Apparent and real time in studies of linguistic change and variation

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Abstract

This article sets out to develop theoretical and methodological aspects surrounding the treatment of the notions of *apparent time* and *real time* in studies of sociolinguistic variation. These two notions are located in the change of linguistic paradigm represented by *a*) the adoption of theoretical aspects such as the concept of function, stylistic and social meaning, variation and linguistic change, bi-directional relations between the *synchronic* and the *diachronic,* on the one hand, and *internal* and *external* variation*,* on the other, and *b*) the formulating of various principles (stability, change from above, change from below) which have guided research in this field. The body of this article deals with the relationship between *apparent time* and *real time*, and replication or "sampling"*real time* study research perspectives applied to the different Catalan speech communities.

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1. Introduction

The notions of *apparent time* and *real time* are not specific to the more recent studies on sociolinguistic variation and of change in progress. In fact, they have been present in the linguistics literature since the early days of the structuralists (Bloomfield 1933, Hockett 1950) and especially since the restructuring known as the Change of Paradigm: Weinreich (1953); Herzog, Labov and Weinreich (1968). For Hockett (1950), for example, differential distribution of use of a given variable across different age groups might not represent any change in the variety of a particular speech community, and instead might represent a pattern typical of age grading, repeated generation after generation.

In fact, sociolinguistic research into variation has shown that many sociolinguistic variables exhibit this graded behaviour, whereby adolescents and young people in a given speech

community will employ, if they are observed, stigmatised forms with much more unselfconscious freedom than for example middle aged speakers. However, the question to be addressed here is, whether we can simply note the distribution of linguistic variables in different age groups, from young to old, in a given community, observing them at the same instant or the same synchronic point of time – thus collecting data in *apparent time* – and then on that basis alone deduce that there is a linguistic change in progress in the speech community.

This article sets out to develop theorectical and methodological aspects that surround the treatment of notions of *apparent time* and *real time* in studies of sociolinguistic variation. However, before beginning that exercise, it is essential that we situate this treatment within the framework of the Change of Linguistic Paradigm in which it becomes meaningful to specify a bi-directional relationship between *synchronic* and *diachronic* aspects, and *internal* and *external variation.*

2. A change of paradigm

If we had to place the change of linguistic paradigm we have just mentioned from the point of view of the history of linguistics, the most relevant reference points that would allow us to take account of this change would be found in various articles which I see as fundamental, as laying the foundations: Weinreich, Labov, and Herzog (1968) "Empi rical foundations for a theory of language change", in W. Lehmann and Y. Malkiel (eds.), *Directions in Historical Linguistics* I, Hymes (1970). "Introduction", *Language in Society, no. 1*; Labov (1975) "*What is a linguistic fact?*"; and Labov (1981) "Building on empirical foundations", in W. Lehmann and Y. Malkiel, *Directions in Historical Linguistics,* II.

Let us be clear that this new movement had as its aim to look anew at the relationship between language and speech, but not to ignore or supplant the work in linguistics that had come before. Instead it set out to give support to the results of such previous work and to develop it further. The justification for this epistemological proposal, which began to take shape at the end of the sixties, necessarily arose out of the realisation that the intuitions of native speakers of a language –the basis for linguistic descriptions carried out between 1925 and 1975 and even later, and the intuitive data arising from them– were found to be increasingly limited and erroneous. This especially when it came to giving support to the theoretical constructs of linguists of that time.

According to Labov (1975), all linguists of the time (the nineteen seventies) were interested in the empirical foundations of linguistics and considered linguistics to be an empirical science, even though some of these same linguists, the heirs of the purest rationalism, were intent on differentiating themselves from it. In other words, all took linguistic phenomena as their point of departure: some took them as items that had to be explained by their theories and others as means of explaining theories that had already been formulated.

Naturally, the methods used differ greatly: the structralists based their work on unknown languages and on intuitions and conclusions, or introspective generalisations – not their own but those of others, that is to say, of the speakers of these languages. Generativists on the other hand took themselves as informants and proposed generalisations based on the generalisations drawn from other languages; lastly, the American dialectologists structured this introspective evidence on the basis of their own personal dialect.

In point of fact, at this juncture in the development of lingüistic thought, the operative modus operandi and the raison d'être of linguistics, could be summarised as the attempt to resolve the apparent contradicton that some linguistic differences apparently do not make any difference, and therefore, constitute *free variation*. This attempt arose out of certain postulates from the Structuralists that led to the search for invariance ("some sentences are the same" (Bloomfield 1933)) and from Phonology, based on the recognition of variance, such that "no two sentences are the same".

Thus, the issue of the *signifié*, which subsequently was to generate so much literature (Lavandera 1981; Romaine 1981) in sociolinguistic variation, emerged as a crucial consideration in the arguments of the linguists in the sixties and seventies. In this respect, it was argued that the linguistic *signifié* of a variable is not the equivalent of any *signifié* from

the point of view of its social meaning or emphasis. No one had yet shown that the difference in formality between specific variants was a difference of meaning in the linguistic sense.

Accordingly, following the analysis by Labov (1975) of the linguistic research scene of those years, this consensus of concept and method among the linguists of the time, regarding the notion that linguistic phenomena are invariant (in the sense that there is an equivalence among variants) made it possible to optimise the Saussurian paradox. This in turn made it possible to study the social aspects of language, (*langue*), using the intuitions of one or two individuals in the context of a homogenous speech community. To be sure, this approach made it possible to collect linguistic data from a great variety of languages. In fact, interest in the search for general principles of language or universals came into being thanks to this approach.

On the other hand, as Labov also points out, if each linguistic fact were to be examined by means of representative samples, with an established research design for the observation and linguistic description, it would never go beyond the simplest of structures of the most known and described languages. Or, to put it another way, it seems that this general agreement on method and lack of interest in empirical the basis resulted from the simple uniformity of the phenomena studied by many linguists in those days

Additionally, given the prevailing logic of that time, it was almost as if linguists set out to solve problems caused by disagreements by going out of their way to avoid obscure or unclear cases and concentrating on the clear cases: the invariant phenomena or facts, which fitted into the categorical view of language. The latter included discrete, invariant categories that were common to the whole speech community. It was against this background that Bloomfield's disciples gradually developed the notion of *idiolect,* in order to exclude variable phenomena, and established a reduction of the scope of analysis to one informant, one topic, over a short period of time. Moreover, for many years the Generativists ignored the problems posed by variation, and excluded from their analysis any data that might be in competition with their "dialect", because they considered variation as an interference with the consensus alluded to above.

Nonetheless, what emerges most clearly is that resorting to the study of the idiolect, in order to avoid the contradictions that might derive from competing data, has even more serious consequences and that is that each scholar of the general structure of the language might end up with a different set of linguistic phenomena and facts, which would constitute an implicit attack on the Saussurian notion of *langue* as a general property of the speech community and on Chomsky's principle of constructing a theory of the language based on "clear phenomena".

According to Labov, studies carried out based on the analysis of introspective generalisations demonstrate that linguistic variation is extensive, uncontrollable and "chaotic", and therefore, given that this is demonstrably so, it would seem *a*) that there should be a sweeping rejection of linguists' generalisations – when paradoxically what linguistics sets out to do is generalise, and *b*) that "idiolectal" dialects would have to be rejected for their instability, while the results that derive from another type of evidence – the study of dialects with a social and geographical basis – were going in the opposite direction of the research into idiolects. All this indicates that the members of a speech community have access to the same set of norms of interpretation even though they may not use certain forms.

Perhaps the conceptual and epistemological concept that will allow us to best capture the change of paradigm that began to be discerned around the end of the sixties and beginning of the seventies is the question of the theoretical (and thus methodological) focus which emerged as a result. The dominant thinking implied on the one hand, that the proposed linguistic model should correspond point by with each element of the structure, and, on the other, that the rules formulated should make it possible to relate parts of the model among themselves and with the empirical phenomena under consideration.

The focus inherent in the New Paradigm, as established in one of its founding articles, *What is a linguistic fact?* (Labov 1975), situated itself nearer the evolutionary sciences such as geology and biology than to logic or information science. And it was structured around the following points:

a) Communities are selected that exhibit progressive change, observations are made of a representative sample and inferences are drawn on what is happening to the community as a whole.

b) Other communities are selected that seem suited to confirming or otherwise the general conclusions or inferences already made.

c) The result of this expansion of our knowledge will be a small number of generalisations, or principles, which it seems reasonable to suppose are true. This set of related principles would logically deserve the name of theory. The fundamental value of such a theory is, above all, to serve to establish the most important aspects of linguistics.

d) Later it would become possible to deduce what patterns of linguistic change other. communities might be undergoing. Such deductions are actually strategies for finding contexts for an evaluation and refinement of such principles.

e) The global or overall objective here is to proceed from that which is known to that which is not known, increasing the pool of knowledge by means of observation and experimentation in an accumulative way.

f) It was hoped that these linguistic generalisations or principles would form a series of interrelations in such a way that they could be combined in more simple and more general formulations. These simplifications are often called synchronic and diachronic explanations.

It is important to note that these formulations, which were produced (in the words of Labov) as a *desideratum* in 1975, have been exhaustively described in two works by Labov published recently: one on internal factors, *Principles of Linguistic Change. Internal Factors* (1994) and another on internal/external factors (*Principles of Linguistic Change. Social Factors* (2001). Now a third is about to see the light, on cognitive factors. These exhaustive works review the research on internal linguistic variation, internal / external sociolinguistic variation, and linguistic change over the last 30 years, and will certainly lay the foundations for the historiography of linguistics for the twenty-first century, despite the more exclusive attitudes of some schools which do not look beyond their own models. As Peter Trudgill, the editor of the Blackwell series that publishes these works, stated (1994), "the study of the language of real people, based on the speech used over the course of their lives may perhaps not be the only way, and certainly not the easiest way, of doing linguistics, but it is the most essential and the most gratifying".

3. The relationship between synchronic and diachronic

3.1 Synchronic versus diachronic

The existence of linguistic change is somewhat difficult to assimilate if the intention is, as Labov states (1994), to arrive at a general theory of language; it becomes difficult to accept - even in the context of the focus on language that the theory of variation has, that is to say, as an instrument of communication used by a speech community based, as with all other theories of language in existence, on associations between arbitrary forms and their *signifiés*. It was accordingly based on the Saussurian concept of opposition and distinctive differences.

Linguistic change is an awkward fact, it disturbs the form/meaning relationship such that the speakers who are affected by the change no longer signal the meaning in the same way as the speakers who have yet to be affected by the change – that is: the old people in the community, or speakers of the same age belonging to other communities. And this circumstance brings with it linguistic instability.

Nonetheless, the instability of linguistic systems is not the only difficulty facing linguists, especially variationists, since the nature of linguistic change also poses substantial methodological difficulties. As Labov says, "if linguistic change were a *constant* linguistic factor it would be easy to analyse"; however, linguistic change is s*poradic*, it is disseminated rapidly through the several different component parts of the linguistic structure, until it loses strength or is distorted and is not recognised for more than a century or two. It may come to a halt so suddenly that the rules on a given linguistic phenomenon, which seemed normal and inevitable, become inconceivable and unnatural in the course of a decade, and may then disappear for millennia, fostering the idea of stability.

Most of the topics treated by historical linguistics have to do with phenomena rather than principles. The existence of disagreements on the question of linguistic phenomena is known as the evidence paradox. And the procedures employed by historical linguistics to overcome this paradox were firstly a) to re-examine the internal evidence, or b) bring in external evidence from other fields: history of settlement, literature, demography.

The occurrence of unexpected phenomena is an indication that there are phenomena searching for a principle, and so are in an intermediate state between phenomena and principles. For example, according to Labov (1994: 15), many phenomena studied by historical linguistics violate principles. This is so in the case of the convergence, observed during the 18th century, of the English diphthong /ay/ in the word "vice" and the diphthong /oy/ in the word "voice", which came to be pronounced identically and which then separated again in the 19th and 20th centuries. This is a violation of Garde's principle, Garde (1961), according to which *convergence phenomena are linguistically irreversible.*

On the other hand, the practice and procedures of historical linguistics are predicated on the idea that phonological change is regular. In contrast, the data used by dialect geography lend support to the opposite idea, that is, almost every word has its own story. In fact, the lexical isoglosses of dialect geography do not coincide with the predictions of regularity.

In view of these considerations, it became clear that overcoming the contradictions and paradoxes of historical linguistics could not be based simply on the reanalysis of linguistic phenomena known and studied by other theories, but rather would specifically need to be based on the processing of a different type of data, and it is this proposal which informs the New Paradigm. Such data would reflect and embody changes going forward now, and throw light on the linguistic past, and on features connected with unfinished business of historical linguistics.

3.2. Diachronic versus synchronic

The article by Labov (1989), "The child as linguistic historian", which in part reproduces the research by Houston (1986), situates us in the opposite context: that is to say, the utilisation of historical explanations to understand the present, specifically in the form of the synchronic behaviour of the English variable (ING),. The latter is a morpheme studied from a purely synchronic point of view in a number of different speech communities (Labov 1966; Trudgill 1974).

The synchronic variable rule formulated, implies that the variable (ING) - /iŋ/ - may be pronounced /in/ in unaccentuated syllables/:

$$
\text{(ING)}
\begin{cases}
/i\eta/ \\
\& \\
(\\
/in/
\end{cases}
$$

The findings of synchronic research carried out during the eighties showed conclusively that the /in/ variant is produced most frequently in progressive verbs, less frequently in adjectives, and seldom or never in gerunds and nouns.

The diachronic explanation of the research carried out by Houston and reviewed by Labov can be summed up in the following way: /in/ derives from the old English ending for the participle *–inde* and was the result of simplification of the /-nd-/ cluster in unaccentuated syllables; /ŋ/ was arguably the reflex of the verb noun ending spelt *-inge* or *-ynge.* Thus, this study showed an opposition in Old English had become a social and stylistic variable – in other words a marker.

Furthermore, Labov (1989) shows that some linguistic variables, which are not synchronically motivated, show historical continuity with few changes over long periods of time, indicating that the separation into synchronic and diachronic linguistics is no longer viable, since children are perfect linguistic historians. Thus, findings on the English variable (ING)–and they are not alone in this –contradict the principle stating that historical linguistics is irrelevant to the study of synchronic linguistics.

4. Internal and external variation

The separation into internal and external (linguistic) factors and external (social, stylistic) factors which constrain the occurrence of variable linguistic phenomena, seems less than

practical for linguists who think, as I do, that language is a whole where "tout se tient". In fact, these two forms of variation cannot be completely separated:

a) When it is looked at as *internal*, the social distribution of the linguistic variable is also considered. The most important source of data becomes the spontaneous production of members of specific speech communities, and since such data are identified or characterised by participants, time and place, they do not lose relevance for the community where they were collected. They are data which represent the processes of real change and variation produced in a community, and as such they are "sociolinguistic". In fact, most variation studies have a sociolinguistic basis. Nevertheless, either because there are variables that are constrained only by internal factors, or because certain research contexts entail a purely linguistic approach, it is sometimes only possible to refer to linguistic systems.
b) In contrast, consideration of *internal* and *external* factors together brings us to the field of micro-sociolinguistics, or sociolinguistic variation, strictly defined, that is to say, that which has as its object the study of language, which analyses the social construction of the speech and speech variety of a given community, and which establishes who are the innovators of the linguistic variation and change based on six independent social variables considered most relevant: sex, age, social class, ethnicity, race and size of community.

The analysis of these social factors in turn brings us to consideration of the status of the linguistic variables and speaker variables within the community and the relationship the latter has with other communities, together with patterns of communication and the homogenising and intensifying effects of social networks. Additionally, the route taken by the transmission of variable elements from generation to generation across different historical periods has to be considered.

According to Labov, what we are discussing here has to do with the notion of *integration*, a key concept in understanding the New Paradigm. Integration here is meant in two senses: firstly, there is integration of a particular linguistic form and structure into the structural matrix alongside other linguistic forms – given that linguistic variation and change are constrained, redirected and accelerated through their relationship with other linguistic forms in the system. Secondly, there is integration into the structure of a speech community, where to understand the causes of variation and change, we need to know where they were first produced within the social structure, which groups lead the innovation, how it has extended to other groups, and lastly which have been the most resistant groups. (See Turell 1995a and 1995b on a number of Catalan-speaking communities). Consequently, the integration of an explanation of the variation and change into a larger structure brings in consideration of multiple causation; and this is the meaning of the term multivariant analysis for the variable treatment of linguistic phenomena.

Variationist inquiry carried out over the last twenty years has made it possible to establish a whole series of principles related to the nature of internal and external factors responsible for the behaviour of linguistic variables under study. These principles can be resumed as follows:

a) Internal factors are independent from external factors; if an internal factor is removed or undergoes change, the change in behaviour may be reflected in the other internal factors, but external factors do not change; if an external factor is removed or undergoes change, the other external factors change, but internal factors remain the same.
b) Internal factors are independent among themselves, while external factors are interactive (See Turell 1995b for a definition of *interaction*).

As the study of variation and linguistic change has advanced, other questions have emerged, such as the cognitive consequences of linguistic change, the evaluation made of the variation and change by individuals in the community, and the status of the variable rules in synchronic grammar. These questions have been posed, based on the study of comprehension across dialects as well as on observations on the acquisition by young children of the patterns of variation in their community. Similarly, support has come from longitudinal studies of the same consultants over time at a series of different periods. Which of course brings us directly up against the notion of *real time* and the study of syntactic change over long periods of time, and for example the study of progressive syntactic change observed in creole languages that are developing.

5. Change in *apparent time* and change in *real time*

5.1 Change in apparent time

The simplest way to study linguistic change is to study it in *apparent time*, based on the analysis of the distribution of linguistic variables across different age groups. This distribution across age groups should not be confused with the regular linguistic behaviour of age grading, repeated in every generation, which has to do rather with differences resulting from the language development found in all individuals.

One of the methodological difficulties most frequently met with in studies of change in *apparent time,* is the issue of selecting the age of the consultants that will best serve to obtain samples of spontaneous speech of sufficient quality. This methodological difficulty has to do with a series of factors: the attention paid to speech and the lack of a stable language variety in the case of young people, and the possible physical deterioration (loss of teeth, voice, lax articulation) or possible mental deterioration (loss of memory, interest and attention) in the case of the very elderly.

These methodological questions are important since most studies show that adolescents particularly, between 11 and 18 years, but also pre-adolescents aged between 8 and 10, are the leaders of ongoing language change. At other times, for relevant theoretical reasons, such as the effect of a specific of the social factor in the characterisation of linguistic change, it may be decided that the setting up of age groups cannot done according to biological – chronological age, but rather has to be based on the external social factors in question. This was the case with the study of linguistic change in the *Ribagorçà* (on the northern Catalonia-Aragon border) (Alturo and Turell (1990), Alturo (1995)). Here, the age groups were determined by the relationship of the speakers with the social upheavals undergone by members of the speech community in the village of El Pont de Suert, between 1930 and 1970. For example, there were those who were adolescents during the Spanish Civil War, aged around 70 at the time the data were collected, secondly those who were adolescents between 1940 and 1950, who experienced the industrial development of the village and who were aged around 50 and 60 years at the time of data collection; and lastly those who were adolescents of the sixties, between 1960 and 1969, who saw stabilisation come to the village, aged between 30 and 40 years old at the time of data collection.

5.2 Change in real time versus change in apparent time

The distribution and occurrence of a given variable by age groups (involving research into linguistic change in *apparent time*) does not indicate definitively that such a linguistic change really is under way in the speech community in question. Instead it may represent a characteristic *age grading* pattern, a pattern which develops during the lifetime of individuals and which repeats itself generation after generation.

Thus, beginning with a distribution across age groups in apparent time, the research question would be: do these results really show the existence of linguistic change in progress? According to Labov (1994), the only way to solve the problems posed by studies in *apparent time* is by providing support for the research findings based on linguistic observation in *real time*, that is, observing a speech community at two discrete points in time.

5.3 Change in real time

5.3.1 Reviewing the past
One efficient way of overcoming the logistical difficulties as well as the methodological issues, in studies of change in *apparent time,* is to search for studies previously carried out on the speech community, to use the results obtained for comparison. In other words, to use the past to explain the present.

This research approach, which has been developed to good effect by certain scholars working on linguistic change, has the disadvantage that the data are often too fragmentary and not always very good quality, but also has the advantage that the evidence is objective, in the sense that the data are not from a given type of study or a specific research project. A further methodological problem here involves the typical tension between qualification and quantification, since the observations that a variant occurred "sometimes" or "frequently" in

the past cannot be compared with the quantified frequencies of more recent studies. What is more, the conservatism of the traditional dialectologists is notorious; it is well known that in general they limited their recording of forms to variants that had already been dated to previous periods of the history of the language.

5.3.2 Repeating the past and returning to the scene

In seeking to overcome the methodological problems discussed above, a new methodology was eventually adopted which involved repeating or *replicating* observations made in the past, by returning to the scene where the language variation and suspected language change was originally observed.

This new focus came into being thanks to the development and implementation of two types of study:
a) Replication or *trend* studies, where the study is carried out with the same population, and the same data collection methods are used, plus the same techniques of analysis, but x years later (usually 10 ~ 15 years later).
b) Studies based on the same original sample (*panel studies*). These involve the seeking out of the same individuals, with same monitoring of the changes in linguistic behaviour using identical instruments (questionnaires, etc) as before in the study on *apparent time.* I propose the term "sample study" to refer to this type of study of linguistic change in *real time.*

5.3.2.1 Replica studies

Trend or replication studies are the simplest way of returning to the past, but they raise a substantial number of methodological problems. In the first place, if a large community is involved, it may be difficult or impossible to include any of the individuals who had taken part in the original sample. Furthermore, the community would necessarily have to be one that remained demographically stable, otherwise the changes could, and probably would, be externally motivated. This does not mean that externally motivated variation and change are unimportant but in this case one would be hard put to say whether they were produced as a result of internal linguistic factors. (Bailey and Maynor 1987).

5.3.2.2 "Sampling studies"

This type of study seeks to go back to use the original sample of informants or consultants, and thus entails the locating of the same individuals who had taken part in the study of change in *apparent time.* These individuals are then given the same questionnaire, in the same sociolinguistic interview with the same formal tests as in the original research design. Instances of this type of study include a) the sample study carried out in Montreal in 1984 by Thibault and Vincent (1990) based on an original study in *apparent time* by Sankoff and Cedergren, in Sankoff and Sankoff (1973); b) the analysis of a single individual over a period of time carried out by Brink and Lund (1975) within the framework of research on the dialect of Copenhagen, and lastly, the study by (1987) on the Besaran dialect of Yiddish, which contrasts with standard *Yiddish*, based on the recordings of a single speaker, the folksinger Sara Gorby, over several decades of her life.

6. The relationship between linguistic change in *apparent time* and real change in *real time*

Any research context which sets out to look at the relationship between linguistic change in real and apparent time would need to be based on two sets of principles which emerged in the studies of linguistic variation and change carried out over the course of the three decades during which the Change in Paradigm was developing. One of these sets of principles came out of the research that looked at differences and similarities between variation in the individual, and variation in the group, and which sought to confirm the internal and external factors that could explain the uniform distribution of variation in a given community (Guy 1980). The other set of principles had to do with notions of change from above and change from below, already discussed elsewhere (Turell 1995a).

There are a number of published studies which consider the relationship between linguistic change in *apparent time* and linguistic change in *real time.* It will not be possible to mention all of them, but I should like to mention one or two of the more significant of those that deal with the Spanish and English languages.

Possibly the most significant study on linguistic change in Spanish is the replication or trend study by Cedergren (1969-1982) in real time in Panama dealing with the substitution of affricative /c/ of Spanish by the fricative /š/ as in words like *muchacha* (girl) *muchos* (many) *etc*. The objective of this study was to show, using newly available real-time evidence, that there actually was a change in progress.

There have been a number of studies of this kind involving English, but perhaps the most significant from the point of view of the relationship between apparent time and real time is the study by Payne (1976, 1980) on the acquisition of the Philadelphia dialect. More specifically, Payne studied the phonological changes (for example, the splitting of the English vowel *a* into two variants: one tense, the other lax) which were occurring in the dialect which was being acquired by the children of families that were originally from outside the Philadelphia area.

Another interesting study from the methodological point of view is the replication or trend study by Trudgill (1988) of his original study of linguistic variation and change carried out in the English city of Norwich in 1968 (Trudgill 1974). This took on a real-time perspective by virtue of the fact that 17 speakers aged between 10 and 25 were added who could then be contrasted with the group of adolescents in the original 1968 sample. It is true that this only added the comparison of the same age group duplicated by two observations at different times, but it was nonetheless a very powerful way of demonstrating the efficacy of a given methodology.

7. Research prospects for language variation and change in Catalan in *real time*

In the field of research into Catalan, all studies of variation and change carried out to date take a methodological approach working with *apparent time.* See Alturo and Turell (1990) and Alturo (1995) for the Catalan *nord-occidental* dialect of the Ribagorça, Pradilla (1995) for Valencian *nord-occidental* dialect, Plaza (1995) for the Catalan of the Conca de Barberà (central Catalonia) as well as the study of linguistic stratification of Petrer (Valencia) carried out by Gimeno and Montoya (1989). And there are many others which have been carried out but which have not yet been published in scientific journals.

As I see it, these communities constitute linguistic laboratories, and are very relevant and suited to the implementation of "sample" type of study in *real time*. Such studies can supply data that will enable us to form a clearer picture of the current state of Catalan in terms of its internal structure, the internal and external factors that constrain patterns of language change and variation, what the starting point is for such changes, who are leading the changes, and the route taken. Information of this sort can also contribute to developing a theory of language variation and change, to which we variationists are committed — and to a general theory of language, which we do not yet have, but which we hope to be able to work towards on both theoretical and methodological levels.

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