanish expression testifies nonetheless
that there are instances of bilingual discourse marking that are not at all
strategic in the sense suggested by Maschler (1994) and indeed are
perceived by speakers as counter-strategic in that they violate the require-
ments on either communicative efficiency or maintenance of prestige,
or both.

6. Load reduction: a cognitive trigger

The relevance of semantic-pragmatic constraints within categories of
comparable structural-syntactic status in both contact-related diachronic

change and synchronic variation in bilingual speech have led me to hypothesize the principles of fusion outlined above. These principles assume that contact-related change in the area of utterance modifiers is not due to lack of equivalent functions in the indigenous language, nor is it due to the prestige effect that the integration of L2 items may have on the overall flavor of the discourse. Rather, I attribute synchronic variation of the type discussed in section 5 to the cognitive pressure exerted on bilinguals to draw on the resources of the pragmatically dominant language for situative, gesturelike discourse-regulating purposes, and the diachronic change that arises from such variation to the establishment of a permanent licensing for speakers to do so. In this section I draw on one additional set of data that provide evidence for the cognitive nature of the process of fusion: speech-production errors involving bilingual utterance modifiers.

Slips of the tongue have previously been used to trace speech-production processes (cf. Garret 1982). It is not my concern here to suggest a sequence of levels that the order of sentence production follows,[25] but to examine the detachability of utterance modifiers from the language of the utterance, and their attachability instead to an interfering system that I call "pragmatically dominant." The point for which I believe slips of the tongue provide indisputable evidence is the existence of COUNTER-STRATEGIC INSERTIONS of L2 modifiers, which are neither prestigious nor communicatively efficient. The motivation for such "mixes" is outlined by the principle of load reduction.

Consider in (40) the case of an elderly native speaker of Judeo-Spanish, born in Bursa (Turkey), who immigrated to Israel in her teens (from Matras 1997: 186–187) She is a fluent speaker of Hebrew, which she uses not only in most interactions outside her home, but also when speaking to younger members of her own family. The segments immediately preceding the excerpt presented in (40) include a conversation in Judeo-Spanish. This conversation is interrupted by the entry of a neighbor who is not of Sephardic origin. The speaker F and her neighbor begin to converse in Hebrew, and in (40a) Y joins their Hebrew conversation:

(40) Y: a. kama   šanim aten garot po, šxenot?
             how-many years you live here neighbors
     F: b. ani xamišim šana.
             I   fifty   year
     Y: c. xamišim šana at   kan?
             fifty   year you here
     F: d. po, *ama* hi — ani xoševet lo esrim/ šmona-esre šana.
             here but she I   think   not twenty eighteen   year

Y: a.   'How many years have you been living here, as neigh-
bors?'
F: b.   'Me — fifty years.'
Y: c.   'Fifty years you have been here?'
F: d.   'Here, *but* she — I think not twenty/eighteen years.'

Apparently still under the impression of the previous conversational task posed by Y to tell about herself in Judeo-Spanish, in (40d) F "slips" from Hebrew into Judeo-Spanish — the local pragmatically dominant language — for the adversative conjunction *ama* (which is borrowed from Turkish into Judeo-Spanish, and from Arabo-Persian into Turkish).

Since F is evidently a fluent speaker of Hebrew, the argument for considering *ama* as a competence-related transfer rather than a local production error is weak. It is further weakened by the existence of similar occurrences where speakers "confuse" their foreign languages. Example (41) from the Macedonian Turkish corpus shows a speaker who has lived in Germany for a number of years and is involved in various community activities with German colleagues with whom he interacts in German. German is also, alongside Turkish, his primary language of interaction with the hearer/interviewer present in the current conversation:

(41) a.   Bu kadar bir   kâğıtlar hep kopiya, ( ) yapti. Oberhausen,
so much one papers all   copy   he-did Oberhausen
bizim, ve Düsseldorf
ours   and Düsseldorf
b.   *Aber* bir ay   sonra geldi! [chuckles]
but   one month later came
a.   'He   produced   that   many   papers,   all   photocopies,
Oberhausen's, ours, and Düsseldorf's.
b.   '*But* it arrived a month later! [=too late].'

I propose that it is the irony of the situation described by the speaker that leads him to "lose control" over the language of the interaction and slip into German, the pragmatically dominant language at the local level. With "local level" I mean the conditions set by the contextual parameters such as topic (his community activities) and addressee (with whom he usually speaks German). The slip into German around the adversative *aber* represents the conversational tension surrounding the denial of hearer expectations, on which in turn the irony is founded. Since the point of the interview is to recall events in the speaker's own dialect of Turkish, no prestige can be connected to the German insertion.

Many language learners are acquainted with the phenomenon of accidentally picking the wrong item out of a general "compartment" reserved for foreign languages. The notion of a pragmatically dominant language that interferes with utterance-modification procedures in the content language helps explain this impression of "compartmentalization" of L2s. Consider some more examples: in (42), a Czech academic whose foreign working language is generally English is asked to give a brief survey of her research activities in a German-speaking forum:

(42) ... in Norwegen/ über diese zwei Sprachen, Bokmål *and* Nynorsk, und so weiter.
'... in Norway/ about these two languages, Bokmål *and* Nynorsk, and so on.'

In (43), a native speaker of German who has been living and working in Britain for the past three years is communicating in Hebrew, a language in which she is reasonably fluent but which requires considerable effort from her:

(43) ani xoševet še   ze   lo   knesiya *anymore*
     I   think   that this not church anymore
     'I think it isn't a church *anymore*.'

Finally in (44), a native speaker of Polish who has been living in Germany for the past decade or so meets friends from Germany in London, where she has been attending an advanced English language course and living with an English family during the past two weeks. She crosses the street from the cafe where the party is sitting to inspect a restaurant that is said to be decorated in Polish style. Having returned and confirmed that the style is on the whole indeed Polish, she says,[26]

(44) ... bis auf/ bis auf die Tischdecken, *because*/ eh weil sie ...
     '... except/ except for the tablecloth, *because*/ uh because it ...'

The fact that there is no discourse-strategic advantage in resorting to an L2 element is common to all the mixes produced around utterance modifiers in examples (40)–(44). The examples also share the feature of conversational tension caused by the speakers' need to handle a repertoire of several different languages at the time of interaction. The language in which the utterance modifiers are produced is generally the language to which the speakers devote most of their focus and effort in the current context; it is not necessarily their first language nor the one in which they are most fluent. On this basis I argue that we are dealing with instances of nonvoluntary or "erroneous" language choice (slips) caused by the fact that speakers concentrate their mental planning efforts on

production in what is at the instance under scrutiny a pragmatically dominant language: "special operations" aimed at directing the hearer's processing of the utterance in critical points are undertaken in this language. Thus the trigger for bilingual utterance modifiers is a cognitive one.

7.   The grammar of talking and the grammar of directing

Why are utterance modifiers so affected by bilingual slips? In outlining the principles of fusion above I suggested that this has to do with their gesturelike, situation-bound, and pragmatically detachable character. Consider in (45) a television interview in English with P, a native speaker of German, on his role in supplying weapons to a Libyan organization:[27]

(45)   I: a.   What did they want to know?
       P: b.   Well jus/ just the way ə ə the m/ the weapons ə brought
                 ə/ I/ I have brought to London, nə, *und* I/ I have told
                 them the truth, *nə*, that they were brought by car, *nə* and/
                 and ə ...
       I: c.   Were they very interested?
       P: d.   Yes, they were very interested, *nə*, to know how, *nə*.

Notice that while P is reasonably fluent in English and has English discourse markers in his repertoire (*well, and*), he consistently uses German (nonlexical) *nə* to tag his utterances, and in one instance, where tension is apparent in the hesitant way in which he plans the utterance in segment (b), he slips into German *und* 'and'. The tag *nə* is apparently treated by the speaker as a superlinguistic element that is not part of the language chosen for the content of the utterance but belongs instead to the directive resources on which he draws in order to organize the situation as an interactional event. Ehlich (1986: 239–253) defines such superlinguistic resources (interjections and fillers) as a steering mechanism that allows direct mental cooperation between speaker and hearer. While mental cooperation plays a central role in various analyses of attention markers (cf. Bühler 1982 [1934]; see also Tomlin 1997), Ehlich stresses the nonsymbolic, direct, and simple structure of interjections and fillers whose sole function is to grasp the hearer's attention to the utterance as a situational event.

Rehbein (1979) interprets fillers such as *nə* as part of a broader class of elements that he calls "speech-action augments" and that includes items with lexical content and even phraselike structure such as *verstehste?* 'do you understand?' According to Rehbein, the speaker draws on aug-

ments in order to influence or DIRECT the hearer's interactional activities.[28] Rehbein (1979: 61) lists the following as components of this directing operation: (a) the speaker CONTROLS how his utterance is being received by the hearer; (b) the speaker ANTICIPATES how his utterance will be received by the hearer; and (c) the speaker INTERVENES in the reception of the utterance by the hearer. These three components are even more clearly represented in grammaticized utterance modifiers of the type dealt with in our present discussion, and I suggest that their vulnerability derives from them: the complexity of the operation, which involves both monitoring and direct infiltration of hearer-sided processing activities by the speaker, and the automaticized, gesturelike procedure that such interventions with hearer activities entail, give rise to a form dependency of the sort described above by the tight-mapping principle.

This may bear some implications for an ongoing discussion in cognitive linguistics on the relationship between mental images, conceptualization, and linguistic representation (see Levinson 1997). If some mental operations are more tightly connected to linguistic expressions, what does this suggest with regard to the compartmentalization of linguistic-processing activities? My tentative conclusion is that distinct operations are involved in what Slobin (1996) very generally calls "thinking for speaking," that is transferring thoughts into speech with a particular grammatical system in mind, and the sort of processing activities that are represented linguistically by the class of grammaticized utterance modifiers: alongside the "grammar of talking" there exists a *grammar of directing*.

The grammar of directing is highly dependent on an attentive monitoring of the addressee's reactions as well as suspected or expected differences between the speaker's and the addressee's attitudes to utterances and the meanings they convey. This explains the particular sensitivity to contrast, restriction, hesitation, or change — all of which are likely to affect the hearer's acceptance of the utterance and the speaker's assertive authority. The grammar of directing thus involves a constant check of speaker's communicative intentions against addressee's expected reactions, and of the speaker's articulated talk against the addressee's gestures of participation (whether agreement, support, denial, disbelief, etc.), and it is for this reason that the grammar of directing is so highly gesticulated, metaphorically speaking.

Although we are in principle dealing here with a closed set of grammatical items, membership in the grammar of directing is gradient and open to variation based on language-specific clustering of features and situation-specific patterns of usage. It is clear that the more lexical the properties of an item, the less specialized it is for gesturelike interactional monitoring and control operations and the more derived its usage for

such functions will be. This explains the borrowability hierarchies encountered above. The stronger the inherent embedding of an item into the grammar of directing, the more automaticized its usage and the more likely it is to escape the speaker's control in instances of processing overload. We can summarize our discussion by positing that the difficulty in coping with multiple sets of automaticized linguistic gestures is the cognitive trigger for bilingual utterance modifiers.

8. Conclusion

Lass (1997: 186) rejects the idea of prestige-motivated borrowing on the grounds that recipient speech communities are known to have borrowed items from languages that had enjoyed no social prestige at all. But Lass relies mainly on evidence from lexical borrowing, and it is possible or even likely that grammatical borrowing follows different rules. I have argued above that the trigger behind language mixing around discourse-regulating grammatical elements is cognitive, not social, in the sense that it derives from the mental-processing functions associated with the linguistic expression, or in plain terms from its communicative-interactional function. The "donor" language is one that is pragmatically dominant in the particular instance in which transfer occurs, that is, it is a linguistic system to which speakers show a special situative commitment and toward which their efforts at norm-conforming linguistic behavior are currently directed. Typically, such a donor system belongs to the language in which group-external communication takes place, and where the speakers under consideration, being outsiders, do not participate in defining the norm. Conversely, their own group may be tolerant toward changing norms and may accept such cognitively triggered transfers. If such a constellation persists, recurring transfers may be conventionalized. Prestige is thus not itself a motivation for the transfer of discourse markers (nor, perhaps, of other grammatical elements), but at most a background precondition for the wholesale, long-term borrowing of this class of items.

Notes

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1. The closest theories of contact have come to approach this issue is perhaps Thomason and Kaufman's (1988) famous scale of borrowability. But the specification of categories for each of the stages on the scale remains rather vague, and no explanation is attempted of the reasons for the postulated progression of change-through-contact over time and intensity (see below).

2. I regard as "conventional, interactional situations of contact" those constellations in which language contact is manifested primarily in oral conversation and in such a way that the two or more languages involved are unlikely to be entirely balanced with respect to their domains of usage, their importance as symbols of identity, speakers' proficiency, etc. For a discussion of some related issues, Weinreich (1968 [1953]) remains a classic.

3. Campbell (1993) categorically rejects two of Moravcsik's statements: the claim that no verbs are borrowed as verbs, and the claim that borrowing of derivation is a precondition for the borrowing of inflection. Campbell also dismisses the observation that nonlexical (= grammatical) properties will not be borrowed without lexical borrowings as "theoretically insignificant" (1993: 101), arguing that there is no conditioning relation between the two. So-called "athematic" morphology in Romani (see Hancock 1995) possibly provides a counterexample to the claim that inflection within a class of constituents cannot apply only to borrowed items.

4. Lass (1997: 190) simplifies the borrowability hierarchy for grammatical categories as {noun > adjective > verb > adverb > preposition}. At least the position of verbs on this hierarchy contradicts Moravcsik's claim on their nonborrowability. But adverbs are just as problematic due to their vague definition. Some highly borrowable elements discussed in the present study are often classified as adverbs.

5. Terms like "borrowing," "donor language," "transfer," and "interference" have often been criticized in the literature for their biased connotations. One such critic is Johanson (1992), who emphasizes that borrowed linguistic properties are not returned to the donor after their usage, and suggests the term "copying" instead. I find the use of terms in the literature quite straightforward (to the extent of course that phenomena such as borrowing, code switching, convergence, etc., can be kept apart methodologically) and make no attempt to purify my own use of them in the present context; however, I do argue for an alternative notion further below, which I call "fusion" (see also Matras 1996).

6. On grammatical gaps see also, with particular reference to discourse markers, Harris and Campbell (1995: 128–130); Mithun (1988: 351–352).

7. Coordinating conjunctions cannot be isolated, as Poplack's category of "conjunctions" also includes subordinators and relative pronouns.

8. Some terminology borrowed from Hebrew, such as *šabát* and *kal*, is regarded by Berk-Seligson as Spanish rather than Hebrew, and indeed *kal* does not appear in modern Hebrew in this meaning at all.

9. Cf. Maschler (1994: 328): "... metalanguaging for the purpose of signaling — reflecting — as well as creating what speakers perceive as boundaries."

10. Cf. Stolz and Stolz (1996: 113): "Mit dem spanischen 'Flair', das über die Diskurspartikeln in die indianische Rede gelangt, hat man zudem die Möglichkeit zur situationsabhängigen soziolektalen und stilistischen Variation geschaffen ... ."

11. In an extensive discussion of ongoing language convergence, Silvá-Corvalan (1994) similarly argues that change emerges when bilinguals develop strategies aimed at lightening the cognitive load of having to remember and use two different linguistic systems. Such strategies include, according to Silvá-Corvalan (1994: 6), simplification of gram-

matical categories, overgeneralization of forms, development of periphrastic construc-
tions, direct and indirect transfer of forms, and code switching.

12. It is noteworthy that both Lovari and Gurbet belong to the Vlax group of dialects, whereas the Polska Roma dialect is part of the Northern group. The translations cited here were obtained from native speakers on the basis of a German original for the production of the series *Jekh, duj, trin ... romanes*, published by Verlag für pädago-gische Medien in Hamburg in 1996. The series, which features tridialectal versions of the same texts, is employed in experimental Romani-language school classes. I owe special credit to the translators: Danuta Rösteholm (Lovari), Dragutin Petrović (Gurbet), and Andrzej Wiśniewski (Polska Roma). The writing conventions represent an attempt at a standardized codification; borrowings are therefore integrated into Romani spelling, which is also the practice in other cases of data citation below.

13. Cf. Boretzky (1993: 114): "Angesichts dieser langen Reihe von Konj. [=which are borrowed from the contact languages; Y.M.] kann man vermuten, daß vor dem Kontakt mit den Balkansprachen das Romani beachtliche Lücken aufwies."

14. The contrastive expression *feri ke* 'only that, however' in the Lovari example in (4a) is not a main adversative connective in the sense discussed by Rudolph (1995), but a specialized expression of contrast. Here, a form from an earlier contact language, Romanian, is retained; but compare example (8).

15. Partly as implied by Meisel (1990; cited in Bentahila and Davies 1995: 87) with refer-ence to the parallel acquisition of two languages by children, though of course speaker awareness of nondifferentiation will be different for adult speakers.

16. It should be noted that Stolz and Stolz's hierarchy includes subordinating conjunctions, which are excluded from our discussion of utterance modifiers. Thus *pero* is joined at the top of the hierarchy for borrowed conjunctions by *porque*, and *como* (*que*) appears between *y* and *o*.

17. This is in line with Salmons's (1990: 465) observation that items that direct the hearer's attention to changes or involve making conversational repairs are most susceptible to contact.

18. Macedonian Turkish examples are from my own transcribed corpus of conversations recorded among Macedonian immigrants in Germany in 1990 (see also Matras forthcoming).

19. As suggested to me by an anonymous reviewer, Bakker's claim can stand only if one accepts both his implicit assumption that the operation of French grammar in Michif NPs (gender and number agreement) is not grammar and his explicit claim that Cree has no lexical morphemes.

20. The switch to English in the uninflected verb *come across* might at first glance suggest an attempted adaptation of an English item into a Cree-derived converbal construction. Bakker (personal communication), however, reconstructs this as a code switch fol-lowed by a repair and a new start.

21. I am grateful to Dörte Hansen-Jaax for providing me with the data.

22. Anders's informants were recent immigrants to Germany from the former Soviet Union, mainly from the northeastern parts of the Russian Federation and from the Central Asian republics, where they settled following deportations from their original area of settlement in the Volga region. Most speak German dialects of a Franconian type; Anders (1993: 42–43) classifies some of those as close to or derived from the Palatinate dialects.

23. Thus excluding cases where *aber* is a postposed modal particle, as in *ich bin aber stolz* 'I am (really) proud' (Anders 1993: IV-88).

24. Recorded in Jerusalem in 1989.

25. But see Azuma (1993).
26. On *because* as a discourse marker see Schiffrin (1987: 201–217). Switches involving *because* are discussed by Maschler (1994) and de Rooij (1996), and Spanish *porque* figures at the top of Stolz and Stolz's (1996) diffusion hierarchy for Spanish conjunctions in Amerindian languages.
27. From "Dispatches," British television, Channel 4, 8 June 1997.
28. Cf. Rehbein (1979: 59): "Mittel, mit denen der Sprecher auf die hörerseitige Koordination Einfluß nehmen will: die Hörersteuerung."

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