From Multilingual Repertoire to Language Change

A Critical Approach to Feature Spread, Borrowing and Language Ecology

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1   Introduction

Some years ago, I was asked by a fellow academic whether there was a post-modernist trend in linguistics. It took me a while to respond. The first thing that came to mind was the growing tendency in language documentation to focus on sound inventories rather than on phoneme systems. This seemed to go back on the axiomatic view taken by structuralist linguistics that systems consist of sets of binary oppositions. Instead, it favoured a more holistic and less pre-determined approach to the organisation of units as a spread of features that are drawn on in communicative practice often independently of any fixed paradigm position. In the meantime, overtly post-structuralist positions have been articulated around the study of multilingualism.

The traditional view in contact linguistics has been that language "systems" come into "contact" or even "interfere" with one another. But there is now a trend to conceptualise language boundaries as social constructions rather than as neutral, objective facts. In this paper I briefly review some of the historical milestones related to theorising in contact linguistics. I then refer to developments in social sciences, particularly the study of diasporas and ethnic identities, and the shift there from a focus on groups and boundaries, to one on practice and processes. I introduce some parallels in contemporary efforts to theorise language difference along such lines, putting features, practice and communicative experience in the foreground ahead of fixed boundaries and affiliations. Finally, I draw some preliminary conclusions about the categorisation of language contact phenomena, referring both to language types that are socially defined (based on their status in multilingual settings) and to those that are defined based on their structural profiles.

2   Contact Linguistics: From Observation to Theory

The very premise of early contact linguistics questioned a founding principle of modern historical linguistics, namely the idea that languages are pre-destined to diverge from one another over time. As Trubetzkoy (1928) argued with reference to the so-called "linguistic league" in the Balkans, contacts between populations and the multilingualism that they create can also increase similarities between languages. Already the earliest examinations of the effect of contact asked whether some structural categories were exempted entirely or partly from such processes. Responding to discussions about the possible existence of "mixed languages", Whitney (1881) introduced the term "borrowing" to refer to the appropriation of word forms from one language into another. Noting that word forms are borrowed more easily than grammar, Whitney postulated a scale to capture differences between the borrowability of individual word classes: noun > adjective > verb (where ">" indicates that a category is more easily borrowed). In due course, attention would be given to the typological parameters that may condition such scales, such as structural autonomy and semantic transparency, as a basis for implicational hierarchies of borrowing (Moravcsik, 1978); to the effect that intensity of cultural contacts had on the borrowing scale (Thomason & Kaufman, 1988); to challenges in establishing the empirical validity of borrowing scales (Campbell, 1993; Matras, 2007); and to the question whether the hierarchical arrangement of contact susceptibility across structural categories reflects the

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status of those categories within the speech production apparatus itself (Myers-Scotton & Jake, 2000; Matras 1998, 2009/2020).

The works of Haugen (1950) and Weinreich (1953) sought to link the process of contact related change to individual bilingualism. Haugen (1950) regarded borrowing (a metaphor which he described as awkward) as the reproduction by speakers of new linguistic patterns in the context of a language other than the one in which those patterns were acquired. Borrowing was thus a process of "innovative reproduction". For Weinreich (1953) individuals were the locus of contact, meaning that languages could be said to be in contact if they were used alternately by the same person. "Interference" among languages was considered the transfer of elements that do not belong to the main language of a speech event within an act of speech. Both authors introduced taxonomies of contact phenomena covering such types as Haugen's "importation" (complete replication of material from another language), "substitution" (alteration of aspects of the structure), "loan translations" or "calques" (where form-function mapping is replicated), "semantic loans" (where word semantics are reproduced), "loanblends" (importation and partial morphemic substitution of certain features), and "loanshifts" (shift in the semantic meaning of an existing word based on similarity with external words), and Weinreich's "phone substitution", "under-differentiation" and "over-differentiation" in so-called "negative transfer" as well as "transfer" in contrast to "replica" (interference in the domain of grammatical relations such as word order, or agreement, or functional extension). Together these two works defined much of the early research agenda on contact linguistics, addressing key issues such as the manner of structural integration, the existence of a universal scale of borrowability of categories and cross-linguistic differences in borrowing patterns.

Over the past decades theorising in contact linguistics has continued to pursue questions of structural taxonomies of borrowed word-forms and morphemes linking those to the attractiveness of word forms for replication or "copying" between languages (e.g. Johanson, 2002). Attention has been given to the social predictors of contact induced change in the power relations among participating languages and the intensity and duration of contact between them, and the type of language transmission across populations or generations, identifying a variety of mechanisms of contact arising from code switching, language shift, bilingual and second-language acquisition and deliberate language alteration (Thomason, 2001). Influential contributions include attempts to accommodate principles of contact-induced change within generally recognised patterns of language change, in particular grammaticalisation involving changes to frequency, environment and semantic meaning modelled on an external structure (Heine & Kuteva, 2005), as well as the distinction between the replication of linguistic Matter (phonological forms of words and morphemes) and Pattern (the relationship between form and meaning) (Matras, 2009/2020; Matras & Sakel, 2007b). Points of debate include the position of linguistic areas as distinct contact phenomena (Campbell, 2006; Matras, 2011), the special status of morphological borrowing (Vanhove et al., 2012; Gardani et al., 2015), the idea of parallel systems arising from the wholesale borrowing of inflection paradigms (Matras, 2012; Kossmann, 2013) cross-linguistic and cross-dialect sampling with special attention to contact influences (Elšík & Matras, 2006; Matras & Sakel, 2007a; Levkovych, 2022), and the emergence of contact languages (Thomason, 1997; Matras & Bakker, 2013).

3   Language Ecology: The Environmental Lens on Multilingualism

Ecology is the study of the relationship between organisms and their environment. Its key dimensions are the organisms themselves, their appearance as populations, and the existence of communities where different populations co-exist. Common themes include adjustments to environmental variation, the evolution of

populations and diversity of species, and interactions and competition among species. The study of ecosystems seeks to understand, explain and predict what will happen to an organism, a population, or a community under different circumstances (Begon et al., 2021, p. xii; Bowman & Hacker, 2023). In linguistics, Voegelin & Voegelin (1964) introduced the term "language ecology" to represent a shift of emphasis from a single language in isolation to many languages in contact in a given geographical area. Taking a somewhat broader view, Haugen (1972) described the ecology of language as the study of the relationship between language and its environment, emphasising that language is not an abstract system of structures but one that is embedded into social interaction. Environment for Haugen constituted not the physical setting but the social practices and attitudes that shaped language use. By analogy to organisms, language could be seen as having a life and a death, and as impacted by interactions with other languages within a community.

Since, research directions drawing on the ecology metaphor seem to have split. In one approach, "ecolinguistics" captures interest in linguistic diversity, valuing all languages regardless of political power and status and promoting social responsibility towards the non-linguistic environment. It represents a general attitude to language use and to its study that takes into account the dynamism of language systems as embedded into situations and speaker-hearer interaction, and the emergence of language systems from communicative activities. The linguistic ecology is seen as constituted by communicative situations, shaped and impacted by the locations in which languages are spoken and open to contact and hybridisation (Ludwig et al., 2019).

Another approach to language ecology emphasises the analogy between language and species, in particular the implications for evolutionary pathways. It challenges the view that languages are transmitted wholesale across generations. Instead, languages are seen as ensembles of individual idiolects, with speakers constituting the external ecology of language systems who develop varieties of speech by selecting from a pool of features that is available to them. Central to this agenda is the rejection of the notion that creoles emerge through a process that is distinct from that underlying the development of other languages. Instead, creoles are understood as drawing on a particularly diverse feature pool, which accounts for their particular combinations of structural features (Mufwene, 2001).

Broadly speaking, in this evolutionary framework contact is seen as the outcome of population movements, which in turn are partly dependent on geographical and physical conditions, or the environmental ecology in the strict sense. Aspects of that ecology include social and political relations such as political economy, social networks, slavery and manpower as well as linguistic diversity. In this perspective, pidginisation is viewed not as imperfect acquisition but rather as speakers adjusting their speech to accommodate others. The evolutionary framework assumes that features that are frequent in an environment are more likely to be selected and replicated, making the outcome dependent on the very particular local circumstances. Accordingly, hybridism in language is seen as the default norm, not an exception (Ansaldo, 2009; Aboh, 2015; Lim & Ansaldo, 2016).

4   Fluid Identities

We are in an era where identity categories are questioned: ethnicity, gender, and citizenship are increasingly acknowledged as fluid and negotiable. Anderson's (1983) influential work on 'imagined communities' opened a discussion that viewed nations as social constructions built around ideologies of shared cultural assets, especially standard languages. Diasporas have since been flagged as alternatives to constructivist notions of ethnic identity – what Hall (1990) referred to as "positioning" amongst a "creolisation of features" and what Brubaker (2004) labelled "ethnicity without groups". This approach regards "community" as a category of practice rather than a fixed collective entity that implies sameness. Globalisation studies have given it an impetus. Appadurai's (1992) seminal work

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described as "ethnoscapes" the various socio-cultural networks that individuals can be part of irrespective of place of birth or current settlement.

The simultaneous partaking in multiple and multi-site communities of cultural practice requires a new understanding of mobility, one that overcomes what Wimmer & Glick-Schiller (2003) labelled "methodological nationalism" – the view of migration as a mere transposition of citizens from one nation to another. Brubaker (2005) described diaspora as a set of practices that take a "diasporic stance", that is, they are actively constructed rather than pre-exist by virtue of the displacement history of a fixed group and its members. Diasporas have been said to benefit from transnationalism and cosmopolitanism to form what Werbner (2002) called "communities of co-responsibility" that act beyond locations and maintain, as Cohen (2008) argued, a distinctive life within the host countries, particularly in cities. In the age of globalisation, cities have become what Vertovec (2007) called "super-diverse": not just displaying cultural differences on a new scale, but also offering individuals and communities multiple opportunities to associate in different ways and to forge a variety of institutions.

5   Multilingual Repertoires and the Deconstruction of "Named Languages"

The fact that multiple connections can transcend physical space leads to a lower degree of predictability of the links between language, place, identity and community. This has methodological implications for the analysis of relations between linguistic forms, participants, place and institutions. In this context, researchers in sociolinguistics have turned their attention to the fluidity of language practices and language identities, the crossing of language boundaries, and questioning the ideological lens that gives rise to the notion of fixed language boundaries (Blommaert, 2010). For one, an appreciation emerged that the crossing of language boundaries is not just characteristic of what Grosjean (1989) described as a "bilingual mode" but also a semi-conscious appropriation of features known to be associated with the speech varieties of others (Rampton, 1995; Jørgensen, 2008), which in turn raises methodological questions as to whether being an integral part of a particular language system is an accurate way of describing linguistic forms. In the domain of education this has inspired critical reflection on traditional monolingual pedagogy in favour of an integral model that acknowledges and activates the multilingual repertoire as a whole, a process of "disinventing languages" that has become widely referred to as "translanguaging" or "metrolingualism" (Makoni & Pennycook, 2006; Blackledge & Creese, 2010; García & Wei, 2014; Pennycook & Otsuji, 2015; Wei, 2018). Awareness of the fluidity of crossing between languages was first gained through observation of mixing as a default form of communication in oral, face to face discourse where code-switching could be described as "monolectal" (Meeuwis & Blommaert, 1998). Since, appreciation of fluidity has expanded considerably with the wide accessibility of informal, personal yet public written interaction in computer-mediated communication in which language mixing is commonplace and sometimes even the norm (Androutsopoulos, 2007).

In my book "Language contact" (Matras, 2009/2020) I set out to propose an integrated theory that would take as a point of departure users' management of a complex repertoire of forms and features. In the introduction to the book (2009/2020) I wrote:

> My principal assumption in this book is that bilingual (or multilingual) speakers have a complex repertoire of linguistic structures at their disposal. This repertoire is not organised in the form of 'languages' or 'language systems'; the latter is a meta-linguistic construct and a label which speakers learn to apply to their patterns of linguistic behaviour as part of a process of linguistic socialisation. Rather, elements of the repertoire (word-

forms, phonological rules, constructions, and so on) gradually become associated, through a process of linguistic socialisation, with a range of social activities, including factors such

as sets of interlocutors, topics, and institutional settings. Mature multilingual speakers face a constant challenge to maintain control over their complex repertoire of forms and structures and to select those forms that are context appropriate. Context-appropriate selection does not necessarily conform to a separation of 'languages': In some contexts, certain types of cross-linguistic 'mixing' and 'inserting' may be socially acceptable and may constitute effective goal-oriented communication. (p. 4)

The model introduced in Matras (2009/2020) viewed repertoire management as an interplay of several competing pull-factors: the wish to accommodate to the setting and context by selecting anticipated and appropriate structures while inhibiting others; the motivation to exhaust the full expressive potential of the repertoire beyond the constraints of setting-based accommodation; and the drive towards reducing the processing burden on the deployment of the selection and inhibition mechanism itself, leading to generalisations of structures across communicative settings. The balance among these factors is conditioned by the changing dynamics of social norms but also by the cognitive load associated with the processing function that is triggered by individual and structural categories. This allows us to derive an explanatory account for explaining the hierarchical nature of the contact-susceptibility of individual categories.

At around the same time the notion that individuals' linguistic repertoire should supersede that of fixed languages as an analytical category was gaining currency. Other works too called to problematise the notion of 'language' as a pre-defined set of structures, to view language as a dynamic, emerging pattern of practices, detached from pre-defined groups or speech communities, and to view groups as emerging and evolving networks of practice and people as moving in between and among such groups. Repertoires, it was argued, consist not just of linguistic structures and communicative routines but also of a range of experiences and encounters, or the lived experience of language (Busch, 2012; Blommaert & Backus, 2013; cf. Lee, 2022). Wiese (2023) proposed a model that seeks to reconcile fluidity of language practice with the existence of grammars and language ideologies: communicative situations are seen as guiding users to select features from their repertoire. The conventionalisation of features in certain sets of communicative situations creates grammars or systems. These can be socially indexed to represent social identities, turning perceived language boundaries into an important reality in its own right in the social organisation of communication. Such ideologies exert different kinds of pressure in different settings, allowing users to use language as "free-range" in some types of communication where monolingual ideologies are suspended (or simply absent). Such settings may include digital social media, communication among multi-ethnic adolescent peer groups, and many more.

If language systems are identified by the communicative routines into which certain combinations of structures are embedded, then the nature of new routines can also explain the emergence of new grammars in multilingual settings. When communicative situations are not fully constrained by monolingual ideologies, users are at liberty to exhaust the expressive potential of their repertoire while at the same time reducing the burden on selection and inhibition, creatively shaping what constitutes appropriate and acceptable accommodation to context and setting and eventually drawing on new routines to index new identities. We can thus understand what Wiese (2023) calls "free-range" as more than just a suspension of the language separation ideology; it is instead a creative assembly of new routines drawing on the resources of the repertoire.

This involves an inherent linking of the dimensions of the individual's complex repertoire of structures, with the surrounding language ecology (understood as the range of communicative routines in which individuals partake and the structural resources that are available to them or to which they are exposed). It includes the illocutionary

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and transactional dimensions of goal-oriented communicative routines. The outcome of such processes of creative assembly are much more than a statistical "role of the dice" (Aboh & Vigouroux, 2021). They depend on the functional value – the semantic-pragmatic role – that particular structures and structural categories have in processing communicative action routines. In other words, the goals of communicative action, the illocution, the actor constellation and the internal function of structural categories all require an inter-linked theoretical anchoring if we are to understand the choices that users make when re-assembling structural features in response to new and emerging communicative routines.

6   Some Implications: From Categories to Processes and Feature Spread

Our critical stance to boundaries and fixed categories should start by addressing some widespread notions about types of status of languages in multilingual settings. The notion of "native speaker" has carried considerable weight not just within formal linguistics (where researchers rely on "native speaker" judgements to determine grammatical systems) but also in various institutional settings such as job adverts or forensic investigations (where native speaker judgement is often relied upon to determine a person's background, for example in asylum applications). The category implies an inherent clustering of features, but that co-occurrence is not always present: the sequence of acquisition (i.e. which language is acquired from birth, and whether it's more than one), proficiency, a feeling of co-ownership and a connection to a community, to name but some, can and often do appear disconnected from one another (cf. Wiese at al., 2023). The term "heritage speaker" is usually associated with the descendants of migrants who acquire a home language as first language but whose proficiency then either declines or fails to expand to include a wider range of registers, as the surrounding majority language takes over in most communication domains (hence the term "interrupted native speakers"; cf. Montrul, 2010). But users of regional autochthonous or indigenous languages may often fall under the same definition: as "semi-speakers" and sometimes new speakers they too are "heritage speakers" in the above sense (Arendt & Reershemius, 2024). The labels "autochthonous" and "indigenous" are themselves tightly linked to particular socio-historical and political contexts like the emergence of nation states and colonialism, respectively. They acknowledge historical precedence in a territory, from which certain claims to rights are derived. The claims of community or immigrant languages are often denied because they lack that territorial precedence, which is inevitably a relational rather than absolute indicator. Common to these various language types is the realisation that there are multiple ways to try to compensate for the position of being a disadvantaged language in a complex linguistic ecosystem. In educational policy, the division between "community" and "modern foreign" languages indexes the institutional value attributed to skills, not the inherent characteristics of languages or their value to learners or users.

Categorisations based on structural profiles also merit critical reflection. While "borrowing" is widely accepted as a metaphor, "heavy borrowing" relies on tacit acceptance of a universal borrowability scale and a tentative threshold of what is common in contrast to what is exceptional. This calls for a theoretical anchoring that takes into consideration not just statistics but also an explanatory account of contact susceptibility. That in turn requires an understanding of the motivations to change routines around selection and inhibition from the complex repertoire of structural resources. Categories like pidgins, creoles, and mixed languages constitute a nomenclature of language types based on certain assumptions about the links between socio-historical processes (particularly cross-generation transmission of language) and structural outcomes. I wish to conclude this paper by showing how we can focus our attention on processes, rather than language categories, and on the features that give rise to them, rather than on essential or defining characteristics.

The Angloromani speech of English Gypsies has sometimes been referred to as a dialect of Romani that has borrowed heavily from English, or alternatively as a mixed language with English grammar and Romani-derived lexicon. In fact, its principal feature is the fact that it is used in certain interaction settings for particular illocutionary purposes such as warnings or emphatic expressions of solidarity (see Matras, 2010). The phrase *penn chichi, muskra akai* "say nothing, [the] police [are] here" displays a selection of lexical resources from a pool that is shared by community members. It indexes shared belonging while excluding outsiders. The omission of the English definite article and copula is reminiscent of pidginisation. Different processes thus interact to serve a particular discursive function. The in-group jargon Lekoudesch was created by Jewish cattle traders in southwestern German and was then used in the post-war period by a small circle of elderly men in villages that had once had large Jewish populations. In the phrase *alle gimmel doff* "all three [are] good" some items – the numeral "three" and the adjective "good'" – are encoded in the in-group lexicon derived from liturgical Hebrew while the quantifier "all" is German. We see targeted selection from a pool of resources to serve particular illocutionary purposes, but also different susceptibility to lexical replacement around various functional categories.

In the speech of the Dom itinerant population of the Middle East, core lexicon and inflection paradigms of Indo-Aryan origin are retained but considerable structural material is borrowed from Arabic (Matras, 2012). In the Jerusalem variety, modality is expressed almost consistently through Arabic expressions that also carry Arabic inflection, as in *biddi džam kuryata* "I want to go home", where Arabic *bidd-i* "want-1SG" inflects for person following the Arabic template. In earlier work (Matras, 1998) I referred to such processes as "fusion": the non-separation of languages around a wholesale functional category. The fusion of modality expressions can be explained as part of the motivation to relax the burden of separation and inhibition around categories that impose a high processing cost associated with presuppositional evaluation (which requires more careful monitoring and assessment of hearer-sided processing). In Zargari Romani (a Romani dialect spoken in Iran) the phrase *vaxti ke amun gözlürdik jiv ajili* "while we were waiting it snowed" shows the temporal subordinator *vaxti ke* from Persian representing fusion of clause connecting devices, whereas *gözlürdik* "waited" replicates the Azeri Turkish lexical verb with its inflection. We might regard this as a re-enacting of the predication in the "source language", initially a kind of performative quotation, the conventionalisation of which leads to the cancellation of the demarcation boundaries between sets of interaction contexts (here around the representation of a particular predication).

At stalls that sell kebab in Germany, vendors commonly ask the customer: *mit scharf oder ohne scharf?* "with or without spicy sauce?". German *scharf* is, however, an adjective, not a noun. But in this particular context, it calques the Turkish word *acı*, which represents both word classes. This semantic-syntactic extension is, however, limited to a particular illocution, embedded into a particular institutional transaction. Another example of mixing around a goal-specific speech act is the spontaneous mixed utterance of a trilingual eight-year-old child: in a home setting where Hebrew is the expected choice, the child addresses the father in Hebrew but then switches to English while inserting German lexicon (Matras, 2009/2020, p. 38): *Aba, where do I get a Lappen so I can wisch my Gesicht?* "Dad, where do I get a wash-cloth so I can wipe my face?" What resembles a mixed language (like Michif or Gurindji Kriol) is here a performative speech act intended to add a humorous and theatrical effect, flagging and strengthening the bond between the interlocutors. Such performative behaviour may indeed explain the emergence of many mixed languages (cf. Matras, 2021). The Hebrew of a trilingual (English, German, Hebrew) heritage speaker often shows, at a young age (under ten), semantic shifts around grammatical expressions, as in *ze aval yafe* "that's beautiful indeed" where Hebrew *aval* "but" assumes the function of the German expressive particle *aber* (which is also a contrastive conjunction); or *hi meod letox kaduregel* "she is very much into football" where the Hebrew spatial expression *letox* "into" assumes the idiomatic meaning of 'intense and sustained interest' associated with its English counterpart (what I called "pivot matching"; Matras, 2009/2020). These constructions disappear when the child reaches a more

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mature stage. But other convergent patterns appear at phrase level, such as *be beerex arba* "at around four" contrasting with the Hebrew baseline norm *beerex be arba* lit. "approximately at four"; as well as in paradigms, around the levelling of irregular gender agreement, as in *ar-ím gdol-ím* "big cities", contrasting with the Hebrew baseline *ar-ím gdol-ót*. At the same time there is no sign of the erosion of numeral agreement, as in *šloš-a bat-ím* "three houses" > **šaloš bat-ím*, by analogy to *šaloš maxoniy-ót* "three cars". The latter is characteristic of Israeli urban youth speech to which the heritage speaker is seldom exposed, one that in turn displays an accelerated pace of change particularly around paradigm levelling. That has its origin at least in part in the unique quasi-creole setting of Modern Hebrew, where an entire parent generation consists largely of second language learners.

My point in listing these examples is to show that the assignment of structural outcomes to wholesale language categories is not always straightforward. We find in all of them individual features that are commonly associated with native speakers, heritage speakers, pidgins and creoles, borrowing and heavy borrowing, and mixed languages. The ongoing turn in contact linguistics towards greater recognition of fluidity and boundary crossing should in my opinion be accompanied by a more direct consideration of a number of dimensions: goal-oriented communicative tasks (not just wholesale communicative situations), the illocutions that support them, the presupposition background that arises through actor constellations, and the internal pragmatic-functional properties of individual linguistic structures that serve the transfer and processing of knowledge. Rather than essentialise the link between structural features and language categories, our attention should be devoted to processes and the way in which they give rise to a spread of different features.

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