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Language Contact and Historical Linguistics

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Commented [SM1]: This is an excellent chapter, although I have raised a couple of issues here and there about your arguments. I hope you will address those issues. Sometimes your sentences got too long and hard to parse. I have broken some of those into shorter sentences, while doing my best at preserving the integrity of your ideas. Please note the publications that I have emailed you in connection to this article, especially regarding internally vs externally-motivated change and whether creoles are not new Indo-European languages.

1. Introduction

It has long been recognized that there is a relationship between language contact and language change, with language contact often being seen as a key vehicle – in fact, for some, a prime motivation -- for change in a given language. Moreover, historical linguistics, throughout its existence as a subdiscipline within the scientific study of language more generally, has largely been interested in the phenomenon of language change, studying in particular how languages change over time and why they change.[1] It is thus only natural that the study of language contact, and more particularly of the effects that forces external to a given linguistic system can have on that system, should have played a key role throughout the development of historical linguistics within the overall field of linguistics, and that it should be continuing such a role. The purpose of this chapter is to explore this relationship along two dimensions: with regard to the field of study itself, but more importantly perhaps, also with regard to explicating various aspects of language contact and external influence that are particularly relevant to understanding the subject matter of historical linguistics, subject matter that encompasses the diachronic development of languages, and specifically what happens to languages as they pass through time.

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2. The matter at hand: Some needed clarifications

[1] I say "largely" because interest in stability across time is in principle equally a concern of historical linguistics, even if the focus of most work in this field has been on change.

As evident in the preceding introduction, linguists generally talk about *language contact*, but this phraseology requires some deconstruction, for several reasons. First of all, though we typically talk about "*language* contact", it would perhaps be more accurate to say "dialect contact", for linguistic systems in contact with one another could be dialects of the same language just as easily as they could be distinct languages. Moreover, in any case, any given speech form that is passed between speakers is necessarily going to be a dialect, i.e., whatever dialect is being used in the interchange, even if it is a standardized variety.[2] Even more specifically, the contact is between idiolects, i.e. the individual varieties spoken by individual speakers (see Mufwene 2001 for this position).

Second, as the reference here to speakers indicates, what is generally meant by "language contact" is contact not between the languages themselves as abstract systems, but between *speakers* of different languages employing their languages concretely, as it were; viewing contact this way treats it as an inherently social phenomenon. Thus if we are focusing, say, on a lexical loan that passes from one language into another, such as the word *moose*, a loanword into English from Eastern Abenaki, an Algonquian language once spoken in Maine, it must be assumed that some speaker of Abenaki was the conduit through which the word entered the usage of some speaker, or group of speakers, of English, at a certain historical point when some event of interaction between the Abenaki and the English took place. This point is perhaps self-evident, but it is easy to be distracted or even misled by our own metaphors, and to come to think of material passing between languages without the medium of human interaction.[3]

[2] A standard language can be viewed as a dialect that happens to have particular social and economic power behind it.

[3] One exception to this statement that must be noted is the borrowing of words and other linguistic material through the medium of written sources. But even in such cases, there is human agency — a writer and a reader — even if no direct interaction takes place between people.

Commented [SM2]: If you really want to get to the bottom of it, the contact is between idiolects, regardless of whether they are associated with languages or dialects. Some of them may actually be hybrid between different languages, as those of nonnative speakers of other languages. Interactions are normally between individuals. This is a position I articulate in *The ecology of language evolution* (2001).

BDJ: Yes, good point; I have put it in the text.

Commented [SM3]: You are getting here into Max Weinreich's "a language is a dialect with an army and a navy" or whatever the exact saying is.

BDJ: True, but I will leave that reference out because it is disputed who actually said it. But you are right. If you think it should be mentioned, please feel free to fit it into footnote 2.

Commented [ea4]: Lexical borrowing takes place through receptive language agency for Thomason & Kaufmann 1988 and Van Coestem 2000. Is this case of *moose* making reference to a different understanding of 'lexical borrowing'?

BDJ: No, I am only trying to emphasize that an individual speaker of the donor language must have been involved at some level – it is not the abstract lexicon that is the source but rather the usage of an individual representing a concrete realization of that abstract lexicon.

Third, despite the foregoing cautionary note, there actually is one sense in which linguistic systems per se could be said to be in contact. That is, having experience with and developing some command of more than one language through interaction with speakers of some language other than one's first language opens the door for the development of cognitive abilities in, and thus mental representations of, that other language. This means that there can be "contact" of a certain sort between linguistic systems that exist in the minds of bilingual speakers. In this view, "language contact" could be said also to be a psychological notion, inasmuch as individual bilingualism really involves different language systems stored in some form in an individual's brain.

Commented [ea5]: Similar to Weinreich's 1953 'the speaker is the locus of the contact'?

BDJ: Yes, but perhaps it does not need to be cited here??

This last point means further that language contact is necessarily tied to some degree of bilingualism via exposure to more than one language (or dialect). Admittedly, there is a wide range of definitions of "bilingualism," from the somewhat loose definition of Haugen (1953: 7) as the ability to "produce *complete meaningful utterances* in the other language" [italics in original], without a lower limit on how many "*complete meaningful utterances*" are needed to constitute bilingualism, to the rather stringent one of Bloomfield (1933), who asks for, as Edwards (2004: 8) puts it, "the addition of a perfectly learned foreign language to one's own, undiminished native language." Nonetheless, bilingualism, however defined, involves at the very least some awareness of, and minimal ability in, a language other than one's own.

It is also the case that we need to distinguish between individual bilingualism and societal bilingualism, though the two often go together. For instance, there are villages in Southern Albania that are predominantly Greek-speaking but where all the Greek speakers are fully fluent in Albanian as well. In such a speech community, all the speakers are bilingual and, assuming

roughly equal use of the two languages by the speakers, each language could be judged at 50% use in the village. But one could equally well imagine a (nonexistent) village where 50% of the population speaks only Greek and the other 50% speaks only Albanian, but no speakers control both languages; in such a village too, each language could be judged at 50% use. Both types of villages could be said to be "bilingual villages," but the extent of knowledge of each language and the functional – and demographic – distribution of each language differs between the two types.[4]

As a final point of clarification, language contact is generally said to involve forces or pressures "external" to a given language, as seen in the usage in the previous section. However, such pressures are "internal" in a certain sense when we are talking about a bilingual individual in that they are internal to that individual, or internal to the grammar, if bilinguals are thought of as having a single grammar encompassing the multiple languages. Still, assuming some degree of separation between the representations of knowledge of each system, any clash between systems in a single bilingual speaker's mind can be considered as being external to each system.

Nevertheless, in this discussion, the essentially metaphorical terms "external" and "internal" are used throughout, as is the very phrasing "language contact." Specific reference is made to dialect contact only as needed, along with, moreover, recognition of the "bilingual brain" as a manifestation of language contact. These decisions are justified by the realization that language contact, however defined and however specified, is a real phenomenon and has a real effect on the diachronic development of a given language. It is for this reason that language contact is relevant — indeed, highly relevant — to the understanding of language change and, as

[4] The comparison made here gives a reason to look to population structure when we are trying to make sense of differing effects of multilingualism in different societies, even when the same languages are involved..

Commented [SM6]: The comparison underscores the significance of population structure in making sense of differing effects of multilingualism in different societies, even when the same languages are said to be in contact.

BDJ: Good point – if it is OK, I have adapted your comment into a footnote.

Commented [ea7]: For those who consider that bilinguals only have one system, the pressure would be internal between the variants?

BDJ: Yes; I have added a mention in the text. Thanks!

discussed below, even of language stability in some instances; it therefore is certainly suitable material in any consideration of historical linguistics.

In what follows, two key topics are covered, the discussion of which makes clear just how the study of the diachronic development of languages as communal phenomena — the subject matter of historical linguistics — is intertwined with the study of language contact. These topics are: a) language contact as actuator of change, and b) language contact as trigger of speciation, i.e., as a creator of new languages.

First, though, since this chapter is as much about the study of language contact within the field of historical linguistics as about the effects of language contact for understanding language change, it is useful to consider the ways in which historical linguists have treated language contact and contact-induced change over the past 150 years or so, i.e. during the period of the development of the subdiscipline of historical linguistics itself.

3. The importance of the external in language change — A brief survey[5]

The casual mention of "external" in the previous sections, with little explication, in the context of discussing language contact suggests that this term reflects a fairly widely recognized and commonsensical division of factors in language change into those that are internal to a given language system and those that are external to a given language system. Indeed, in the last 30 years, as the study of language contact has entered what may be called its "modern era," this terminological, and thus conceptual, division has become quite standard. It is found (passim) in Anttila 1972, a major and widely used textbook in historical linguistics, and also in Thomason &

[5] Much of this section is drawn from Dawson & Joseph (2019); I am grateful to my colleague Hope Dawson for the many illuminating discussions that led to our having material that I could make use of here, and for her graciously allowing me to use it in this venue.

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Kaufman 1988, the ground-breaking volume that effectively launched this modern era of language contact studies. Thomason & Kaufman use this specific terminology, for instance, when they talk of (and ultimately reject) a "methodological inclination … to consider the possibility of external causation only when all efforts to find an internal motivation for some change have been exhausted" (p. 57), and they repeatedly make references to contact and to social factors, and to their importance vis-à-vis what they call "purely linguistic factors", i.e. the internal. And various treatments of language change since then highlight this distinction, most notably the textbook by Campbell (2004), though there is also the useful handbook discussion by Hickey (2012). Campbell (2004: 317) offers perhaps the clearest delineation of what this dichotomy means in practical terms: internal causes are those "based on what human speech production and perception is and is not capable of … includ[ing] physical and psychological factors." On the other hand, external causes "involve factors that are largely outside the structure of language itself and outside the human organism … includ[ing] … expressive uses of language, positive and negative social evaluations, … language contact, and so on."

Despite the current clarity, there was, however, a rather long period in the history of linguistics when this dichotomy, so seemingly natural now, was not to be found, at least not insofar as terminology was concerned, even if the conceptual distinction embodied in the current terms *internal* and *external* may well have been recognized. In the 19th century, in what may be termed "early modern linguistics," that specific distinction was not a particular focus, although it is clear that there was a general awareness of the relevance of external influences to a full understanding of what happens to languages historically over time. This absence was perhaps a function of the particular approach to diachrony in that era, in that the focus of the Neogrammarians — scholars such as Karl Brugmann, August Leskien, and Hermann Osthoff,

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among others, who so enormously advanced the study of language change — was squarely on relatedness and reconstruction. Lexical borrowing, the most obvious effect of language contact, was relevant largely insofar as recognizing its possibility was needed in order to exclude material that could counteract the effective working of the Comparative Method and could thus be extraneous to determining relatedness. And as for the study of language change itself, as opposed to relatedness and reconstruction, the assessment of Thomason & Kaufman (1988: 1) is telling: "For well over a hundred years, mainstream historical linguists have concentrated heavily on system-internal motivations and mechanisms in studying language change … [embodying] an assumption that virtually all language change arises through intrasystemic causes."

Such observations do not mean that there was little or no work on language contact; after all, the 19th century did see the postulation of the Wave Theory regarding the diffusion of innovations, and this depended on contact among speakers of different, but related, languages (Schmidt 1872). Moreover, there were several early studies of creoles, such as those by Hugo Schuchardt, many of which are available in Schuchardt 1979. Nonetheless, the focus was not so much on the causation of change but rather on the nature of change. Hermann Paul, in his 1880 Neogrammarian manifesto *Prinzipien der Sprachgeschichte*, for instance, says nothing specific about a system-internal/system-external distinction inasmuch as he was interested more in the psychology of the individual and what happens to various parts of the linguistic system than in any effects of language contact.[6]

Even as the focus of linguistic investigation began to shift, as seen especially in de Saussure (1915), so as to include more synchronic issues, the view of synchrony that prevailed

[6] Paul does include a nod in the direction of external matters when late in his book, in the last chapter, he discusses language standardization. So he was well aware that speakers live in a world that is external to them, but his focus was on the individual and what the individual did.

saw linguistic structure as particularly important, and this affected how language contact and thus external forces were treated. For example, like the Neogrammarians before him, de Saussure recognized that borrowing was a mechanism of change, but for him, the focus in discussing language change was mainly on matters internal to the linguistic system. Thus, even when he did consider loanwords, it was mainly to see how they fit into the borrowing language's system.[7]

Moving ahead in the 20th century and taking up several now-classic works, all conveniently with *Language* as the main title, we can consider Sapir (1921), Jespersen (1922), and Bloomfield (1933). In each of these books, there was no particular focus on causation per se or on possible internal or external factors. Sapir did include a chapter entitled "How Languages Influence One Another," signaling a recognition that languages do not develop in isolation, but at no time does he use the terms *external* or *internal* with reference to the forces behind language change or generalize over different types of system-internal developments.

Jespersen, for his part, does have two chapters on "Causes of Change" in which he offers subsections on various factors which could be considered "external," though this is a term that he himself does not use. He does mention possible effects of geography on language[8] and the role of what he calls "national psychology", essentially a sort of language ideology. However, he

Commented [SM8]: On the other hand, Jespersen includes at least a chapter on the emergence of pidgins and creoles, although he is like the others in treating them as exceptional developments.

BDJ: Good pointl I have incorporated this into a new footnote, if that is OK.

[7] For instance, de Saussure said about borrowings that "a loan-word no longer counts as such whenever it is studied within a system" (1915: 22, cited in Hoffer 1995: 542), indicative of his interest in what Hoffer (1995: 542) calls the "internal workings of the linguistic system." On the other hand, "external elements, such as its social use, are outside the scope of this area of linguistic study" (1915: 22, cited in Hoffer 1995: 542).

[8] Though see now Everett (2013a, 2013b), and Everett et al. (2015, 2016) on possible interactions between geography and language change.

does not talk about contact per se, so that even if some such factors are "external" in some sense, language contact is not a focus for Jespersen.[9]

Bloomfield (1933), echoing and expanding upon distinctions made in Bloomfield (1926),[10] contained two chapters on sound change ("Phonetic change", "Types of phonetic change"), a chapter that was a bridge between sound change and other types of change and treated residue in sound change ("Fluctuation in the frequency of forms"), one chapter on analogy ("Analogic change"), one on meaning viewed diachronically ("Semantic change"), and three on borrowing ("Cultural borrowing", "Intimate borrowing", "Dialect borrowing"). These last three represent Bloomfield's discussion of system-external effects, and it is clear that he takes contact seriously as a mechanism of change. The other chapters treat system-internal effects, though it must be noted that he does so without using the terms *internal* or *external* per se. In fact, instead of a dichotomy into internal and external factors, Bloomfield really envisions and reaffirms the Neogrammarian threefold division of types and causes of language change into sound change, analogy, and borrowing, without generalizing over sound change and analogy as both essentially system-internal changes.

Weinreich (1953), as the title of his work — *Languages in Contact* — would indicate, is a major step forward in bringing language contact to the forefront of consideration by historical linguists. He contrasts "purely linguistic studies of languages in contact" with "extra-linguistic

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[9] It is noteworthy that Jespersen does include a chapter on the emergence of pidgins and creoles. However, like the others of his time, he treats them as exceptional developments. I thank Salikoko Mufwene for drawing this important fact to my attention.

[10] Bloomfield 1926 distinguished "sound-change" and "analogic change," which would cover internal changes, and moreover distinguished them from "linguistic substitution" and "linguistic borrowing," covering external change. Thus, he (of course) recognized such different kinds of effects but did not generalize over each of these types of change.

studies on bilingualism and related phenomena" (1953: 4), saying ultimately that "they are all essentially complementary in understanding a phenomenon of so many dimensions" (i.e., language contact). Conceptually this comes very close to the internal/external distinction, in that he is viewing mechanisms of change in dichotomous terms rather than the Bloomfieldian triad, though Weinreich does not label these concepts in precisely this way.[11]

The terminological breakthrough regarding "internal" and "external", and thus an explicit recognition that some types and causes of change arise within a linguistic system itself and some are due to effects outside of that system, seems to have come in Charles Hockett's (1958) influential textbook, *A course in modern linguistics*. He does refer to the "triad" of sound change, analogy, and borrowing as the mechanisms of linguistic change. However, in his chapter 43 on Old and Middle English, by way of elucidating the history of English, he draws a distinction between the *external history* of a language and the *internal history*:

> The external history of a language concerns the location and migrations of its speakers, the episodes in which they have had various sorts of contact with speakers of other languages, the circumstances under which it has acquired new groups of speakers (other than by normal transmission to children born within the community) or lost old groups and so on — indeed, anything about the history of the speakers of the language which has some bearing on the history of the language itself.
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> The internal history of a language concerns what happens to the design of the language as time passes.

[11] Weinreich was of course more concerned with how to build an awareness of linguistic variation into a model of sound change, so the internal/external distinction may well have been hidden for him behind the veil of variability.

Commented [SM9]: Did Weinreich really connect the study of language contact with that of language change, say in the way that Einar Haugen did in showing how Norwegian changed in the US and anticipating some of the discussions of language shift/loss.

BDJ: I think that the fact that he talks so much about interference means that he connected contact and change. And he explicitly mentions change at times, e.g. on p. 23 he t=mentions "the spread of sound changes induced by foreign influence".

This comes especially close to talking about the "internal" as opposed to the "external" as causes of change, especially since "contact with speakers of other languages" is part of what Hockett includes under "external history." Still, it is not an explicit drawing of this distinction, and in a later work, Hockett (1965), regarding the triad, he says (p. 190):

> Whether each of these was to be interpreted as a **kind** of change, a **cause** of change, or a **mechanism** of change is obscure; apparently the scholars of that time had not the habit of making distinctions of this sort. … The threefold classification was to some extent an answer to the how.

Since "the how" refers to the quest to understand causation, it is clear that Hockett is identifying various factors responsible for change in language, hence internal and external factors, the terminological dichotomy that becomes the new standard after being adopted by Anttila (1972) and especially, as far as language contact studies are concerned, by Thomason & Kaufman (1988), as noted above.

It is worth pointing out that there are scholars after Hockett who developed different terminology but preserved the internal-versus-external conceptual dichotomy. Andersen (1973), for instance, distinguished between *evolutive change* and *adaptive change*. An *evolutive* change is "a change entirely explainable in terms of the linguistic system that gave rise to it;" it is therefore a system-internal development arising out of the linguistic system in and of itself, driven entirely by linguistic factors. By contrast, an *adaptive* change is "a change not explainable without reference to factors outside the linguistic system in question;" it is therefore a system-external development driven by the embedding of the change in a larger social structure; driven by social factors.

Commented [ea10]: Mari Jones 2005 uses the distinction internal, external, and extra-linguistic.

BDJ: OK, but as I am not familiar with this work, perhaps I will not cite it. Anyway, my point here was not to be exhaustive but to mention a few of the more prominent post-Hockett scholars, specifically Andersen and Labov.

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Finally, and more recently, Labov (2007) has distinguished between *transmission* and *diffusion* in accounting for linguistic change. For Labov, transmission refers to change that emerges from within the system in the ordinary course of passage of language from generation to generation, whereas diffusion refers to change that spreads from speaker to speaker within speech communities. Transmission, therefore, essentially covers the conceptual territory of internal change — Andersen's "evolutive change" — and diffusion more or less corresponds to external change, though perhaps better to Andersen's "adaptive change."

There may well be some nuances of meaning that distinguish these pairs of terms.[12] For instance, Labov's "transmission" seems more process-oriented than "internal" or "evolutive" might suggest, and "diffusion" seems more community-oriented than "external" or "adaptive" might indicate. Such differences are not relevant here but the basic conceptual distinction that all of these terms embody is, as is the documentation that this survey provides of the importance that language contact has come to have for historical linguistics.[13]

4. Language contact as actuator of change

Having established that contact has come to play an increasingly important role in what may be called mainstream historical linguistics, as indicated by the key works cited in the previous

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[12] Another set of terms that are somewhat parallel to these various sets of terms is *endogenous* and *exogenous*, long used in the social sciences (e.g. in economics), but increasingly common in recent linguistic literature to refer respectively to developments originating from within a system and those originating from outside of the system.

[13] It is worth noting that there is now a scholarly journal devoted to contact, the *Journal of Language Contact*, founded in 2007. Moreover, impressionistically speaking, the number of submissions and published papers in major journals that have something to do with the effects of language contact seems to be higher than ever.

section, we can now turn to one of the leading questions that mainstream historical linguists have wrestled with and how contact and external factors might offer an answer. The question is that of actuation, formulated by Weinreich, Labov, & Herzog (1968: 102) as follows:

> Why do changes in a structural feature take place in a particular language at a given time but not in other languages with the same feature, or in the same language at other times?

This question has long been a difficult one to answer in any effective way. Even when well-founded internal (i.e., "natural") causes, such as the physiology of articulation (cf. Campbell's "human speech production" above in §3), can be identified, one has to ask why, if the same physiology was always there, a change happened when it did and where it did. For instance, to simplify rather drastically a complex set of facts,[14] Western Romance languages show weakening and in some instances loss of intervocalic consonants, as in Spanish *caer* 'fall' from Latin *cadere*, or French *épée* 'sword' from Latin *spat(h)a* (via Old French *espede*).[15] However, while weakening occurred in Italian, loss did not, as shown by *spada* 'sword' and *cadere* 'to fall'. Thus, one has to ask why these changes occurred among speakers of Spanish and French but not among speakers of Italian, or, for that matter, why they never occurred among speakers of Latin itself. One might think that the presence of speakers of a Celtic language in Iberia and Gaul prior to the coming of the Romans might have had something to do with the weakening, given that intervocalic consonant weakenings — called "lenitions" in Celticist usage — are widespread throughout Celtic. The evidence appears in, for instance, Old Irish 3SG ending *-id* from PIE *-eti (e.g. *berid* < *bhereti 'bears'). That is, Celtic speakers shifting to the use of

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[14] See Martinet (1952) for a detailed and careful discussion of the relevant data.

[15] With intervocalic voicing as well, due to the adjacency of vowels, and thus a kind of assimilatory development.

Latin, it is suggested, could have carried over their Celtic phonological habits into their production of Latin. Looking to contact here, in the form of the very common "interference" from speakers' native language into their second language, is especially appealing since there was no such Celtic substrate in Italy. Therefore, the actuation of the ultimate weakening changes leading to loss in Western Romance could be attributed to the Celtic substratum, even if a first wave of weakening was just a natural outgrowth of the phonetic environment. Indeed, Martinet (1952: 217) observes that "it must be clear that there exist potent arguments in favor of interpreting the Western Romance developments as ultimately due to Celtic influence." But it is not clear that Celtiberian showed lenition (cf. 3SG ending *-eti*, as in **ambidiseti** 'he builds around' (< *…dhig'hseti)) and, as Martinet himself argues, there may be parallel structural tendencies that can explain the similarity.

To take another example, in the wholesale sound shift known as Grimm's Law, affecting the Proto-Indo-European (PIE) stops on their way into Germanic, PIE *b d g became *p t k* and PIE *p t k became *f θ x*. Since these changes did not occur in any other Western Indo-European language, it is tempting to attribute their actuation to language contact, via imperfect acquisition — that is, a form of weak bilingualism — of the phonological contrasts of the language of the Indo-European speakers entering northern Europe by speakers of an indigenous substratum language. Such a hypothesis, however, even if it might have the virtue of explaining the geographic limitation of Grimm's Law, is problematic as an account of the actuation of the sound shifts. In particular, if the substrate language had *p t k* at all, the expectation would be that Indo-European *p t k would be assimilated into the bilingual's usage unchanged, and if the substrate had no *p t k*, then there would be no account of why *b d g would have become precisely *p t k*.

Problematic cases like these can be multiplied across languages and regions of the world, and there are keen debates in the literature on the proper balance of internal and external causation in various changes. However, it is not the case that contact-based explanations for the actuation of a change are always doomed, for there are some legitimate cases where contact offers the best account. The case of contact between Modern Greek and Arvanitika is especially compelling in this regard. Arvanitika is the dialect of Albanian that has been spoken widely in many parts of Greece — primarily Central Greece, the Peloponnesos, and Attica — since approximately the 15th century; currently, however, it is severely endangered, as speakers from the early 20th century on have been increasingly shifting to Greek.

Arvanitika shows the effects of this increased bilingualism among its speakers, with Greek phonology affecting Arvanitika. For instance, both Hamp (1989: 201) and Sasse (1991: 61-62) note that for the pure voiced stops of Albanian elsewhere, Arvanitika shows prenasalized voiced stops, i.e., stops that (for Sasse) "tendieren … zur Pränasalierung." This is just as in Greek, which, for many speakers, especially older ones, has no pure voiced stops but rather only voiced stops accompanied by some preceding nasality. Moreover, Sasse (1991) and Tsitsipis (1998: 25n. 3) report that younger speakers of Arvanitika are moving in the direction of denasalizing their Nasal + Stop clusters, yielding pure voiced stops, exactly the same development found in Greek speakers in the same age-group. Further, Sasse (1991: 58-59) observes that Greek-type dental affricates — Greek having no palatal affricates in general — occur among many speakers of Arvanitika in place of common Albanian palatal affricates (*t͡ʃ/d͡ʒ*). In these three cases, therefore, bilingualism in Greek is affecting the phonological realizations of Arvanitika speakers in their production of Arvanitika, a phenomenon that can be referred to as

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"reverse interference."[16] Contact with Greek can therefore be safely assumed to be the actuating force behind these innovations in the phonological system of Arvanitika.

Thus, language contact can be an actuator of linguistic change, but it is not the only actuator. Language-internal ("natural") changes can also occur, though even in such cases the external factors of social meaning attributed to one variant as opposed to another, in the widely adopted model proposed by Labov (1963, 1994, 2001, 2010), may well be at work. That is, contact among speakers in a sociolinguistic milieu with variation can be seen as responsible. In such a case, however, the actuation is pushed back a level, as it could be asked why a particular social meaning and not some other social meaning comes to be attached to a particular variant and not to some other variant. Thus, questions remain, and perhaps always will, as to when and how it is appropriate to invoke the legitimate effects of language contact to account for why and when a given language underwent a particular change. The answer may well lie with the intensity of contact and the social conditions surrounding the use of one or the other language, inasmuch as the Greek-Arvanitika situation shows a level of dominance of Greek over Arvanitika both societally and in individuals.

It is appropriate to consider a side issue here: if language contact can be an actuator of change, can it also be an inhibitor of change? That is, can there be contact-induced retentions in a language? The answer seems to be yes, and again the case of Arvanitika and Greek offers an instructive example where language contact seems to have acted as a conserving influence. Hamp (1973: 314), for instance, notes that both the Arvanitika spoken in the southern part of

[16] Since the term *interference* is used (as above) for the very common phenomenon in which a speaker's first (or dominant) language affects the production of a second language, *reverse interference* is appropriate as a name for the effects of a second language on one's first language; it is the "reverse" of the more commonly discussed type of interference effect.

Commented [JB11]: I like "meaning" better here, and changed the mention of "factor" just before it to "meaning" as well; if you prefer "Factor" in each case, I won't fight you over it!

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Commented [SM12]: Is this really the way to ask the actuation question, which raised issues about the traditional internal-motivation account. Why a particular social factor rather than another is as good as why one particular structural/language-systemic factor rather than another. These associations appear to be arbitrary. Social factors such as changes in demographics or changes in attitude answer the question of why particular changes occur at a particular point in time in a particular geographical area.

BDJ: True, but I guess I would ask what brings about changes in attitude. Demographics, I understand, are independent in a sense, but attitudes are formed by a kind of common social consciousness, no? And where does that come from? So I think there will almost always be an underling question that perhaps cannot be answered. I do talk about the intensity of the contact as being a possible determining factor, so perhaps that is enough?

Commented [SM13]: This is an excellent question to ask.

BDJ: Thank you!

Greece, i.e., in the Peloponnesos, and the southern dialects of Greek show the preservation of the number of syllables in words, as they have not undergone any sorts of syncope or apocope that would reduce the number of syllables in a word.[17] By contrast, more northerly Arvanitika varieties, just like the co-territorial northern dialects of Greek, show syncope, with the result that the syllable count in a word has been altered. While the northern situation suggests reverse interference of Greek onto Arvanitika of the sort described above, in the southern situation Greek influence seems to have led to the absence of syllable-count-altering changes, and can thus be reckoned as having a conserving effect, essentially preserving the Proto-Albanian syllable count in words.

Finally, with regard to actuation, it is useful to distinguish two kinds of contact effects. First, there are what may be called *direct effects*, in which some element from outside a given language (or dialect) is incorporated into the system of the borrowing speakers and thus represents in and of itself an innovation within that system. Any instance of a loanword or any example of the borrowing of some element of grammar would be a case in point; the innovative appearance of the Turkish plural marker *-llar* in Albanian, especially but not exclusively in words like *aga* 'nobleman' (plural *agallarë*), a loanword from Turkish,[18] would be an example of this sort. In such a case, the actuation of the change that a new plural affix in the language represents, as well as that of the emergence of a new word, is triggered by the borrowing and thus by the contact between speakers that triggered the borrowing.

[17] Exception must be made for the possible loss of unstressed initial vowels in Greek (especially [e o i u], though with exceptions due to the originally phrasal sandhi source of this change) and Albanian.

[18] See Joseph (2016) and Friedman & Joseph (2020: Chap. 4) for more general discussion of this Turkish plural suffix in various Balkan languages.

Commented [SM14]: Are "to appear" and "2019" 2 different publications or the same? If not, please choose one date only.

BDJ: when I thought the book would appear in 2019, I started citing it as "To appear, 2019) but now it will be 2020, so I will just cite it that way.

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Second, there are what may be called *indirect effects*, in which the contact leads to the "enhancement" of existing tendencies already present in the language. An example would be the account given by Friedman (2006) for the emergence in the South Slavic languages Bulgarian and Macedonian of a verbal category of evidentiality under the influence of Turkish, a language in which the category was well developed within the grammar from an early stage. For Friedman (p. 668), the key distinctions in evidentiality can be characterized as "confirmative (vouched for, 'witnessed') and nonconfirmative (not vouched for, 'reported', 'inferential')." He notes further that

> In East South Slavic, the old synthetic pasts are markedly confirmative (…) By contrast, the old perfect using the resultative participle in *-l* has become an unmarked past, with a chief contextual variant meaning of nonconfirmative.

That is, the Turkish evidentiality categories were mapped in language contact onto a Slavic verbal system in which old synthetic past tense forms were already moving in the direction of a confirmative use, so that old perfects could be deployed as a nonconfirmative. Contact with Turkish thus enhanced and in a sense capitalized upon category shifts that were already taking in the language.

In either case, contact is the actuating mechanism, and one can go so far as to say that if contact provides any input, whether direct or indirect or at an even greater remove, into the emergence of a particular change, then it can be considered a contact-induced change.[19] While

[19] As an extreme case of an indirect contact effect at a great temporal remove, we can consider the innovative perfect tense formations that arose in late Medieval Greek, consisting of an inflected form of 'have' (Greek *ekhō*) and an uninflected form that continues the older infinitive (e.g. *grapsei* 'write'). This perfect formation derives from an old pluperfect which comes from an older conditional (future in the past) which was built on an older future that was a calque on Late Latin HAVE futures (see Joseph 2000 for details). Thus it was the impetus of the initial contact-induced innovation in Greek of a HAVE-future, from Latin, that set in motion the chain of (internal change) events that led to the perfect.

Commented [ea15]: This example of 'indirect effects' is reminder of Heine & Kuteva's 2005 two types of contact-induced phenomena under functional transfer: *grammaticalization* and *minority-to-majority patterns*. It is also a reminder of Siegel's (2012) *enhancement* and *alteration* effects in functional transfer in language contact. The example of the perfect acquiring nonconfirmative function in E S Slavic would fall under H&K's grammaticalization and Siegel's alteration.

BDJ: I see what you mean but I am in general a bit skeptical of the utility of H & K's invocation of grammaticalization in language contact so I would prefer not to cite it here as then I would feel compelled to include a log footnote as to why I am skeptical. Siegel's "alternation" seems to me to be just a way of saying that categories are not necessarily preserved when transferred in contact situations, so I am not sure it would add a lot here to refer to it.

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there are limits of course on how great a temporal or spatial remove can be involved, no one can deny that contact among speakers of different languages or different dialects is a powerful force in shaping the direction of language change.

5. Language contact as a trigger of speciation [SEP]

Based on what has been seen in the preceding sections, it would seem that the direct and indirect effects of language contact can in principle lead to an entirely new language. That is, if the donor language's influence and effects are thorough-going enough and cut deeply enough into the recipient language, the character of the recipient language can be fundamentally changed as to its basic grammar and lexicon. As a result, the affected language can look quite different from its state prior to the contact. This means that it is possible to compare languages that are clearly historically related to one another but where one has been seriously involved in contact with other languages, and to try to measure, informally at least, the degree of difference between two. It can still be asked, however, whether the genetic/genealogical lineage of the affected language changes in such a case. To put this in somewhat different terms, we can ask whether language contact can lead to linguistic speciation, to the creation of a new language with a new lineage.

The South Slavic language Macedonian offers an interesting case study in this regard, when compared with the East Slavic language Russian. In this case, we are of course dealing with languages that were differentiated from one another prior to contact. So, as a case-study in this context, what this comparison shows is not the creation of a new language per se; rather it offers a look at how drastic the results of contact-induced change can in principle be from a structural standpoint. Without wanting to get into the thorny issue of deciding whether two speech communities speak distinct languages or dialects of a single language, we can say the following. If instead of two distinct Slavic languages, we were dealing with two dialects of a

Commented [SM16]: What's this?

BDJ: just some funny quirk in Word, I guess, as all I had here was a space and a return! As at the end of the heading for §4, this can be deleted.

Commented [SM17]: … as in the case of creoles? At least this has been my line of thinking-☺

single speech community, the same questions could be asked: can language contact effects be such as to alter a genetic link holding historically between two speech communities?

Macedonian has the following characteristics that are different from Russian (and thus from most other Slavic languages), as indicated. In each case, they represent deviations away from Proto-Slavic that can be tied to contact that Macedonian has had with speakers of other languages in the Balkans, specifically Albanian, Aromanian, Greek, Romani, and Turkish.[20] There are negative as well as positive characteristics, that is, features that Macedonian has innovatively lost as well as features that it has innovatively gained through contact:

- no nominal case (vs. a rich case system in Russian)
- no infinitive (vs. an infinitive in Russian used in complementation and in various other grammatical ways, e.g., in the formation of the imperfective future)
- weak (so-called "clitic") pronouns (vs. none in Russian)
- pro-Drop (vs. "partial" pro-Drop in Russian (Matushansky 1997))
- object reduplication, i.e. a process by which the presence of a direct or indirect object is marked overtly on the verb by a weak (so-called "clitic") pronoun reduplicating (or "doubling") the object (vs. the absence of this construction in Russian)
- definite article (vs. none in Russian)
- evidentiality as a category in the verbal system (vs. a different marking of evidentiality, if at all, in Russian).

These features, which separate Macedonian from Russian, are in addition to significant lexical innovation that Macedonian has undergone through borrowing, mostly from Turkish. They

[20] This contact has given rise to the famous Balkan Sprachbund (see Friedman, this volume), in which these languages have come to converge both structurally and lexically over the past 800 years or so. See Friedman & Joseph (2020) for a comprehensive study of the Balkan contact situation.

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→ • object reduplication, i.e. the registering of an object, e.g. as to topicality, with the verb by "doubling" it with a weak ("clitic") pronoun (vs. the absence of this construction in Russian (though this may be subsumed under the absence of the "weak (so-called "clitic") pronouns" listed above)¶

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involve not only words across a wide range of grammatical, semantic, and pragmatic domains,[21] but also derivational suffixes. These include the occupational suffix *-džija* (Turkish *-cI/-çI*), the building suffix *-ane* (Turkish *-hane*), and the abstract noun suffix *-lak* (Turkish *-llk/-lik*). And, of course, there are some internally motivated innovations that each language has undergone, as well as contact-induced changes affecting just Russian, that have driven the languages further apart.

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The resulting overall picture is that there are just a few ways in which Macedonian appears to be a typical Slavic language. Perhaps the most characteristically Slavic traits of Macedonian are the importance of aspectual distinctions, especially perfective and imperfective, in the verbal system, as marked by stem changes on verbs and various verbal prefixes, though one can point also to the use of a verbal form in *-l* as the basis for the past tense (e.g. *tie zovali* 'they called') and the occurrence of morphophonological alternations involving palatalization of velars and dentals (e.g. *istok* 'east' ~ *istoč-no* 'eastern'). But the significant grammatical differences listed above seem on the surface at least to outweigh the similarities between these two languages.

To assess what these differences mean from the point of view of speciation and language contact, it is necessary first to establish a baseline of what it means to be a "Slavic" language. There is, of course, a straightforward and clear definition in terms of genealogy or historical lineage: a Slavic language is a language that continues the Indo-European intermediate (i.e., sub-group) proto-language, Proto-Slavic, via an unbroken line of transmission across

[21] See Friedman (1986). Note that all parts of speech in Macedonian show Turkish borrowings, even closed-class items like prepositions and pronouns, for instance, *karši* 'opposite' (Turkish *karşı*), *ič* 'nothing' (Turkish *hiç*),as well as all classes of nouns, even kinship terms, such as *badžanak* 'brother-in-law (wife's sister's husband)'),and abstract nouns, for instance, *loštilak* 'nastiness' (cf. *loš* 'bad').

generations, leading to a direct lineal descent from the proto-language to the attested offspring languages. And, Proto-Slavic is itself defined within the family tree modelling of the Indo-European language family as the language that shows certain divergences — so-called "shared innovations" — that are common to all later instantiations of the language and drive it away from the rest of the family. Examples of such innovations include use of a resultative participle in *-l* in the past tense together with the copula, and the metanalytic accretion of an initial *n-* onto pronouns controlled by a preposition (e.g. *ego* 'him' but *na nego* 'on him').[22] Proto-Slavic therefore provides the starting point for all the languages that stem from it, languages like both Russian and Macedonian.

What would it take for this genealogy to change? Note that the differences between Macedonian and Russian under consideration here really reflect a comparison of the languages on typological grounds. To approach the notion of "Slavic language" from a typological standpoint would mean taking one language or one set of characteristics as the model from which to judge other languages. Such a decision is problematic to be sure, but it should also be clear that the characteristics of Macedonian that are related to language contact would not be a suitable starting point for building such a model. Moreover, we are fortunate in this case in having a deep historical record for Slavic as well as texts in Old Church Slavonic, an old form of Slavic that is very close to what Proto-Slavic must have looked like. Thus we can establish the features that a Slavic language would have on both historical and typological grounds; and such a model is less like Macedonian and more like Russian, in terms of having cases, no definite article, an infinitive, and so on.

[22] I thank my colleague Dan Collins for his help concerning the identification of these features.

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What this example shows is that language contact can lead to considerable grammatical innovation. Moreover, the significant vocabulary replacement affecting Macedonian could make it difficult to establish relatedness through the powerful classical methodology of the Comparative Method, in which regular sound correspondences in comparable lexical items can demonstrate a genealogical connection. Without comparable lexemes, the sound correspondences will not be able to be established to any degree of regularity, so that the Comparative Method would not be applicable. In the absence of the solid historical record that tells us that Russian and Macedonian are related, then, one can fairly ask if the few shared traits they show would be enough to establish their genealogical relationship. Any answer here would be speculative, and it is certainly hard to know for sure if a principled judgment could be made. Still, one could quite plausibly take the position that as long as direct lineal transmission of the language takes place across generations, there would be no break with the genealogy. Nonetheless, it is fair to say that because of the considerable grammatical and lexical innovation that Macedonian shows, the case of Macedonian and Russian pushes against the limits of the extent to which languages can retain traces of their genealogy in the face of extensive language contact. It may thus come down to a matter of demonstrability of a relationship, not whether there has actually been a break in the language's genealogy.[23]

This sort of exercise can be multiplied across many different languages and language families, and is relevant really any time there has been significant disruption of inherited grammatical patterns and lexicon due to language contact. In many ways, for instance, after the Norman French invasion of 1066, English ended up being quite different structurally from the

[23] Since lexical differences are common and are especially salient to speakers, a lay-person's view of "speciation" due to contact might be different from what a linguist might say about the same situation.

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Commented [SM18]: However, this "lineal transmission" is a hypothesis that would normally be based on the Comparative Method, whose reliability you just questioned. You thus come to the same conclusion as Meillet (1926, I think): without independent historical evidence, for instance the history of the speakers, the CM is not so conclusive.

BDJ: I didn't doubt the reliability of the method, only its applicability in the absence of enough lexical matches to work with.

shape Old English had had before then. In that way it might seem somewhat less Germanic in character, compared with other languages of the subgroup and especially with earlier stages of those languages. The loss of nominal case and the emergence of a prepositionally based possessive (with *of*) are two such innovative grammatical features. Still, English retains much of its Germanic vocabulary, especially in seemingly "basic" domains such as body parts, kinship terms, numerals, terms of nature, and the like. Noteworthy are also some Germanic grammatical traits, for instance, Verb-Second word order in relic constructions (e.g. *Never have I seen such interesting facts!*), and morphological particularities (suppletion in comparative and superlative degree of the adjective *good*: *good – better – best*, congruent with German *gut – besser – (am) best(en))*, so that its genealogy is not really in doubt.

However, as a thought experiment, suppose one were dealing first of all with languages that to the best of anyone's understanding are unrelated to one another, and about whose history little was known. Moreover, suppose the nature of the language contact was intense and led to numerous grammatical elements and structures present in both languages. Without a clue about the history of each language, one might well suppose that they were related genealogically, and it might be only their geographic proximity — which allowed for the contact between the two groups of speakers — that might give one pause as to the matter of this apparent relatedness. However, where there are relatives for even one of the languages, and therefore comparative evidence, so that one can derive a sense of the prehistory of one language in this situation, a judgment about the direction and extent of the effects of contact can be made.

Still, the blending of languages due to contact can be particularly extreme, so that the matter of whether there are "mixed languages," languages of mixed parentage, so to speak, remains unresolved. In such a case, one might be justified in concluding that a truly new

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language, with a new lineage, has resulted from contact. For instance, the Michif language of Turtle Mountain in North Dakota, as described by Crawford 1976, Rhodes 1977, and more recently Bakker 1997 (see Papen, this volume), shows both French elements and Cree elements, blended in an interesting way: the nouns are typically of French origin, complete with determiners, and the verbs are typically from Cree, with its complex Algonquian morphosyntax intact. Given the centrality of the verb to Algonquian sentences, and the amount of information that is typically packed into the verb,[24] it is not surprising that speakers who were fully fluent in Cree in addition to French might well start constructing utterances with this central element, and then add in French nouns, for clarification, serving essentially as adjuncts to the action expressed in the verb.

The question of whether this is a new language depends on how one decides linguistic lineage. Thomason (2001: 202) is of the opinion that "the language is basically Cree" because of "the elaborate verb phrase and sentence structure," even though it has "incorporated French noun phrases." This is most likely the best assessment, though in other cases of extreme contact where the distribution of elements is not as compartmentalized (as Thomason puts it) as in Michif, as with Media Lengua, a mix of Spanish and Quechua spoken by a relatively small community in Ecuador, it may be more difficult to decide what the effects of contact mean for the genealogical assessment of the language.[25]

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Commented [SM20]: In this case too, like that of English, one may argue that the history of the speakers prevails, as the French were minorities in both populations and their language did not survive in these colonial settings. In the case of Media Lengua, the actors were typically Native Americans among themselves.

BDJ: True, and a good point. I have adapted this into a new footnote, if that is OK with you.

[24] For instance, Algonquian verbs show marking for subject, object, mood, and subordination versus main-clause usage, as well as concrete information about instrumentation, manner of action, and the like. Nouns, by contrast, do not show that same wealth of information relevant to full predication.

[25] As Salikoko Mufwene has pointed out to me, like the case of English, here too, with Michif, it can be argued that the history of the speakers is what is crucial. That is, he observes that the French were minorities in both populations — in England and in North Dakota — and their language did not survive in these colonial settings. With regard to Media Lengua, the actors were typically indigenous peoples interacting among themselves.

The extreme in such cases is creole languages, i.e. those that arise in particular social circumstances in which speakers of several different languages were brought together, usually via such cruel and inhumane practices as slavery, and had to figure out a way to communicate with one another. Even if the source languages can be identified, as with Haitian Creole, based as it is on French together with the indigenous Caribbean language Taino and various West and Central African languages, it is not clear what elements of the language to focus on in assessing genealogical lineage. Some linguists, e.g. Thomason & Kaufman (1988), take the view that the social circumstances surrounding the emergence of creole languages are decisive here, and they argue that the direct lineal transmission of a speaker's language across generations has been disrupted. Without such lineal transmission, they say, the usual bases for genealogical determination are not in effect. Thus, in this view, the language that emerges in such a contact situation has in effect been "re-rooted"; that is from the source language's family tree, a new language "tree" has been extirpated and re-planted, thereby establishing a new lineage, a new language "species."[26]

This is a controversial position, but a compelling and intriguing one, as it bears directly on the question of the extent to which language contact and contact effects are usual and widespread across languages of the world. This question is taken up in the section that follows, by way of offering some concluding remarks.

6. Conclusion: How usual is language contact?

It should be clear, based on the foregoing, that the effects of language contact fall along a continuum of a small amount of interference in one language through contact with another

[26] This view is consistent with what is referred to as "creole exceptionalism," a notion which is disputed by the chapter by Aboh & DeGraf, this volume.

Commented [SM21]: But these were either marginalized or killed quite early by the Spaniards.

BDJ: But it was the starting point for some indigenous input, even if not as important as the African input, right?

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Commented [SM22]: As you know, a number of us have disputed the claim of break in the transmission of the lexifier. When segregation was institutionalized there were already locally-born, Creole slaves that spoke the lexifier natively. The continuous transmission of the language was thus not disrupted, although the nature of the lexifier kept changing. However, hasn't such a change of the nature of the lexifier occurred everywhere else, although the degree of change is variable?

BDJ: Agreed, but what I am trying to do here is to present T & K's views as an influential position taken in the literature, not to endorse them. So I am not sure that I need to present any counter-discussion.

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language to the extreme of a full blending of elements from more than one language. In that way, language contact is a normal, everyday event, even if it and its effects can take different shapes in the affected language. The differences may be more a matter of degree than a matter of substance, more quantitative than qualitative. "Speciation" via contact, if one adopts the Thomason-Kaufman metric of disruption of direct lineal transmission, would be an unusual case, at the extreme end of the continuum. But even if one of the source languages contributing to a creole is accorded primacy in a genealogical assessment, so that Haitian Creole might be considered a Romance language, a variety of French, one still has to reckon with significant structural, grammatical, and lexical differences between the creole and the languages that constitute its relations.

We can take the view, then, that since contact among speakers of different languages, and certainly different dialects, is "natural" and represents a normal effect of human interaction, change due to contact is a natural and normal state of affairs. To close this discussion, and to bring it back to the earlier consideration of the history of research into language contact as it relates to historical linguistics more generally we can recognize here the insight of Eric Hamp, a giant among historical linguists and among scholars who have worked on language contact. Hamp (1989: 279) spoke of the "twin faces of diachronic linguistics," recognizing both the results one obtains from the Comparative Method, as representing results of internal changes, and the results that emerge from areal linguistics, representing the effects of geographic contiguity among peoples and languages and thus of language contact. These are two key and complementary ways of coming to understand the sources of historical similarities and differences between languages. The study of language contact must always, therefore, be

considered a crucial part of historical linguistics, a crucial part of working towards understanding linguistic diachrony, elucidating how languages and their speakers pass through time.

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