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THE ECOLOGY OF LANGUAGE CONTACT: MINORITY AND MAJORITY LANGUAGES

1. Introduction/definitions

Unsurprisingly in the evolution of scientific thought, a number of academics found it appropriate in the last third of the twentieth century to begin applying the idea of "ecology" to their study of the phenomena of language contact. Two factors, which mutually fed into one another, influenced the adoption of an ecological perspective to understand the evolutionary processes at work in situations in which two or more language varieties come into close relation. One of these factors was an increasingly acute awareness of the need for more general, systemic and comprehensive approaches to the facts that science was seeking to understand, while the other lay in the success that had already been achieved by applying ecological approaches in the field of biology. This shift toward an "ecologisation" of thought increased scientists' attention to the interrelations and interdependencies of elements of reality and to the dynamic evolution of sociocultural situations. Situations of language contact had these characteristics: each one involved the actions of different units and agents and it could result in highly significant changes in major human groups. In addition, increased study of natural ecosystems sharply raised human awareness of the loss of specific biological species as a result of the destruction of their habitats, the so-called crisis of biodiversity. It was, therefore, a logical and straightforward step for the approaches and concepts of biological ecology to be transferred by analogy to linguistic ecology, linking the crisis of biodiversity to the crisis of language diversity. Thus, the parallel rise in the awareness of a significant abandonment of human language varieties spurred on the conceptual transfers being made, at times not without hazard, from one field to the other.

Turning specifically to relations between what have come to be called "minority" and "majority" languages, we can find many cases in which there is an intergenerational process leading toward abandonment of the "minority" code and adoption of the majority language by the population that had previously used the former. Analogies readily spring to mind, such as a big fish swallowing up a smaller fish, or a species going extinct because its natural environment is being destroyed. While these analogies can be thought-provoking, however, we must never forget that languages are neither organisms nor biological species. Rather, they are contextually situated behaviours arising out of human culture. This clearly requires us to create a theory of the evolution of language contact that can take account of the singular nature of human behaviour, perhaps keeping away from conceptualisations too closely bound up with biological facts.

At the level of languages, the use of terms like "minority" and "majority" can mislead us into thinking that the cause of such a difference lies in some feature that can be attributed to a code itself, as though it were something intrinsic to the species, so to speak. Yet nothing could be farther from the truth. All human languages serve their populations, which create and renew them in order to name the elements and ideas necessary to each group's survival and development. In short, they are complete and fully functional instruments of the group's daily life. Their transformation into "minority" or "majority" languages belongs not to their structural properties as codes, but typically to power relations between the individuals and/or groups who use them. If a human group comes into frequent, close contact with another group and the former is much larger in number of speakers and in political and/or economic power than the latter, their respective languages can then turn into "majority" and "minority" languages. This is why there is a common preference to use the adjective "minoritised" rather than "minority" to indicate that this fact is the product of a relational process and is not a negative feature belonging internally to the code in question.

As noted earlier, power differences between human groups coming into contact can be put down to a variety of factors. The clearest factor is demographic, where there is a major difference in the number of people speaking the two languages involved. However, this is not the only factor that can affect how a situation evolves. Sometimes other variables, such as the economic power of one group, can counteract or balance out the pressure exerted by a demographic asymmetry favourable to the other group. Political

power is another of the major factors that can play a role, particularly in contemporary societies. In democracies, the demographic majority will logically tend also to dominate public institutions, enabling it if it so chooses to exercise significant influence over the minoritisation process of the language of a demographically smaller group or groups. However, in undemocratic situations, the group holding political power, even though it may be demographically smaller in number, can influence the other group from the institutional level and cause this group's code to become minoritised, at least at the level of formal public communications. The ecological perspective, as may be seen, is necessary to view such a situation in its entirety, and comprehend the interrelation of the different factors and the sociocognitive dynamics of the society leading the situation to evolve in one direction or another.

2. Historical perspectives

Though certainly there are aspects that we do not yet clearly understand and situations can present variations and follow different historical courses, the ecology of language contact field has developed significantly over the past four decades and we now understand its various phenomena much more clearly. This is all due to the large number of researchers who have opted to pursue a holistic ecological approach in sociolinguistics, though sometimes without yet using the term. While T.S. Eliot spoke of an "ecology of cultures" as early as 1948, this approach appears to have first been taken up in linguistics in 1964 in a chapter by Carl and Florence Voeglin and then again in 1967 by the Voeglins and Schutz writing about Native American languages. The term they employed is "linguistic ecology". However, the text most frequently cited as foundational is one by the Norwegian-American linguist Einar Haugen, who defined linguistic ecology, in 1971, as the study of the interactions between a language and its environment. Haugen also sketched out a programme of research, always situating the ecology of languages within the framework of a general sociology. Growing success in the application of ecological thinking to biological phenomena was a major contributor to increasing interest among other disciplines in the adoption of systemic approaches that included environments or contexts in their investigations. One example was Steps to an Ecology of Mind by Gregory Bateson (1972), which appeared just one year after Haugen's paper, or La vie de la vie by Edgar Morin (1980). This was the emerging intellectual climate that gave rise to new contributions from Lluís-Vicent Aracil (1965, 1979), William F. Mackey (1974, 1979, 1980) and Norman Denison (1982), who implicitly or explicitly also promoted a *sociolinguistics* from an "ecological" approach able to integrate the various interrelated aspects of language contact and of developments caused by the conditions in which it occurred. Indeed, these scholars were delving more deeply into the interdisciplinary and contextual line that Uriel Weinreich had first set out in 1953: "It is in a broad psychological and sociocultural setting that language contact can best be understood (1968:4).

One of the greatest challenges to develop this ecological perspective on language contact was—and still is—how to conceive of its representation and imagine its conceptualisation. Given that language is not a biological species, the advancements made in conventional ecology were not directly applicable to sociolinguistics. How should we think about the contexts of languages and language varieties, their elements and the interrelations that exist between them? To what extent can analogical transfers be useful to understand phenomena of contact between codes? What models should be built?

One of the first decisions was to establish what constituted the environment or context of languages. From the very outset, Haugen's view was clear: "The true environment of a language is the society that uses it as one of its codes. Language exists only in the minds of its users, and it only functions in relating these users to one another and to nature, i.e. their social and natural environment. Part of its ecology is therefore psychological: its interaction with other languages in the minds of bi- and multilingual speakers. Another part of its ecology is sociological: its interaction with the society in which it functions as a medium of communication. The ecology of a language is determined primarily by the people who learn it, use it, and transmit it to others." (2001:57). The ecology of languages, therefore, must clearly be interdisciplinary and focused on the communicative actions of humans, who are ultimately the ones responsible for the persistence or disuse of verbal codes. The problem, however, is that human beings are units that both form and live in complex socio-political ecosystems, which in turn have an influence on their language behaviours and can determine specific evolutions depending on the intervening factors in each case.

In the development of linguistic ecology, roughly three major areas or approaches can be distinguished, though not sharply separated from one another, depending on whether they are more directly inspired by theoretical ecology's "way of thinking" or are closer to the metaphors coming out of bio-ecology. Within the second sub-group, a further distinction can be made between studies driven more by seeking a scientific understanding of the phenomena and studies that are concerned more with maintaining language diversity and therefore hew more closely to activism and political action undertaken to transform the evolution of sociolinguistic situations. In the end, however, the three lines lead to contributions that are not so very different, but rather cast light upon one another, and a variety of authors do move back and forth between the approaches.

Drawing on the first of these perspectives, which is more inspired by systems thinking and complexity and yet obviously does not ignore advances in bio-ecology itself, authors like Mackey (1979) clearly argue that biological facts differ from facts at the sociocultural level: "The study of a society (...) is not analogous to the study of the physical world (...)[n]or is analogous to the study of life" (p. 455). This is probably what led authors like Haarmann (1986) and Bastardas-Boada (1996) to conceive of an ecology of language contact grounded in a psycho-sociologico-political approach that is multidimensional and dynamic and can give an account of the intertwinings and interdependencies of levels and factors that influence and/or co-determine the language forms and varieties involved. This interdisciplinary collaboration is also followed by Mühlhäusler (1996), who is equally supportive of a general, holistic approach as the only way of being able to grasp the phenomena arising in the evolution of situations of language contact. Calvet (1999) sets out a useful "gravitational" image for the world's ecosystemic organisation of languages, which are also clustered into constellations (De Swaan, 2001). Terborg & García Landa (2006, 2013) have also directly postulated a sociocultural ecology of languages, which draws on the "pressures" that speakers feel in their environment to use one language variety or another. This approach, like the constitution of a general (bio)ecology, steers clear of fragmentation and specialisation by taking the opposite road, integrating elements from vastly different sociocultural disciplines that are nevertheless useful and necessary to understand human sociolinguistic ecosystems and their whole-part interrelations.

The major development of ecological thought applied to biological facts and, specifically, to contact among species and between species and their contexts has also inspired, analogously, as I have already noted, its application to the ecology of languages. If we think of languages as cultural "species" that live in ecosystems that have a crucial influence on how they evolve, we can find an interesting line of study. While remaining cognizant of the differing properties of biological and linguistic entities, this strategy has been used by a number of authors with heuristic aims and to help push forward with the theorisation of complex sociolinguistic phenomena (Mufwene & Vigouroux, 2012). For instance, Mufwene (2001), drawing inspiration from population genetics, uses the analogy of a parasitic, Lamarckian species to indicate that languages depend on their speakers, just as a parasite depends on its carrier, and he stresses the importance of the environment in relation to the changes that the species may undergo. From this perspective, he applies a competition-and-selection model of language forms to understand the evolution of contacts between different languages (Mufwene, 2008). In this way, the context is what gives competitive advantage to some languages and takes it away from others. The context causes a "natural selection" of languages, similar to biological evolution. Similarly, though not drawing inspiration from the parasite analogy but rather from an analogy of species in general, Bastardas-Boada (2002) suggests a research programme in linguistic ecology to address the formation of language diversity, or speciation, and to examine language continuity, change and extinction, as well as language preservation or recovery. Like Pennycook (2004) and Edwards (2008), however, the author cautions against paying excessive heed to analogies between biological and linguistic species and, as a consequence, he underscores the need not to apply the metaphor uncritically.

The temporal—and, frequently, spatial—coincidence between the crises of biodiversity and of language diversity (Maffi, 2001) has further encouraged the metaphoric borrowing of approaches and concepts from biology in linguistics, particularly in the case of endangered language varieties. Concern to preserve the diversity of language systems created by humans has given rise to a need for an in-depth understanding of the mechanisms that lead to language shift and, ultimately, to the total abandonment of minoritised languages (Junyent, 1989). An awareness of the severity of the crisis has led to the development of what might be called a "linguistic environmentalism" that clearly encourages activism and the constitution of a "political" ecolinguistics able to propose

changes in the socioeconomic and cultural organisation of human societies. From this perspective, the equality of the rights of languages is advocated, as well as the need to fight for their preservation and give support for a relation of non-subordination and non-hierarchy among different human language groups (Junyent, 1998; Skutnabb-Kangas & Phillipson, 2008).

3. Critical issues and topics

3.1 Bilingualisation and language shift in minoritised populations

The most important contributions of linguistic ecology to our understanding of phenomena of contact between "majority" and "minority/minoritised" language groups are the result of the broad, dynamic perspective that the ecosystemic view can give. Beyond a simple attention to the results that contact produces in the structures of codes in contact, linguistic ecology also enables us to apprehend the major causes driving how each case evolves. As a consequence, it also helps us move toward socio-political measures that can be proposed to reverse negative dynamics or support the sustainable maintenance of the languages involved. The most typical and most frequent situations of minoritisation occur in states that have a linguistically diverse population and yet recognise only one official language, often striving to impose language homogenisation among the different populations of the state.

The fact that populations that have adapted linguistically to their contexts are exposed to new political and economic situations through what have come to be called *modernisation* processes, has also wrought important ecosystemic changes that frequently have an impact at the level of language. Adaptively, such populations develop language competences in the majority language or languages depending on their contexts and age of exposure, and they move toward widespread bi- or multilingualism.

Through the official educational apparatus, mainly, with its vast social and symbolic impact, the official language enjoys dissemination at the optimal age of language acquisition in the case of children. If this process is also accompanied by a discourse that denigrates and stigmatises the other languages or varieties, presenting them as systems

without any fixed and written standard but purely as oral, dialectal and secondary, and parents are called on to speak the language of the schools with their children in order to help them achieve academic success, then the conditions leading to disuse of the varieties of the autochthonous language might gain greater and greater force.

In this respect, the historical example of Spain -following the experience of France- is paradigmatic of situations of minoritisation. Spain is one of the most linguistically complex states in the European Union. Four languages in particular stand out: Basque, Galician, Catalan and Castilian — the last of which is frequently referred to as "Spanish"-, and other demographically less important ones, such as Asturian, Aranese, and Aragonese. The greater part of speakers of the three non-Castilian main languages occupy compact, self-contained territories; they are usually not scattered around Spain. The populations of the areas of these three languages represent over a third of Spain's total population. Before the advent of democracy in Spain in 1978, all of the non-Castilian languages went through long periods in which their public use was prohibited and/or they faced extremely hostile policies imposed by different Spanish governments. As a result, the native populations of these languages were subjected to processes of asymmetric bilingualisation in Castilian, because the latter generally was the only code permitted in official public activities, in education and in the media. Castilian thus became indispensable, and the other minoritised languages lost ground; all of them felt the impact of the process of language shift, and some became almost unnecessary within their own territories.

Nonetheless, the abandonment of a group's own language system is not a quick or an easy process. The social elements that encourage behaviours to persist in the group, in interactions and in the individual will have an influence. Because the development of productive language competences becomes harder as an individual gets older, many adults in a situation of language contact may not be able to master fluency in the new code. As a result, they may avoid using it when not strictly necessary. That means that if they remain at this level of competence, they will also not use the official variety to speak with their children and that their children will not experience this variety as their first language of socialisation. However, this does not necessarily lead to the second generation not becoming fully competent in the dominant language used as an institutional vehicle. Given the educational language policy present in most of the cases,

the single, customary language of instruction in the education system will be the official one.

In a context of ongoing exposure to the official code, which will also become the common language of all remaining public communication, particularly of the media and written communications of the official or para-official bodies of the government, members of the second generation can become asymmetrically bilingual in their codes. On the one hand, they gain only an informal oral competence in the vernacular variety of their first language. On the other hand, they acquire formal written and oral competence in the second language, the official one, in its standard version, with features that are more or less local depending on the case. This is the "bilingualism" characteristic of situations of political subordination. The group's own language is limited to the oral vernacular continuum, while the language declared official by those in political power becomes the group's formal standardised written and spoken modality.

This political framework is responsible for the typical hierarchical distribution of functions and for the high interference experienced by minoritised languages that tend to show all the processes of language shift before they advance effectively toward abandonment of their own vernaculars. In an ecosystem in which the use of the autochthonous language is not allowed in official and institutionalised communications in general, this code will necessarily be absent in such communications and it will necessarily not develop or adapt any suitable variety of its own to fulfil these types of functions. In the absence of such a variety or of any bodies that could take the relevant language decisions, it is hardly surprising that the trend will be to adopt forms coming from the only standard language model available to refer to the multitude of things in social life. Over time, even the denominations and constructions that already exist in the minoritised code can be replaced by others coming from the official language. In this way, the autochthonous vernacular continuum tends to present an image of mixing and blending with the dominant language. Perversely, the authorities can take advantage of this fact to corroborate the inferiority of the language system of the subordinate community and/or present it as a "simple dialect" or a spurious and badly spoken "patois" of the language declared to be official.

According to this asymmetric model, the bilingualised generations of subordinate communities will present code-switching depending on the situation and the function.

The most commonly seen distribution is spoken/written, given that the written level cannot be occupied by any variety of the autochthonous language and will only be performed by the alien official language, which is provided exclusively for these functions. When speaking, individuals will switch between one system and the other fundamentally according to how they categorise a function. In keeping with the policy instructions in force, formal speaking activity in official or assimilated areas will have to be in the official language. The community will tend also to listen to the speeches and contributions of its leaders and to the classes given by its teachers and professors solely in the official language. In general, all media will function in the official language, too. This does not mean that there will not be cases such as the situations of diglossia depicted by Ferguson (1959) in which the local authorities or teachers will speak autochthonous vernaculars when the microphone is switched off or outside the meeting room or classroom. Now, however, these communications will be experienced as individualised and therefore as less formal in nature.

In this distribution of functions, individualised communications are still reserved for autochthonous vernaculars by force of group custom and the face-to-face norms established among speakers. However, this can break down if individuals see themselves forced to speak together in the official majority language because of any other constraints imposed, for example, by the norms of the domain in which their interactions take place. The strength of the personal or intra-group language norm can grow weak. If, as for example, in the French case and in particular periods of the Spanish case, even the deliberations of municipal councils and other more or less public local institutions have had to make use of the official language, it is not surprising that these situations might evolve toward code-switching that is not only institutional but also personal, at least between individuals who find themselves in these circumstances.

In light of this asymmetry of competences and the symbolic superiority of the official language, any interactions with individuals in these roles, which may include doctors, secretaries and other administrative staff in the city hall, pharmacists, lawyers, other professionals and priests, tend to occur in the dominant language. The influence of these people, who are typically of high status in the eyes of socioeconomic subordinate communities, extends so far as to affect the language behaviour of minority individuals among one another when in their presence. In many cases, given the status of their interlocutors, they may even gain some satisfaction from being able to do so.

The key moment in the disappearance of languages comes with the interruption of their native acquisition and use in the next generation. As in situations of contact due to migration, parents who become bilingual in the dominant language will decide to transmit it to their children and not the group's own language. This decision stems from their view that it will be more advantageous for economic survival or for upward mobility or social acceptance. Characteristically, the process sustains a situation in which the generation of parents can still speak to one another in the minoritised variety, but use the second code – the official, prestigious one – to address their children. The children perfectly internalise the new language, which is typically also the language of instruction in the schools, and they establish new social norms of language use that spread as generational replacement occurs. It is even possible that the change may spread asymmetrically from the top to the bottom of the social ladder at the outset, if the extent of intergenerational language shift does not reach most of the population. As the language shift behaviour spreads, the new code can become wide-ranging and anyone still with the minoritised code as a native first-language will grow ashamed and embarrassed at using it. They will avoid speaking it, at least in public, particularly with friends and classmates. By this point, an entirely new generation will have largely adopted the new language behaviour through their parents and the majority code will become native.

3.2 Language preservation, recovering and development

In addition to human communities who continue inexorably down the path toward total abandonment of their own language codes and the adoption of outside majority languages even for private uses, there have been and still are communities that have put up varying degrees of opposition to this apparently fatal evolution, trying to modify the ecosystem leading toward their disappearance as a linguistically distinct society. Whether as part of an overall process asserting demands for self-determination or self-government or as a movement basically focused on the achievement of recognition as a distinct cultural—and therefore language—community, a large number of ethnolinguistic groups have sought to throw off the political causes that obliged them to feel and act as minorities in their own historical territory. This type of process has at least two stages: first, the creation of self-consciousness in relation to the unjust situation of

political and/or language subordination; and second, the process leading toward a change in the political or language structure deemed inadequate by the subordinate group.

Looking first at the initial internal process, it should be noted that there will probably be at least two different positions within the subordinate ethnolinguistic group on how to define the actual situation. Depending on the case, a larger or smaller part of the group may view the situation as appropriate and "normal", and support the arguments of a language assimilation ideology. Drawing their views from the ruling political structure, they will tend to think that all groups and individuals residing within the sovereign area of the state in question should speak and write in the same manner as the demopolitically dominant group—whose language will most commonly be the only one declared official. Thus, the proponents of this position will subscribe to the arguments put forth by the established political power and they will believe in the language superiority of the dominant group. On the other side of the question, the prevailing ideology will tend to be "language pluralism", based on the right of linguistically distinct societies to maintain and cultivate their languages based on the principle of equal rights for all human language communities. In the cases where this is so, this segment of the group will also often have individuals who champion not only the recognition of cultural pluralism, but also the recovery or acquisition of the group's own politically sovereign organisation, without any ties of subordination or dependence to the politically dominant group. To varying degrees, this entire segment will be in favour of challenging the established political order and, in some cases, of securing a minimum of equal rights among the language communities within the state or achieving a maximum of separation from the state and constructing a new political entity.

Thus, in the context of solutions based on autonomy and official multilingualism or independence and a single official language, that of the group, we can see historical processes of sociolinguistic transformation that have gone not in the direction of language shift but rather toward what, drawing on Aracil's initial proposal of terminology, we might call language "normalisation", or a 'reversing language shift' process, as Fishman said (1991).

If language competence and use—at least in individualised communications—have been kept alive and the population and its autonomous institutions have the will to do so, this type of recovery process can move forward, halting any intergenerational process of

language shift underway and reaching if not complete normalisation in the use of its code, then relative language stability. In the case that the group did not reach independence, that typically occurs without necessarily eliminating the bilingualisation of the subordinate community in the dominant language of the state as a whole.

Spain could be again a good example to understand this kind of evolutions. Nowadays Basque, Galician and Catalan languages share equal status with Castilian as official languages within the limits of their "autonomous communities" (communities with regional governments), and other languages such as Aranese, Asturian and Aragonese enjoy some recognition from the public authorities, though this varies a great deal depending on the case. Castilian is, nevertheless, the only official state language as such, which means that Spain presents itself officially as a monolingual state. The policy of Spanish governments since 1978 – the year of the new Constitution – has not essentially altered either the legal framework or the monolinguistic inertia of the central government in most of the areas inside its jurisdiction. For example, Catalan citizens and organizations cannot communicate with the central government in Catalan, even in writing, in spite of the fact that Catalan is the second most widely spoken language in Spain. Comparison with a country such as Switzerland, for example, whose egalitarian principles allow, for example, the French community to be Swiss without renouncing their own language, spotlights the ground still to be covered. As a result, recognition of the Basque, Galician and Catalan languages in Europe is almost nil.

Nonetheless, within this limited framework, the new autonomous governments of the Basque, Galician and Catalan-speaking areas have, with varying degrees of commitment, set in motion processes of linguistic normalisation aimed at (re)instating their own language in institutionalized communications. In doing so they aim to halt the processes of linguistic extinction and to construct new sociolinguistic ecosystems which will permit the recovery and habitual use of their own languages and which will guarantee their future stability and normality. These normalisation processes resemble each other in so far as they encourage the customary processes of standardization — given that the political conditions that prevailed in the past made the normal existence of a standard variety impossible — but differ, obviously, due to the complexity of their respective situations. This complexity resides in the fact that in these territories many people do not speak the local language and use only Castilian, because of intergenerational language shift, or because they are immigrants from other language areas of Spain. For this reason, points of departure in the different areas have tended to vary. For example,

in the Basque country — even though the population in the main supports self-government and is proud of its culture — individuals who habitually use an autochthonous vernacular language variety are in the minority in the population as a whole. In this case, then, the process is not simply one of typical standardization but one of recovering the autochthonous language variety and using it for communicative functions in all areas, official, public, or private.

In the case of Galicia, the situation is different again. Of all the non-Castilian linguistic communities, Galicia has the highest proportion of residents who know the indigenous vernacular varieties, and is thus in theory the community with the most favourable preconditions. Nonetheless, the commonly accepted ideas of the value of local linguistic forms work against the normalisation of Galician. As often happens in a situation characterized by long term political and economic subordination, the speakers of vernaculars come to see their own language negatively, devaluing it symbolically and investing Castilian — historically used in all official and non-official public functions — with greater prestige and higher use in urban settings.

Within the language area in which Catalan is used in its several variants, we also find significant differences. One of the complex aspects of Catalan/Spanish contact is to understand why the repression and prohibition of the public use of Catalan during most of the first three-quarters of the twentieth century produced disparate language behaviours and ideologies in Catalonia and other areas such as the autonomous community of Valencia or the Balearic Islands. It is not easy to explain the reasons for these contrasts. One of the differential elements might be the earlier industrialisation of Catalonia, which led to the creation of an autochthonous bourgeoisie and a positive self-image with respect to other areas of Spain, which lagged behind in this respect. The autonomous community of Valencia, for example, had a more agricultural economy that was less developed.

Today, however, the Valencia region has an advanced economy and developed agriculture. Yet the people's image of their identity, in large part, does not correspond to that of Catalonia. While numerous people in Catalonia report feeling strictly Catalan or more Catalan than Spanish, the opposite is true in the autonomous community of Valencia. That is, a substantial number of individuals feel more Spanish than Valencian or both in equal terms (Coller, 2006.) It is in this aspect of the hierarchical organisation of identities where we could find an explanation for their differing language behaviours.

When making a choice of identity between the State and the community of origin, a positive group self-representation supports the intergenerational maintenance of the language. Conversely, if the group's own identity is considered to be subordinate to the one of the State, the language will tend to be viewed as dispensable and the group will opt for the State's dominant official language. Once again, we see how the elements that may have an effect on the selection of language behaviours are complexly intertwined.

What this comparison between Catalonia and the Valencian community again shows is how important it is to ecologically introduce the historical element when examining language behaviours in situations of contact and to study such situations on a case-by-case basis. Perhaps in many processes of bilingualisation and language shift, the elements are alike or very similar, but path dependency also exerts an influence and it can be crucial for the final outcomes.

As the Irish case also appears to confirm, even when there is full political control, the previously subordinate group can run into enormous difficulties in achieving a successful reversing language shift process. Even when the population's attitudes and predispositions strongly favour restoring full use of Gaelic, the sociolinguistic situation will be hard to change in those cases in which the language is not only missing from institutionalised communications but has also largely disappeared from individualised ones. It appears much easier to move from individualised to institutionalised communications, rather than the opposite. Yet the latter is not impossible, as the case of Hebrew in Israel seems to show. In particular, if the loss is not simply in use but also in competence, the reintroduction of an autochthonous language code basically through the school system offers no certainty that it will be adopted as a language of everyday colloquial communication, a basic function for the "natural" sociocultural reproduction of languages. In the Irish case, there are also other factors that may further hamper the revitalisation process. The significant degree of structural distance between Gaelic and English, for instance, may be an additional obstacle to the adoption of Gaelic in habitual social use. Given that competence in English has frequently been acquired at home, the norms of language use among individuals have already been established in that language. Just as any behaviour does, such norms become subconscious and routine and so tend to persist automatically and hamper the adoption of Gaelic in interpersonal relations.

Political independence may not be a necessary condition for a process of language recovery to be completely successful, however, if the community embarking on the process has control over its territory at least in language aspects and the State to which it belongs recognises and is organised to provide effective protection to the subordinate language community. In this sense, communities joined together in States with a confederal or federal structure based on the principles of egalitarian plurilingualism can, at least in theory, achieve quite stable sociolinguistic situations even though they remain politically bound up with other distinct language communities. In this type of structure, however, the weight of other factors, e.g., demographics, economics, the media, etc., is not clear. The Swiss example, however, does have demographically uneven groups and it appears to show that the application of egalitarian plurilingualism at the federal level and the principle of territoriality at the level of each language community can lead to the normal and stable coexistence of linguistically diverse groups in a single shared political organisation.

4. New issues and future trends

The current collection of processes we call 'globalisation' present us now with a significant growth of linguistic contact in areas which historically have maintained a status quo that has allowed individuals and societies to ensure a certain functional monolingualism and political self-control, as majority language groups (Coupland, 2010; Bastardas, 2012). A novelty of this process is that the knowledge of more than one language or having to use these with different interlocutors or for different functions (an issue previously affecting only elite groups or minoritised or small linguistic groups) is now an increasingly everyday phenomenon for many individuals from larger and/or majority linguistic groups within their states.

This extended language contact and the plurilingual needs of more and more members of human groups that were, up until now, non-minority (in the traditional sense of the word), are generating feelings of cultural threat and defensive reactions, previously only experienced by groups habitually minoritised through political integration without official and public recognition. Although these feelings of linguistic insecurity and threat

may be exaggerated in most cases, this effect of globalisation is a good starting point for a serious review of the foundations of the linguistic organisation of mankind as a whole. Now that this sense of feeling threatened is not exclusive to politically-subordinated groups, now that it encompasses those that are beginning to suffer from the (inter)dependence of economies, technology and the mass media, it should be used to increase understanding of the classical situation of minoritisation by larger, minoritising groups.

In fact, a vitally important question now arising is how human beings should organize ourselves so we can maintain and develop the language of each group without being globally minoritised. From the ecological complexity perspective two languages can coexist in an individual and in human societies if people can distribute the uses of the languages they speak and can identify themselves with different categories. Research should focus on the study of the application of the principle known as 'subsidiarity' in the field of linguistic communication. We could translate this politico-administrative category into a gloto-political one that, in a general manner, would establish the criteria that a more 'global' language should not do anything a 'local' language can do. This is to say that we would allow and promote an effective, massive understanding of other languages, while always accepting whenever possible the functional pre-eminence of the language of every historically constructed linguistic group. The languages known as 'foreign' would be used for exterior contacts but everyday local functions would be clearly assigned to each group's own language. These preferent or exclusive functions of the group's code should obviously not be limited to informal oral communication, but rather should encompass the maximum number of formal and written functions with the aim that the individual representations and valuations were not seen to be diverted towards other languages that are external to the group.

This approach should promote a process of gradual transformation from the current model of the linguistic organisation of the human species, a transformation whose objective would be to avoid that collective bi- or plurilingualism of human beings must require the abandonment by different cultural groups of their own languages. From this approach, a *sustainable* linguistic contact (Bastardas, 2007) will be that which does not produce linguistic exposure or linguistic use in allochthonous language at a speed and/or pressure—to a degree—so high as to make impossible the stable continuity of the

autochthonous languages of human groups. We can, then, state that the sustainable character of a massive bilingualisation comes from the comparison between the degree of valuation and functions of the language that is not originally that of the group (L2) and that of the language that is originally that of the group (L1). If the first is lower, the contact massive and the bilingualisation are sustainable. If it is greater, the bilingualisation is not sustainable and the language original to the group will degrade and disappear in a few decades.

This new form of language ethics should be based on an ecological vision of the sociolinguistic situation and not limit itself to the official or normative plan. It should involve the whole of the factors involved in the situation and its evolution, thereby ensuring public authorities act in a compensatory, stabilizing manner, favourable to the linguistic groups that are proportionally weaker. This is a viewpoint that will allow us to create the right conditions for the sustainability of every linguistic group. More than merely seeking equality, we should seek fairness, in order to ensure a sociocultural ecosystem that favours stability and linguistic diversity, and, at the same time, the intercomprehension of the whole humanity.

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