The use of the terms "substratum" and "superstratum," used in diachronic linguistics to designate linguistic contact, leads to ambiguity, confusion, and specious arguments. Each term carries a chronological-geographic, a social, and a linguistic definition which increases the grounds for misunderstanding. The terms encourage thinking about language relationships in an unrealistic and deceptive way, as material substances piled up in layers. Clearer, more specific terms should be used to suggest the particular aspect of the relationship under consideration. "Upper" and "lower" might suggest a social relationship; "conquered" and "conquering" could be used to designate that particular situation of language influence. (VM)
USES AND MISUSES OF THE TERMS
SUBSTRATUM AND SUPERSTRATUM

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It is generally thought, especially among those who work in the Romance area of historical linguistics, that the ideas associated with the terms substratum and superstratum were conceived at a fairly definite and fairly recent time. Specifically, many seem to feel (cf. Malkiel, 1967, p. 231; Jungemann, 1955, p. 18) that the superstratum idea took definite form only in the 1930's, when von Wartburg introduced the term, and that the substratum concept was originated by G. I. Ascoli about 1880 (cf. above references and also Tagliavini, 1962, p. 64: "È stato un grande merito di G. I. Ascoli l'avere messo in evidenza le cosiddette 'reazioni etniche, l'influsso cioè del sostrato...'). Niels Nielsen (1952, p. 1) claimed that the theory of linguistic substrata was first formulated by Jakob Hornemann Bredsdorff in 1821. If, therefore, at first thought I had made a discovery when I came upon discussions of what we would now call substratum and superstratum influences in the works of Carl Ludwig Fernow (1808) and Carlo Denina (1804). Well considered, however, the idea that languages influence each other—especially the idea that a speech community will preserve features of its original language (i.e., will have a "foreign accent") when it adopts a new language—seems so superficially obvious, so common-sensical (in the pejorative Korzybskian sense) that one should probably not be surprised to find it was expressed as early as Machiavelli, or to find that it is held or independently reinvented by laymen. In fact one may wonder whether the "theories" of substratum and superstratum influences are really theories or merely linguistic folklore.

Although my chief quarrel is with the terms themselves, which I believe to be misleading (and therefore harmful) metaphors, I shall begin by protesting against two untenable assumptions about language contact
more or less obviously underlying the thought of many historical linguists. These are (1) that no language ever disappears without leaving important traces of itself on the language that replaces it; and (2) that any change not surely accounted for in some other way must be attributed to substratum influence.

On the basis of the first assumption the substrATOManiac finds that any feature once present (or only perhaps present) in the superseded language and later found in the surviving language (in or near the same territory) must necessarily be a carryover, no matter what the time gap may be, no matter what the differences in distribution may be, and even though the same change may have occurred in many other places where a substratum causation cannot be alleged.

On the basis of the second assumption the substratist not only explains changes in the surviving language by features known to have been present in the superseded language, but actually claims to discover features of the extinct language by examining the changes that have occurred in the surviving language (for, he believes, the changes can only have been caused by substratum influence).

Sometimes both procedures are used in the same study, and the result is complete circularity of reasoning. As an example, I cite a paper by the late Cleme:nte Merlo on one of his favorite topics, the alleged Etruscan origin of the gorgia toscana. Early in the article Merlo writes:

Della famiglia italiana centro-meridionale non fanno parte i vernacoli toscani. Il loro sostrato etnico non è italico, ma etrusco. A persuaderne basta il fenomeno delle aspirate a fricative odierne dalle sorde latine intervocaliche, fenomeno spiccatamente toscano, come fu un tempo spiccatamente etrusco. . . . Quello che importa (il prof. Rohlfs mostra anche qui di non avere una chiara idea di quel ch'è reazione etnica) è ritrovar nel toscano, e fra quante parlato ha l'Italia, nel solo toscano, una tendenza fonetica che fu sicuramente etrusca, e non fu italica, non fu celtica.¹

Merlo assumes here that every innovation is to be attributed to substratum influence. More important, at this point (and in several other papers) he stresses the supposed presence of the gorgia features in Etruscan. His proof that the gorgia is a survival from Etruscan is that Etruscan itself had the same or similar features. Apparently he knows Etruscan phonology from some source other than modern Tuscan; for if his knowledge of Etruscan sounds were based on the sounds of Modern Tuscan, his statement that finding the gorgia both in Etruscan and in Tuscan proves Etruscan survival would be meaningless. Merlo's reasoning here depends upon
the assumption that our knowledge of Etruscan phonology is sound; but a few pages farther on he denies that assumption. Rohlfs had written (in objection to Merlo's position on [rv → rb, 1v → 1b]) that Etruscan did not have voiced stops. Merlo replies that the absence of the letters for voiced stops in Etruscan writing

non basta an inferirne la mancanza nell'etrusco di suoni consonantici sonori, mancanza . . . contrastata dalle condizioni fonetiche odierno, dalle odierno sonore. . . . Io mi vado persuadendo sempre più . . . che il continua-tore toscano della sorda latina intervocalica non è una sorda, ma una sonora [N.B.]; che le sorde rappresentano la corrente letteraria, in Toscana più che altrove, antica e forte; che la corrente toscana shietto è quella di ago, lago, strada . . . Le nostre cognizioni dell'etrusco sono limitatissime, e per quel ch'è della fonetica (è questo un mio pensiero fermissimo!) la luce non può venire che dai vernacoli parlati oggi nella regione che già fu degli Etruschi.2

Not only does this passage contradict the alleged proof stated earlier, but it seems to make it impossible for Etruscan to have caused the change of Latin /-p-, -t-, -k-/ to voiceless spirants, because it says that the influence of Etruscan was to cause them to become voiced stops. Nor is this the end of bad reasoning. The passage just quoted tells us that we can discover the sounds of Etruscan only by studying the dialects spoken today in the region once inhabited by the Etruscans. From this it follows that to discover the sounds of a substratum language we must know where its speakers lived. But throughout this paper Merlo makes use of a converse assumption which elsewhere he describes as a linguistic principle and as his "linguistic discovery," namely, that the presence of certain characteristic sounds in the modern dialects indicates exactly where each substratum language was formerly spoken, that this "linguistic evidence" overrides historical and archeological evidence.3 If this principle were correct, we should obviously need to know the sounds of the substratum language to apply it. But we are told that the sounds of substratum languages can be discovered only by studying the modern dialects. Hence Merlo's substratum argument chases itself around in circles. We know that the gorgia is from Etruscan because the Etruscans had it. We know that the Etruscans had it because it is used in the dialects now spoken where Etruscans once lived. We know that Etruscans once lived there because the gorgia is used there today, and wherever the gorgia is used today there were once speakers of Etruscan, because the gorgia is a survival from Etruscan. We know that the gorgia is from Etruscan because . . . and so around the circle again.

The above example is perhaps extreme, but it is not unique. Lack of evidence, phonetic implausibility, conflicts of relative chronology, internal
inconsistency or circularity, more or less anything can be ignored or
denied in a substratist's (or a superstratist's) argument. 4

I have said that I object to the terms *substratum* and *superstratum*
because I believe the terms themselves are misleading. Because they
are metaphorical, they do not seem to require definition, and most of
us think we know exactly what they mean when in fact each of them is
multiply ambiguous. Sometimes apparently clear definitions are given.
For example, in von Wartburg (1963, p. 41) one finds:

> On a coutume d’appeler superstrat un peuple qui s’est
> fondu dans un autre peuple déjà installé sur un territoire
> et parlant une autre langue. Cependant, le rapport peut
> être inverse: ce peut être le peuple soumis qui, quoique
> numériquement plus fort, abandonne peu à peu sa langue.
> Alors, on parle d’un substrat. . . . Les Latins venant
> de l’Italie ou même de Rome ne constituaient le plus sou-
> vent dans les provinces qu’une maigre couche; pourtant,
> grâce à leur prestige politique et culturel, ils inculquè-
> rent leur langue aux peuples soumis. Ceux-ci, bien ciu'en
> majorité cr as ante passerent à la langue des conquérants.
> Au cours de cette opération, ils transportèrent dans la
> langue nouvellement acquise leurs habitudes articulatoires
> antérieures.

In this seemingly explicit statement, substratum and superstratum
are in fact defined according to different criteria and in such a way that
the two terms are not even mutually exclusive: superstratum influence
is the influence of a language brought in from the outside, and substratum
influence is the persistence of native speech habits. What then does one
call the persistence of the native speech habits of those who come to an
area from outside?

Whether we define the terms or take their meanings for granted, it
seems that we tend to use *substratum* and *superstratum* with at least three
meanings for each; and ambiguity, confusion, and specious arguments re-
sult when we unwittingly shift from one meaning to another or assume that
the three meanings inevitably go together.

Substratum language is most often defined, as in the passage cited
above, as a language spoken in some particular region before it is super-
seded there by some language brought in from elsewhere. This "primary"
meaning has only chronological-geographic significance and is therefore
not very interesting; but it tends to be accompanied, unconsciously, by
two other meanings that have social and linguistic significance. First, it
is generally understood that a substratum language is the language of a
conquered people and therefore, while it survives, the language of a
socio-politically inferior or less prestigious group. Second, it is also
understood that a substratum language is a language which leaves traces of itself in a new language learned by its speakers because these speakers cannot rid themselves of all the features of their native language. That is, substratum influence is unintentional, the result of imperfect learning.

Superstratum language seems to mean "primarily" a language brought into an area already inhabited by speakers of another language and subsequently given up in favor of the earlier language. Again, this first meaning has only chronological-geographical significance, and tends to be accompanied by two other meanings that have social and linguistic importance. That is, we are likely to think of the superstratum speakers as conquerors and therefore in a superior socio-political position; and we generally think of superstratum influence as more or less intentional or conscious borrowing, not unavoidable persistence of native language patterns.

Perhaps the most obvious problem resulting from this multiplicity of meanings is that the different conditions implied by the terms don't necessarily go together in real situations, so that if we classify in terms of one pair of meanings, we will not have the same labels as when we classify in terms of another. For example, if we considered English and Spanish in the American Southwest, we would have to say that Spanish is a substratum for English, if by substratum language we meant the language that was there first and was later superseded by another. But obviously the mass of Spanish words borrowed by English cannot be called substratum influence if substratum features are features carried over from a native language unwillingly because of imperfect learning of a new language. In this sense the influence of Spanish upon English has been nil. American English adopted chaps, mustang, pinto, lariat, rodeo, mesquite, etc. in typical borrowing circumstances: the speakers of English encountered new items for which they knew no English words but for which Spanish words were at hand, and they accepted the Spanish words as names for the new items.

If we move back a few centuries to the first arrival of Spanish speakers in America, we find the same sort of contradiction. If we consider the relationship of the Carib language to Spanish we shall have to say that from two points of view Carib is a substratum language: it was there before Spanish came, and it was the language of a conquered, socially inferior people. But would we call canoe, tobacco, etc. substratum survivals? They clearly are not features unwillingly carried over from the native language by speakers attempting to learn a new language. Nothing at all was carried over unwillingly through imperfect learning on the part of the Caribs, for they were early exterminated.

The case of Aztec influence constitutes a similar problem. Aztec preceded Spanish in Mexico, and the Aztecs were a conquered people; but words like chocolate, cacao, tomato obviously did not come into Spanish
and then spread to other European languages because Aztec speakers
learned Spanish imperfectly. They were voluntarily adopted in a situation typically favorable to borrowing: the Aztecs had names for these things that Europeans had not met before. Aztec words for eat, sleep, birth, death, etc. were not taken into Spanish. Even in the case of Aztec words that occur only in Mexican Spanish—guajolote, zopilote, tecolote, etc.—we still do not have unwilling or unconscious carryover but linguistic borrowing. Many linguists do, however, call Aztec a substratum for Mexican Spanish; and when they move from the consideration of these certain lexical survivals to the doubtful allegations of phonological influence, their meaning of substratum influence changes from borrowing to unwitting carryover. But the term does not change, so that the reader (and probably the writer) is likely to think that two quite different things are one.

Similar conflicts and confusions of meanings occur in the use of the term superstratum. In more than one case, it turns out that from a linguistic point of view substratum and superstratum are exactly the same. Let us consider only one example. When we say that the lengthening and diphthongization of French vowels in open syllables and the development of a strong stress accent are Germanic features that the Franks carried over into their pronunciation of Gallo-Romance, we are speaking of what is, from one point of view, a substratum influence. That is, we are speaking of native-language features believed to have been carried over unintentionally to a second or learned language. But Germanic is traditionally called superstratum for French because it was brought in by invaders.

Finally, I strongly object to the terms substratum and superstratum because they lead us to think of language relationships in an unrealistic and deceptive way. We think of languages as layers piled on top of each other if we use the picture language of substratum, core stratum and superstratum, when in fact there are no such layers, but rather interchanges among speakers. Rarely, except at the time of their first adoption, are ordinary speakers of any language aware of different origins (different strata) of the various features of their language. In English, for example, catch, chase, and capture are simply three rather ordinary words, and only the etymologist knows or cares that they represent three different developments of a single and non-English root. Pulgram seems to present a commendably clear definition when he writes (1958, p. 338): "By substratum I mean a linguistic layer [N.B.] which is eventually superseded by the language that comes to predominate; in the same sense a superstratum is a linguistic layer on top [N.B.] of such a predominating language. Thus, e.g., Keltic is the substratum of Latin in Gaul, while Frankish is its superstratum." But at best this is linguistically meaningless, at worst misleading. It is meaningless because the supposed layers do not exist, misleading if it makes the reader believe that they do. The
"layer on top" means nothing except that the influence of Frankish (in the case cited) was later in that territory. It has only geographic, not even historical significance. If the mountain had come to Mohammed i.e., if Gallo-Romance speakers had invaded Frankish territory instead of the Franks coming into Gaul, Pulgram--and everyone else--would call Frankish a substratum instead of a superstratum.

It is surely not by chance that, just as the most fanciful hypotheses of interlingual influences have been made about the remotest periods and the least known languages, so the terms substratum and superstratum are most freely used in the same contexts. In dealing with the distant past, we generally ignore Einar Haugen's warning (1950, p. 271) that "talk of substrata and superstrata must remain stratospheric unless we can find it solidly on the behavior of living observable speakers." We are easily tempted to think of populations as organisms, to compress eras into decades unconsciously, and especially to think of languages in terms of layers or strata instead of thinking of real speakers in real situations of social contact.

Because the idea of layers or strata in languages is unrealistic and misleading, and because the various meanings attached to substratum and superstratum are in part useless and in part confused and contradictory, I believe the terms should be abandoned entirely and replaced by clearer, more specific terms. For the relationships of social prestige usually implied by substratum and superstratum language, the terms "higher" (or "upper") and "lower" might be used (as in fact they were by Bloomfield 40 years ago). When there is reason for distinguishing between conquered and conquering groups, conquered, subjugated, or subject might be used for the one and conquering, ruling, or sovereign for the other. Where substratum is used to mean features of a native language involuntarily carried over into a second language, we might substitute a term like native language interference; and where superstratum means conscious imitation or borrowing, it could be replaced by some such term as imitative interference. Where substratum and superstratum have been used to indicate chronological relationships, they should clearly be replaced by the specification of the exact temporal order in which the languages concerned came into contact with each other. If we can in some way rid ourselves of our present metaphorical terms, which be-guile us into thinking of languages as material substances piled up in layers, we shall know better what we are talking about and more easily realize when we are talking nonsense.
NOTES

1. Merlo (1933), p. 11.


3. Cf. Merlo (1946), pp. 6-7: "Per individuare e circonscrivere i gruppi etnici stanziati in Italia al tempo della conquista romana noi neo-latinisti, possediamo ... un mezzo sicuro, quale nessun'altra disciplina possiede: le alterazioni che i suoni latini subirono sulla bocca delle popolazioni soggiogate e incivilite da Roma. Poco giovano le scarse notizie, spesso contraddittorie, tramandateci da scrittori greci e latini, i nomi di luogo ... che son muti quanto all'età, le iscrizioni che, oltre ad essere mute, possono venir rimosse dal luogo dove furono incise; la comunanza di riti religiosi e funebri, di istituti, di costumi, che facilmente l'un pò polo apprende, riceve dall'altro ... A individuare, a circonscrivere i singoli gruppi bastano poche alterazioni fonetiche tipiche, caratteristiche, che, a tanti secoli di distanza, continuano le abitudini orali delle singole stirpi."


5. I would emphasize that when I say "superior socio-political position," I do not mean to imply anything like superiority of social or political system or organization, or anything about cultural superiority in general (although this too is important in determining the amount, direction, and kind of interlanguage influence). It is merely a question of which group is in control--carries on the affairs, owns the property, sets the laws and customs, etc.

6. Cf. Weinreich (1953, p. 11): "What the historical linguist finds to be an effect of interference from another language may not be one to the user of the language; the consumer of imported goods only rarely has the same awareness of their origin as the importer or the investigator."

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