

Chapter III

STATIC AND EVOLUTIONARY LINGUISTICS

1. Inner Duality of All Sciences Concerned with Values

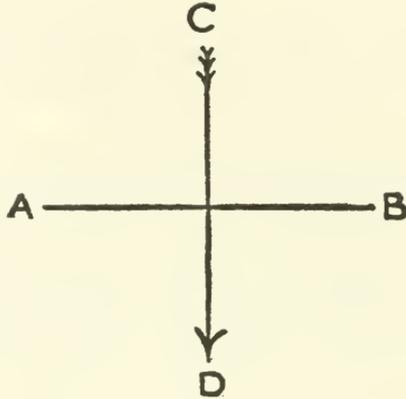
Very few linguists suspect that the intervention of the factor of time creates difficulties peculiar to linguistics and opens to their science two completely divergent paths.

Most other sciences are unaffected by this radical duality; time produces no special effects in them. Astronomy has found that the stars undergo considerable changes but has not been obliged on this account to split itself into two disciplines. Geology is concerned with successions at almost every instant, but its study of strata does not thereby become a radically distinct discipline. Law has its descriptive science and its historical science; no one opposes one to the other. The political history of states is unfolded solely in time, but a historian depicting a particular period does not work apart from history. Conversely, the science of political institutions is essentially descriptive, but if the need arises it can easily deal with a historical question without disturbing its unity.

On the contrary, that duality is already forcing itself upon the economic sciences. Here, in contrast to the other sciences, political economy and economic history constitute two clearly separated disciplines within a single science; the works that have recently appeared on these subjects point up the distinction. Proceeding as they have, economists are—without being well aware of it—obeying an inner necessity. A similar necessity obliges us to divide linguistics into two parts, each with its own principle. Here as in political economy we are confronted with the notion of *value*; both sciences are concerned with *a system for equating things of different orders*—labor and wages in one and a signified and signifier in the other.

Certainly all sciences would profit by indicating more precisely the co-ordinates along which their subject matter is aligned. Every-

where distinctions should be made, according to the following illustration, between (1) *the axis of simultaneities* (AB), which stands for the relations of coexisting things and from which the intervention of time is excluded; and (2) *the axis of successions* (CD), on which only one thing can be considered at a time but upon which are located all the things on the first axis together with their changes.



For a science concerned with values the distinction is a practical necessity and sometimes an absolute one. In these fields scholars cannot organize their research rigorously without considering both co-ordinates and making a distinction between the system of values per se and the same values as they relate to time.

This distinction has to be heeded by the linguist above all others, for language is a system of pure values which are determined by nothing except the momentary arrangement of its terms. A value—so long as it is somehow rooted in things and in their natural relations, as happens with economics (the value of a plot of ground, for instance, is related to its productivity)—can to some extent be traced in time if we remember that it depends at each moment upon a system of coexisting values. Its link with things gives it, perforce, a natural basis, and the judgments that we base on such values are therefore never completely arbitrary; their variability is limited. But we have just seen that natural data have no place in linguistics.

Again, the more complex and rigorously organized a system of values is, the more it is necessary, because of its very complexity, to study it according to both co-ordinates. No other system embodies this feature to the same extent as language. Nowhere else do we find such precise values at stake and such a great number and diversity of terms, all so rigidly interdependent. The multiplicity of signs, which we have already used to explain the continuity of language, makes it absolutely impossible to study simultaneously relations in time and relations within the system.

The reasons for distinguishing two sciences of language are clear. How should the sciences be designated? Available terms do not all bring out the distinction with equal sharpness. "Linguistic history" and "historical linguistics" are too vague. Since political history includes the description of different periods as well as the narration of events, the student might think that he is studying a language according to the axis of time when he describes its successive states, but this would require a separate study of the phenomena that make language pass from one state to another. *Evolution* and *evolutionary linguistics* are more precise, and I shall use these expressions often; in contrast, we can speak of the science of *language-states* [*états de langue*] or *static linguistics*.

But to indicate more clearly the opposition and crossing of two orders of phenomena that relate to the same object, I prefer to speak of *synchronic* and *diachronic* linguistics. Everything that relates to the static side of our science is synchronic; everything that has to do with evolution is diachronic. Similarly, *synchrony* and *diachrony* designate respectively a language-state and an evolutionary phase.

2. *Inner Duality and the History of Linguistics*

The first thing that strikes us when we study the facts of language is that their succession in time does not exist insofar as the speaker is concerned. He is confronted with a state. That is why the linguist who wishes to understand a state must discard all knowledge of everything that produced it and ignore diachrony. He can enter the mind of speakers only by completely suppressing the past. The intervention of history can only falsify his judgment. It would be absurd to attempt to sketch a panorama of the Alps

by viewing them simultaneously from several peaks of the Jura; a panorama must be made from a single vantage point. The same applies to language; the linguist can neither describe it nor draw up standards of usage except by concentrating on one state. When he follows the evolution of the language, he resembles the moving observer who goes from one peak of the Jura to another in order to record the shifts in perspective.

Ever since modern linguistics came into existence, it has been completely absorbed in diachrony. Comparative Indo-European philology uses the materials at hand to reconstruct hypothetically an older type of language; comparison is but a means of reconstructing the past. The method is the same in the narrower study of subgroups (Romance languages, Germanic languages, etc.); states intervene only irregularly and piecemeal. Such is the tendency introduced by Bopp. His conception of language is therefore hybrid and hesitating.

Against this, what was the procedure of those who studied language before the beginning of modern linguistics, i.e. the "grammarians" inspired by traditional methods? It is curious to note that here their viewpoint was absolutely above reproach. Their works clearly show that they tried to describe language-states. Their program was strictly synchronic. The *Port Royal Grammar*, for example, attempts to describe the state of French under Louis XIV and to determine its values. For this, the language of the Middle Ages is not needed; the horizontal axis is followed faithfully (see p. 80), without digression. The method was then correct, but this does not mean that its application was perfect. Traditional grammar neglects whole parts of language, such as word formation; it is normative and assumes the role of prescribing rules, not of recording facts; it lacks overall perspective; often it is unable even to separate the written from the spoken word, etc.

Classical grammar has been criticized as unscientific; still, its basis is less open to criticism and its data are better defined than is true of the linguistics started by Bopp. The latter, occupying ill-defined ground, has no clear-cut objective. It straddles two areas because it is unable to make a sharp distinction between states and successions.

Linguistics, having accorded too large a place to history, will

turn back to the static viewpoint of traditional grammar but in a new spirit and with other procedures, and the historical method will have contributed to this rejuvenation; the historical method will in turn give a better understanding of language-states. The old grammar saw only the synchronic fact; linguistics has revealed a new class of phenomena; but that is not enough; one must sense the opposition between the two classes of facts to draw out all its consequences.

3. *Inner Duality Illustrated by Examples*

The opposition between the two viewpoints, the synchronic and the diachronic, is absolute and allows no compromise. A few facts will show what the difference is and why it is irreducible.

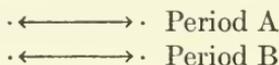
Latin *crispus* 'crisp' provided French with the root *crép-* from which were formed the verbs *crépir* 'rough-cast' and *décrepir* 'remove mortar.' Against this, at a certain moment the word *dēcrepitus*, of unknown origin, was borrowed from Latin and became *décrépit* 'decrepit.' Certainly today the community of speakers sets up a relation between *un mur décrépi* 'a wall from which mortar is falling' and *un homme décrépit* 'a decrepit man,' although historically the two words have nothing in common; people often speak of the *façade décrépite* of a house. And this is static, for it concerns the relation between two coexisting forms of language. For its realization, the concurrence of certain evolutionary events was necessary. The pronunciation of *crisp-* had to become *crép-*, and at a particular moment a new word had to be borrowed from Latin. It is obvious that the diachronic facts are not related to the static facts which they produced. They belong to a different class.

Here is a more telling example. In Old High German the plural of *gast* 'guest' was first *gasti*, that of *hant* 'hand' was *hanti*, etc. Later the final *-i* produced an umlaut, i.e. it resulted in the changing of the *a* of the preceding syllable to *e*: *gasti* → *gesti*; *hanti* → *henti*. Then the final *-i* lost its timbre: *gesti* → *geste*, etc. The result is that today German has *Gast: Gäste*, *Hand: Hände*, and a whole group of words marked by the same difference between the singular and the plural. A very similar fact occurred in Anglo-Saxon: the earlier forms were *fōt: *fōti*, *tōþ: *tōþi*, *gōs: *gōsi*, etc. Through an

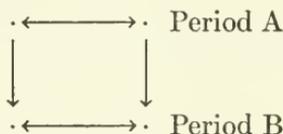
initial phonetic change, umlaut, **fōti* became **fēti*; through a second, the fall of final *-i*, *fēti* became *fēt*; after that, *fōt* had as its plural *fēt*; *tōþ*, *tēþ*; *gōs*, *gēs*, etc. (Modern English *foot*: *feet*, *tooth*: *teeth*, *goose*: *geese*.)

Previously, when speakers used *gast*: *gasti*, *fōt*: *fōti*, the simple addition of an *i* marked the plural; *Gast*: *Gäste* and *fōt*: *fēt* show a new mechanism for indicating the plural. The mechanism is not the same in both instances; in Old English there is only opposition between vowels; in German there is in addition the presence or absence of final *-e*; but here this difference is unimportant.

The relation between a singular and its plural, whatever the forms may be, can be expressed at each moment by a horizontal axis:



Whatever facts have brought about passage from one form to another should be placed along a vertical axis, giving the overall picture:



Our illustration suggests several pertinent remarks:

1) In no way do diachronic facts aim to signal a value by means of another sign; that *gasti* became *gesti*, *geste* (*Gäste*) has nothing to do with the plural of substantives; in *tragit* → *trägt*, the same umlaut occurs in verbal inflection, and so forth. A diachronic fact is an independent event; the particular synchronic consequences that may stem from it are wholly unrelated to it.

2) Diachronic facts are not even directed toward changing the system. Speakers did not wish to pass from one system of relations to another; modification does not affect the arrangement but rather its elements.

Here we again find the principle enunciated previously: never is the system modified directly. In itself it is unchangeable; only certain elements are altered without regard for the solidarity that binds them to the whole. It is as if one of the planets that revolve

around the sun changed its dimensions and weight: this isolated event would entail general consequences and would throw the whole system out of equilibrium. The opposition of two terms is needed to express plurality: either *fōt: fōti* or *fōt: fēt*; both procedures are possible, but speakers passed from one to the other, so to speak, without having a hand in it. Neither was the whole replaced nor did one system engender another; one element in the first system was changed, and this change was enough to give rise to another system.

3) The foregoing observation points up the ever *fortuitous* nature of a state. In contrast to the false notion that we readily fashion for ourselves about it, language is not a mechanism created and arranged with a view to the concepts to be expressed. We see on the contrary that the state which resulted from the change was not destined to signal the meaning with which it was impregnated. In a fortuitous state (*fōt: fēt*), speakers took advantage of an existing difference and made it signal the distinction between singular and plural; *fōt: fēt* is no better for this purpose than *fōt: *fōti*. In each state the mind infiltrated a given substance and breathed life into it. This new perspective, inspired by historical linguistics, is unknown to traditional grammar, which could never acquire it by its own methods. Most philosophers of language are equally ignorant of it, and yet nothing is more important from the philosophical viewpoint.

4) Are facts of the diachronic series of the same class, at least, as facts of the synchronic series? By no means, for we have seen that changes are wholly unintentional while the synchronic fact is always significant. It always calls forth two simultaneous terms. Not *Gäste* alone but the opposition *Gast: Gäste* expresses the plural. The diachronic fact is just the opposite: only one term is involved, and for the new one to appear (*Gäste*), the old one (*gasti*) must first give way to it.

To try to unite such dissimilar facts in the same discipline would certainly be a fanciful undertaking. The diachronic perspective deals with phenomena that are unrelated to systems although they do condition them.

Here are some other examples to strengthen and complement the conclusions drawn from the first ones.

In French, the accent always falls on the last syllable unless this syllable contains a mute *e* (ə). This is a synchronic fact, a relation between the whole set of French words and accent. What is its source? A previous state. Latin had a different and more complicated system of accentuation: the accent was on the penultimate syllable when the latter was long; when short, the accent fell back on the antepenult (cf. *amīcus*, *ánima*). The Latin law suggests relations that are in no way analogous to the French law. Doubtless the accent is the same in the sense that it remained in the same position; in French words it always falls on the syllable that had it in Latin: *amīcum* → *amí*, *ánimum* → *áme*. But the two formulas are different for the two moments because the forms of the words changed. We know that everything after the accent either disappeared or was reduced to mute *e*. As a result of the alteration of the word, the position of the accent with respect to the whole was no longer the same; subsequently speakers, conscious of the new relation, instinctively put the accent on the last syllable, even in borrowed words introduced in their written forms (*facile*, *consul*, *ticket*, *burgrave*, etc.). Speakers obviously did not try to change systems, to apply a new formula, since in words like *amīcum* → *amí* the accent always remained on the same syllable; but a diachronic fact was interposed: speakers changed the position of the accent without having a hand in it. A law of accentuation, like everything that pertains to the linguistic system, is an arrangement of terms, a fortuitous and involuntary result of evolution.

Here is an even more striking example. In Old Slavic, *slovo* 'word' has in the instrumental singular *slovem' b*, in the nominative plural *slova*, in the genitive plural *slov' b*, etc.; in the declension each case has its own ending. But today the weak vowels *b* and *'b*, Slavic representatives of Proto-Indo-European *ǐ* and *ǔ*, have disappeared. Czech, for example, has *slovo*, *slovem*, *slova*, *slov*; likewise *žena* 'woman': accusative singular *ženu*, nominative plural *ženy*, genitive plural *žen*. Here the genitive (*slov*, *žen*) has zero inflection. We see then that a material sign is not necessary for the expression of an idea; language is satisfied with the opposition between something and nothing. Czech speakers recognize *žen* as a genitive plural simply because it is neither *žena* nor *ženu* nor any of the other forms. It seems strange at first glance that such a particular notion

as that of the genitive plural should have taken the zero sign, but this very fact proves that everything comes about through sheer accident. Language is a mechanism that continues to function in spite of the deteriorations to which it is subjected.

All this confirms the principles previously stated. To summarize:

Language is a system whose parts can and must all be considered in their synchronic solidarity.

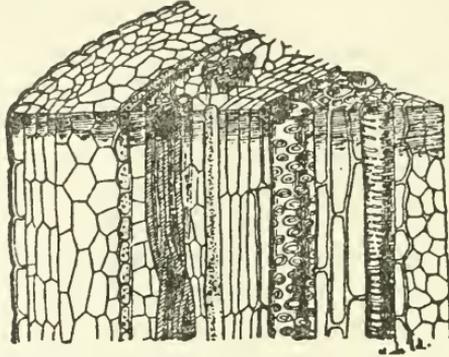
Since changes never affect the system as a whole but rather one or another of its elements, they can be studied only outside the system. Each alteration doubtless has its countereffect on the system, but the initial fact affected only one point; there is no inner bond between the initial fact and the effect that it may subsequently produce on the whole system. The basic difference between successive terms and coexisting terms, between partial facts and facts that affect the system, precludes making both classes of fact the subject matter of a single science.

4. *The Difference between the Two Classes Illustrated by Comparisons*

To show both the autonomy and the interdependence of synchrony we can compare the first to the projection of an object on a plane surface. Any projection depends directly on the nature of the object projected, yet differs from it—the object itself is a thing apart. Otherwise there would not be a whole science of projections; considering the bodies themselves would suffice. In linguistics there is the same relationship between the historical facts and a language-state, which is like a projection of the facts at a particular moment. We do not learn about synchronic states by studying bodies, i.e. diachronic events, any more than we learn about geometric projections by studying, even carefully, the different types of bodies.

Similarly if the stem of a plant is cut transversely, a rather complicated design is formed by the cut surface; the design is simply one perspective of the longitudinal fibers, and we would be able to see them on making a second cut perpendicular to the first. Here again one perspective depends on the other; the longitudinal cut shows the fibers that constitute the plant, and the transversal cut shows their arrangement on a particular plane; but the second is distinct from the first because it brings out certain relations be-

tween the fibers—relations that we could never grasp by viewing the longitudinal plane.



But of all comparisons that might be imagined, the most fruitful is the one that might be drawn between the functioning of language and a game of chess. In both instances we are confronted with a system of values and their observable modifications. A game of chess is like an artificial realization of what language offers in a natural form.

Let us examine the matter more carefully.

First, a state of the set of chessmen corresponds closely to a state of language. The respective value of the pieces depends on their position on the chessboard just as each linguistic term derives its value from its opposition to all the other terms.

In the second place, the system is always momentary; it varies from one position to the next. It is also true that values depend above all else on an unchangeable convention, the set of rules that exists before a game begins and persists after each move. Rules that are agreed upon once and for all exist in language too; they are the constant principles of semiology.

Finally, to pass from one state of equilibrium to the next, or—according to our terminology—from one synchrony to the next, only one chesspiece has to be moved; there is no general rummage. Here we have the counterpart of the diachronic phenomenon with all its peculiarities. In fact:

(a) In each play only one chesspiece is moved; in the same way in language, changes affect only isolated elements.

(b) In spite of that, the move has a repercussion on the whole system; it is impossible for the player to foresee exactly the extent of the effect. Resulting changes of value will be, according to the circumstances, either nil, very serious, or of average importance. A certain move can revolutionize the whole game and even affect pieces that are not immediately involved. We have just seen that exactly the same holds for language.

(c) In chess, each move is absolutely distinct from the preceding and the subsequent equilibrium. The change effected belongs to neither state: only states matter.

In a game of chess any particular position has the unique characteristic of being freed from all antecedent positions; the route used in arriving there makes absolutely no difference; one who has followed the entire match has no advantage over the curious party who comes up at a critical moment to inspect the state of the game; to describe this arrangement, it is perfectly useless to recall what had just happened ten seconds previously. All this is equally applicable to language and sharpens the radical distinction between diachrony and synchrony. Speaking operates only on a language-state, and the changes that intervene between states have no place in either state.

At only one point is the comparison weak: the chessplayer *intends* to bring about a shift and thereby to exert an action on the system, whereas language premeditates nothing. The pieces of language are shifted—or rather modified—spontaneously and fortuitously. The umlaut of *Hände* for *hanti* and *Gäste* for *gasti* (see p. 83) produced a new system for forming the plural but also gave rise to verbal forms like *trägt* from *trağit*, etc. In order to make the game of chess seem at every point like the functioning of language, we would have to imagine an unconscious or unintelligent player. This sole difference, however, makes the comparison even more instructive by showing the absolute necessity of making a distinction between the two classes of phenomena in linguistics. For if diachronic facts cannot be reduced to the synchronic system which they condition when the change is intentional, all the more will they resist when they set a blind force against the organization of a system of signs.

5. *The Two Linguistics Contrasted According to Their Methods and Principles*

Everywhere the opposition between diachrony and synchrony stands out.

For instance—and to begin with the most apparent fact—they are not of equal importance. Here it is evident that the synchronic viewpoint predominates, for it is the true and only reality to the community of speakers (see p. 81). The same is true of the linguist: if he takes the diachronic perspective, he no longer observes language but rather a series of events that modify it. People often affirm that nothing is more important than understanding the genesis of a particular state; this is true in a certain sense: the forces that have shaped the state illuminate its true nature, and knowing them protects us against certain illusions (see pp. 84 ff.); but this only goes to prove clearly that diachronic linguistics is not an end in itself. What is said of journalism applies to diachrony: it leads everywhere if one departs from it.

The methods of diachrony and synchrony also differ, and in two ways.

(a) Synchrony has only one perspective, the speakers', and its whole method consists of gathering evidence from speakers; to know to just what extent a thing is a reality, it is necessary and sufficient to determine to what extent it exists in the minds of speakers. Diachronic linguistics, on the contrary, must distinguish two perspectives. One of these, the *prospective*, follows the course of time; the other, the *retrospective*, goes back in time; the result is a duplication in methodology with which we shall deal in Part Five.

(b) A second difference results from delimiting the fields embraced by each of the two disciplines. Synchronic study has as its object, not everything that is simultaneous, but only the totality of facts corresponding to each language; separation will go as far as dialects and subdialects when necessary. The term *synchronic* is really not precise enough; it should be replaced by another—rather long to be sure—*idiosynchronic*. Against this, diachronic linguistics not only does not need but even rejects such specialization; the terms that it studies do not necessarily belong to the same language (compare Proto-Indo-European **esti*, Greek *esti*,

German *ist*, and French *est*). The succession of diachronic events and their multiplication in space are precisely what creates the diversity of idioms. To justify the associating of two forms, it is enough to show that they are connected by a historical bond, however indirect it may be.

The foregoing oppositions are neither the most striking nor the most profound. One consequence of the radical antimony between the evolutionary and the static fact is that all notions associated with one or the other are to the same extent mutually irreducible. Any notion will point up this truth. The synchronic and diachronic "phenomenon," for example, have nothing in common (see p. 85). One is a relation between simultaneous elements, the other the substitution of one element for another in time, an event.

We shall also see (p. 107) that diachronic and synchronic identities are two very different things; historically the French negation *pas* is identical to the substantive *pas* 'step,' whereas the two forms are distinct in modern French. These observations would suffice to show the necessity of not confusing the two viewpoints, but nowhere is this necessity more apparent than in the distinction we are about to make.

6. *Synchronic and Diachronic Law*

It is a popular practice to speak of laws in linguistics. But are the facts of language actually governed by laws? If so, what are they like? Since language is a social institution, one might assume *a priori* that it is governed by prescriptions analogous to those that control communities. Now every social law has two basic characteristics: it is *imperative* and it is *general*; it comes in by force and it covers all cases—within certain limits of time and place, of course.

Do the laws of language fit this definition? The first step in answering the question—in line with what has just been said—is to separate once more the synchronic and diachronic areas. The two problems must not be confused; speaking of linguistic law in general is like trying to pin down a ghost.

Here are some examples, taken from Greek, in which the two classes are intentionally jumbled:

1. Proto-Indo-European voiced aspirates became voiceless: **dhūmos* → *thūmos* 'breath of life,' **bherō* → *phérō* 'I bear,' etc.

2. The accent never falls farther back than the antepenult.

3. All words end in a vowel or in *s*, *n*, or *r*, to the exclusion of all other consonants.

4. Prevocalic initial *s* became *h* (sign of aspiration): **septm* (Latin *septem*) → *heptá*.

5. Final *m* changed to *n*: **jugom* → *zugón* (cf. Latin *jugum*).⁵

6. Final occlusives fell: **gunaik* → *gúnai*, **epherst* → *éphere*, **epheront* → *épheron*.

Law 1 is diachronic: *dh* became *th*, etc. Law 2 expresses a relation between the word-unit and accent, a sort of contract between two coexisting terms; it is a synchronic law. The same is true of Law 3 since it concerns the word-unit and its ending. Laws 4, 5, and 6 are diachronic: *s* became *h*; *-n* replaced *-m*; *-t*, *-k*, etc. disappeared without leaving a trace.

We should also notice that Law 3 is the result of 5 and 6; two diachronic facts created a synchronic fact.

After we separate the two classes of laws, we see that Laws 2 and 3 are basically different from Laws 1, 4, 5, and 6.

The synchronic law is general but not imperative. Doubtless it is imposed on individuals by the weight of collective usage (see p. 73), but here I do not have in mind an obligation on the part of speakers. I mean that *in language* no force guarantees the maintenance of a regularity when established on some point. Being a simple expression of an existing arrangement, the synchronic law reports a state of affairs; it is like a law that states that trees in a certain orchard are arranged in the shape of a quincunx. And the arrangement that the law defines is precarious precisely because it is not imperative. Nothing is more regular than the synchronic law that governs Latin accentuation (a law comparable in every way to Law 2 above); but the accentual rule did not resist the

⁵ According to Meillet (*Mem. de la Soc. de Ling.*, IX, pp. 365 ff.) and Gauthiot (*La fin du mot indo-européen*, pp. 158 ff.), final *-m* did not exist in Proto-Indo-European, which used only *-n*; if this theory is accepted, Law 5 can be stated in this way: Greek preserved every final *-n*; its demonstrative value is not diminished since the phonetic phenomenon that results in the preservation of a former state is the same in nature as the one that manifests a change (see p. 145). [Ed.]

forces of alteration and gave way to a new law, the one of French (see above p. 86). In short, if one speaks of law in synchrony, it is in the sense of an arrangement, a principle of regularity.

Diachrony, on the contrary, supposes a dynamic force through which an effect is produced, a thing executed. But this imperative-ness is not sufficient to warrant applying the concept of law to evolutionary facts; we can speak of law only when a set of facts obeys the same rule, and in spite of certain appearances to the contrary, diachronic events are always accidental and particular.

The accidental and particular character of semantic facts is immediately apparent. That French *poutre* 'mare' has acquired the meaning 'piece of wood, rafter' is due to particular causes and does not depend on other changes that might have occurred at the same time. It is only one accident among all those registered in the history of the language.

As for syntactical and morphological transformations, the issue is not so clear from the outset. At a certain time almost all old subject-case forms disappeared in French. Here a set of facts apparently obeys the same law. But such is not the case, for all the facts are but multiple manifestations of one and the same isolated fact. The particular notion of subject was affected, and its disappearance naturally caused a whole series of forms to vanish. For one who sees only the external features of language, the unique phenomenon is drowned in the multitude of its manifestations. Basically, however, there is but one phenomenon, and this historical event is just as isolated in its own order as the semantic change undergone by *poutre*. It takes on the appearance of a "law" only because it is realized within a system. The rigid arrangement of the system creates the illusion that the diachronic fact obeys the same rules as the synchronic fact.

Finally, as regards phonetic changes, exactly the same is true. Yet the popular practice is to speak of phonetic laws. Indeed, it is said that at a given time and in a given area all words having the same phonic features are affected by the same change; for example, Law 1 on page 92 (**dhūmos* → Greek *thūmos*) affects all Greek words containing a voiced aspirate (cf. **nebhos* → *néphos*, **medhu* → *méthu*, **anghō* → *ánkhō*, etc.); Law 4 (**septm* → *heptá*) applies to **serpō* → *hérpō*, **sūs* → *hūs*, and to all words that begin

with *s*. This regularity, which has at times been disputed, is apparently firmly established; obvious exceptions do not lessen the inevitability of such changes, for they can be explained either by more special phonetic laws (see the example of *trikhes: thriksi*, p. 97) or by the interference of facts of another class (analogy, etc.). Nothing seems to fit better the definition given above for the word law. And yet, regardless of the number of instances where a phonetic law holds, all facts embraced by it are but manifestations of a single particular fact.

The real issue is to find out whether phonetic changes affect words or only sounds, and there is no doubt about the answer: in *nephos, methu, ankhō*, etc. a certain phoneme—a voiced Proto-Indo-European aspirate—became voiceless, Proto-Greek initials became *h*, etc.; each fact is isolated, independent of the other events of the same class, independent also of the words in which the change took place.⁶ The phonic substance of all the words was of course modified, but this should not deceive us as to the real nature of the phenomenon.

What supports the statement that words themselves are not directly involved in phonetic transformations? The very simple observation that these transformations are basically alien to words and cannot touch their essence. The word-unit is not constituted solely by the totality of its phonemes but by characteristics other than its material quality. Suppose that one string of a piano is out of tune: a discordant note will be heard each time the one who is playing a melody strikes the corresponding key. But where is the discord? In the melody? Certainly not; the melody has not been affected; only the piano has been impaired. Exactly the same is true in phonetics. Our system of phonemes is the instrument we play in order to articulate the words of language; if one of its elements is modified, diverse consequences may ensue, but the modification itself is not concerned with the words which are, in a manner of speaking, the melodies of our repertory.

⁶ Of course the examples cited above are purely schematic: linguistics is right in trying currently to relate to the same initial principle the largest possible series of phonetic changes; for instance, Meillet explains all the transformations of Greek occlusives by progressive weakening of their articulation (see *Mem. de la Soc. de Ling.*, IX, pp. 163 ff.). Naturally the conclusions on the nature of phonetic changes are in the last analysis applicable to these general facts, wherever they exist. [Ed.]

Diachronic facts are then particular; a shift in a system is brought about by events which not only are outside the system (see p. 84), but are isolated and form no system among themselves.

To summarize: synchronic facts, no matter what they are, evidence a certain regularity but are in no way imperative; diachronic facts, on the contrary, force themselves upon language but are in no way general.

In a word—and this is the point I have been trying to make—neither of the two classes of facts is governed by laws in the sense defined above, and if one still wishes to speak of linguistic laws, the word will embrace completely different meanings, depending on whether it designates facts of one class or the other.

7. *Is There a Panchronic Viewpoint?*

Up to this point the term law has been used in the legal sense. But cannot the term also be used in language as in the physical and natural sciences, i.e. in the sense of relations that are everywhere and forever verifiable? In a word, can not language be studied from a panchronic viewpoint?

Doubtless. Since phonetic changes have always occurred and are still occurring, this general phenomenon is a permanent characteristic of speech; it is therefore one of the laws of speech. In linguistics as in chess (see pp. 88 ff.) there are rules that outlive all events. But they are general principles existing independently of concrete facts. When we speak of particular, tangible facts, there is no panchronic viewpoint. Each phonetic change, regardless of its actual spread, is limited to a definite time and territory; no change occurs at all times and in all places; change exists only diachronically. These general principles are precisely what serve as a criterion for determining what belongs to language and what does not. A concrete fact that lends itself to panchronic explanation cannot belong to language. Take the French word *chose* 'thing': from the diachronic viewpoint it stands in opposition to the Latin word from which it derives, *causa*; from the synchronic viewpoint it stands in opposition to every word that might be associated with it in Modern French. Only the sounds of the word considered independently (*šəz*) are susceptible of panchronic observation, but

they have no linguistic value. Even from the panchronic viewpoint *şoz*, considered in a chain like *ün şoz admirablə* 'an admirable thing,' is not a unit but a shapeless mass; indeed, why *şoz* rather than *qza* or *nşo*? It is not a value, for it has no meaning. From the panchronic viewpoint the particular facts of language are never reached.

8. *Consequences of the Confusing of Synchrony and Diachrony*

Two instances will be cited:

(a) Synchronic truth seems to be the denial of diachronic truth, and one who has a superficial view of things imagines that a choice must be made; this is really unnecessary; one truth does not exclude the other. That French *dépit* 'spite' originally meant contempt does not prevent the word from having a completely different meaning now; etymology and synchronic value are distinct. Similarly, traditional grammar teaches that the present participle is variable and shows agreement in the same manner as an adjective in certain cases in Modern French (cf. *une eau courante* 'running water') but is invariable in others (cf. *une personne courant dans la rue* 'a person running in the street'). But historical grammar shows that it is not a question of one and the same form: the first is the continuation of the variable Latin participle (*currentum*) while the second comes from the invariable ablative form of the gerund (*currendō*).⁷ Does synchronic truth contradict diachronic truth, and must one condemn traditional grammar in the name of historical grammar? No, for that would be seeing only half of the facts; one must not think that the historical fact alone matters and is sufficient to constitute language. Doubtless from the viewpoint of its origin the participle *courant* has two elements, but in the collective mind of the community of speakers, these are drawn together and fused into one. The synchronic truth is just as absolute and indisputable as the diachronic truth.

(b) Synchronic truth is so similar to diachronic truth that people confuse the two or think it superfluous to separate them. For example, they try to explain the meaning of French *père* 'father'

⁷ This generally accepted theory has been recently but, we believe, unsuccessfully attacked by M. E. Larch (*Das invariable Participium praesentis*, Erlangen, 1913); there was then no reason for eliminating an example that would retain its didactic value. [Ed.]

by saying that Latin *pāter* meant the same thing. Another example: Latin short *a* became *i* in noninitial open syllables; beside *faciō* we have *conficiō*, beside *amīcus*, *inimīcus*, etc. The law is often stated in this way: "The *a* of *faciō* becomes *i* in *conficiō* because it is no longer in the first syllable." That is not true: never did the *a* "become" *i* in *conficiō*. To re-establish the truth one must single out two periods and four terms. Speakers first said *facio*—*confacio*; then, *confacio* having been changed to *conficiō* while *faciō* remained unchanged, they said *faciō*—*conficiō*:

<i>faciō</i> ←————→ <i>confaciō</i>	Period A
<i>faciō</i> ←————→ <i>conficiō</i>	Period B

If a "change" occurred, it is between *confaciō* and *conficiō*; but the rule, badly formulated, does not even mention *confaciō*! Then beside the diachronic change there is a second fact, absolutely distinct from the first and having to do with the purely synchronic opposition between *faciō* and *conficiō*. One is tempted to say that it is not a fact but a result. Nevertheless, it *is* a fact in its own class; indeed, all synchronic phenomena are like this. The true value of the opposition *faciō*: *conficiō* is not recognized for the very reason that the opposition is not very significant. But oppositions like *Gast*: *Gäste* and *geben*: *gibt*, though also fortuitous results of phonetic evolution, are nonetheless basic grammatical phenomena of the synchronic class. The fact that both classes are in other respects closely linked, each conditioning the other, points to the conclusion that keeping them apart is not worthwhile; in fact, linguistics has confused them for decades without realizing that such a method is worthless.

The mistake shows up conspicuously in certain instances. To explain Greek *phuktós*, for example, it might seem sufficient to say that in Greek *g* or *kh* became *k* before voiceless consonants, and to cite by way of explanation such synchronic correspondences as *phugeîn*: *phuktós*, *lékhos*: *léktron*, etc. But in a case like *trikhēs*: *thriksi* there is a complication, the "passing" of *t* to *th*. The forms can be explained only historically, by relative chronology. The Proto-Greek theme **thrikh*, followed by the ending *-si*, became *thriksi*, a very old development identical to the one that produced

léktron from the root *lekh-*. Later every aspirate followed by another aspirate in the same word was changed into an occlusive, and **thrikhes* became *trikhes*; naturally *thriksi* escaped this law.

9. Conclusions

Linguistics here comes to its second bifurcation. We had first to choose between language and speaking (see pp. 17 ff.); here we are again at the intersection of two roads, one leading to diachrony and the other to synchrony.

Once in possession of this double principle of classification, we can add that everything diachronic in language is diachronic only by virtue of speaking. It is in speaking that the germ of all change is found. Each change is launched by a certain number of individuals before it is accepted for general use. Modern German uses *ich war, wir waren*, whereas until the sixteenth century the conjugation was *ich was, wir waren* (cf. English *I was, we were*). How did the substitution of *war* for *was* come about? Some speakers, influenced by *waren*, created *war* through analogy; this was a fact of speaking; the new form, repeated many times and accepted by the community, became a fact of language. But not all innovations of speaking have the same success, and so long as they remain individual, they may be ignored, for we are studying language; they do not enter into our field of observation until the community of speakers has adopted them.

An evolutionary fact is always preceded by a fact, or rather by a multitude of similar facts, in the sphere of speaking. This in no way invalidates but rather strengthens the distinction made above since in the history of any innovation there are always two distinct moments: (1) when it sprang up in individual usage; and (2) when it became a fact of language, outwardly identical but adopted by the community.

The following table indicates the rational form that linguistic study should take:

(Human) Speech	{	Language	{	Synchrony
		Speaking		Diachrony

One must recognize that the ideal, theoretical form of a science is not always the one imposed upon it by the exigencies of practice; in linguistics these exigencies are more imperious than anywhere else; they account to some extent for the confusion that now predominates in linguistic research. Even if the distinctions set up here were accepted once and for all, a precise orientation probably could not be imposed on investigations in the name of the stated ideal.

In the synchronic study of Old French, for instance, the linguist works with facts and principles that have nothing in common with those that he would find out by tracing the history of the same language from the thirteenth to the twentieth century; on the contrary, he works with facts and principles similar to those that would be revealed in the description of an existing Bantu language, Attic Greek of 400 B.C. or present-day French, for that matter. These diverse descriptions would be based on similar relations; if each idiom is a closed system, all idioms embody certain fixed principles that the linguist meets again and again in passing from one to another, for he is staying in the same class. Historical study is no different. Whether the linguist examines a definite period in the history of French (for example, from the thirteenth to the twentieth century) Javanese, or any other language whatsoever, everywhere he works with similar facts which he needs only compare in order to establish the general truths of the diachronic class. The ideal would be for each scholar to devote himself to one field of investigation or the other and deal with the largest possible number of facts in this class; but it is very difficult to command scientifically such different languages. Against this, each language in practice forms a unit of study, and we are induced by force of circumstances to consider it alternately from the historical and static viewpoints. Above all else, we must never forget that this unit is superficial in theory, whereas the diversity of idioms hides a profound unity. Whichever way we look in studying a language, we must put each fact in its own class and not confuse the two methods.

The two parts of linguistics respectively, as defined, will be the object of our study.

Synchronic linguistics will be concerned with the logical and

psychological relations that bind together coexisting terms and form a system in the collective mind of speakers.

Diachronic linguistics, on the contrary, will study relations that bind together successive terms not perceived by the collective mind but substituted for each other without forming a system.