Speech and Writing: Two Distinct Systems of Signs

Speech, Writing, and the General Linguistic Faculty

The status of writing and its relationship to (1) the language system; and (2) to the spoken language have presented Saussure's commentators with a number of difficulties of interpretation. The first mention in CLG ((Saussure, Ferdinand de. 1971 [1915]. *Cours de Linguistique Générale.* Paris: Payot.

– 1983. *Course in General Linguistics.* Trans. Roy Harris. London: Duckworth.

– 1967. *Cours de Linguistique Générale.* Critical edition in three volumes, ed. Rudolf Engler, Wiesbaden: Otto Harrassowitz.)) of the visual image as a possible resource for making linguistic meanings occurs when Saussure discusses Whitney's claim that it is purely by chance that the human vocal apparatus is used to produce linguistic signs. Saussure considers Whitney's ((Whitney, William Dwight. 1979 [1875]. *The life and growth of language.* New York: Dover.)) position to be an extreme one. Nevertheless, he derives an important lesson from it:

" … for Whitney, who takes the language system [la langue] to be a social institution on the same level as all the others, it is by chance, for simple reasons of convenience, that we use the vocal apparatus as the instrument of the language system; men could just as well have chosen gesture and used visual images in place of acoustic images. Doubtless, this thesis is too absolute; the language system is not a social institution which is like the others in all respects […]; moreover, Whitney goes too far when he says that our choice [of the vocal apparatus] fell by chance on the organs of

speech; it was to be sure imposed on us in some way by nature. But on the essential point, the American linguist seems to us to be right: the language system is a convention, and the nature of the sign on which one is in agreement is indifferent. The question of the vocal apparatus is, then, secondary as far as the problem of language [langage] is concerned".(CLG: 26)

Whitney "goes too far" because he attributes to chance or blind necessity the adaptive emergence of the vocal apparatus as a means of communicating linguistically with one's fellows. Presumably, the rest is left to inheritance in such a (Darwinist) view after chance has started things off. This view leaves nothing to the agency of the individuals in whom language first developed. That is, this change "fell by chance" to the vowel organs, rather than to the agents who use the vocal organs for the purposes of socially organized linguistic interaction. It is a random mutation occurring at a lower scalar level than the individual agents who use their vocal apparatus for determinate social purposes. Saussure claims that the vocal apparatus is "secondary" as far as language is concerned. What does this mean? In my view, this may be taken to refer to the ways in which the lower order biological organization – the vocal apparatus and its functioning – is integrated into that of the higher order social-semiological system of langue. This means that the latter cannot be explanatorily reduced to the former. In this process of 'upwards' integration, the bodily potential afforded by the vocal apparatus is reconstructed and directed towards specifically social-semiological ends; it becomes a means whereby the individual makes contact with others and hence increases his or her own agency in the social world. Whitney's explanation, as it stands, cannot explain why it is that the vocal gestures of nonhuman primates such as the chimpanzee and the bonobo did not develop into linguistic communication. If the organs which produce human speech sounds had evolved for the sole purpose of breathing, chewing, licking, grabbing, swallowing, smelling, and so on

(Abercrombie ((Abercrombie, David. 1967. *Elements of General Phonetics.* Edinburgh: Edinburgh University Press.
)) 1967: 20), then it would be difficult to explain the substantial differences between the vocal apparatus and the nervous systems of humans, on the one hand, and nonhuman primates, on the other (Peng ((Peng, Fred C.C. 1994 'Language disorders and brain function' *Acta Neurologica Sinica* 3,3: 103-30.)) 1994: 111). The vocal apparatus of nonhuman primates such as chimpanzees did not develop for the learning of oral language presumably because primate forms of social organization did not require it (Kendon ((Kendon, Adam. 1991. 'Some considerations for a theory of language origins'. *Man* 26, 199-221.)) 1991: 112, quoted in Armstrong et al ((Armstrong, David F, William C. Stokoe, Sherman E. Wilcox. 1995. *Gesture and the Nature of Language.* Cambridge: Cambridge University Press.)) 1995: 145).

From the point of view of the language system, the linguistic sign may be realized in a number of different perceptual-motor modalities. These include sign language, writing, and speech. There is, then, no necessary or naturalistic connection between the neurophysiological processes involved in vocal articulation and the language system as a whole. That is, the language system is not organized solely or even primarily on the basis of the neuroanatomical substrate which enables the individual to produce coarticulated speech sounds or any other modality of linguistic semiosis. For this reason, it cannot be explained in terms of or reduced to the workings of the vocal apparatus. What interests Saussure is the need to base the explanation of the language system on social-semiological criteria, rather than on biological criteria of human anatomy. In an admittedly inchoate way, he recognizes that structures at the social-semiological level regulate and entrain the individual's biological predisposition to interact with others. The social-semiological resources of langue provide the stable regulating environment in which the individual's

sign-making faculty develops. Such a faculty may be seen as a precursor of the principle of epigenesis in biology. Thus, the faculty specifies the normal routes along which the individual obtains necessary information from this environment at the same time that it provides the individual with neuroanatomical capabilities for selecting from and adaptively modifying this information:

" … it could be said that it is not spoken language[le langage parlé] which is natural to man, but the faculty of constituting a language system [une langue], that is to say, a system of distinct signs corresponding to distinct ideas". (CLG: 26)

The language faculty, as Saussure defines it, is what enables individuals to participate in and hence to be entrained by the higher-order social-semiological system of langue. The centrality of meaning, rather than neuroanatomical criteria, in the explanation of the language system means that the latter cannot be localized in any specific centre in the brain or in any particular anatomical substrate. Saussure refers to Broca's ((Broca, Paul. 1965. 'On the speech center'. In Richard J. Herrnstein and Edwin G. Boring (eds.), *A Source Book in the History of Psychology,* trans. Mollie D. Boring, Cambridge, Mass.: Harvard University Press, 223-9. [(1861) 'Remarques sur le siège de la faculté du langage articulé, suivie d'une observation d'aphémie', *Bulletin de la Société Anatomique de Paris* 2, 6: 343-57].)) anatomical findings in this regard. The anatomical research of the French physician, Paul Broca (1861), is sometimes cited as evidence of the localization of language in the third convolution of the left frontal lobe of the brain. However, Broca's clinical findings in connection with his patient, Tan Tan, do not specifically state that language is so localized. What is localized, according to Broca, is the ability to produce speech sounds, i.e., 'the faculty of articulate speech' (see also Harris ((Harris, Roy. 1987. *Reading Saussure. A critical commentary on the Cours de*

linguistique générale. London: Duckworth.)) 1987: 16). That is, the localization identified by Broca would be connected with the stratum of the phonic signifier. Subsequently, Broca's claim has often been taken as evidence for the localization of a more general language faculty (see McCarthy and Waddington ((McCarthy, Rosaleen A. and Elizabeth K. Warrington. 1990. *Cognitive Neuropsychology: A clinical introduction.* New York and London: Academic Press.)) 1990: 2-5 for discussion). In my view, this is a misreading, which Saussure, as we shall see below, does not subscribe to. In actual fact, Broca identifies a specific brain function which is relevant to the production, or articulation, of speech sounds. This does not mean it is the same as the whole of language. Rather, it is just one of the areas in the brain which is functionally involved in the production and comprehension of language (Peng 1994: 125).

The centrality of Broca's area lies in the fact that it is concerned with the production and coarticulation of the sound sequences onto which lexicogrammatical and semantic structures are mapped (Edelman ((Edelman, Gerald M. 1989. *The Remembered Present: A biological theory of consciousness.* New York: Basic Books.)) 1989: 174-5). Interestingly, Broca's patient was able to comprehend, if not produce, speech and tended to compensate, to some extent, his inability to coarticulate speech sounds with a system of gestures (Broca 1965 [1861]: 226). This may suggest the possibility of a deeper homology between the gestural dimension of vocal articulation and the manual-brachial modality of linguistic semiosis or sign language. Saussure makes it clear that whereas specific faculties such as those of articulating speech sounds or tracing graphic signs may be related to specific brain functions, the language system as a whole may not be so localized in any one part of the brain. Instead, language in the individual is the result of the global integration of many levels of neuroanatomical and perceptual-motor organization. It is not specific to any single centre in the brain or any specific perceptual-motor

substrate. In this way, Saussure provides a remarkable anticipation of some of the most recent research concerning language and brain functions (Edelman 1989: 179; Peng 1994: 124-5; Armstrong et al 1995: chap. 4). Here is how Saussure formulates the relationship between specific brain functions and langue:

"Broca discovered that the faculty of speaking [la faculté de parler] is localized in the third frontal convolution of the left hemisphere of the brain; this has also been used to attribute a natural character to language [langage]. But it is known that this localization has been observed for everything that is related to language [langage], including writing, and these observations, together with the observations made on the different forms of aphasia due to lesion in the localization centres, seem to indicate: 1. that the various disorders of oral language are caught up in a hundred ways with those of written language; 2. that in all cases of aphasia and agraphia, what is affected is not so much the ability to utter this or that sound or to trace this or that sign, but the ability to evoke by any means whatsoever the signs of a regular language. All this leads us to believe that above and beyond the functioning of the various organs there exists a more general ability, that which governs signs, and which would be the linguistic faculty par excellence.(CLG: 26-7; emphasis in original)

The two quotations cited above show (1) that spoken language has no privileged natural status in Saussure's theory; and (2) language is not a natural kind. For Saussure, the language faculty enables the individual to "evoke by any means whatsoever the signs of a regular language". The global character of language in the individual means that any number of diverse neuroanatomical capabilities may be entrained in the coarticulation of the gestures – vocal or manual-bracial – which are the substrate of linguistic interaction. Saussure does not ascribe a specifically biological or natural status to the linguistic faculty par excellence. He remains neutral on

this point. Certainly, it is possessed by all individuals who are not otherwise impaired for organic reasons. However, the function of this general faculty, as the above passage shows, is to integrate the functioning of the more specific faculties which are involved in the production and comprehension of all of the various modalities of linguistic semiosis – speech, writing, sign language. The basis of this integration, which would seem to include all of the relevant neuroanatomical and neurophysiological functions, is **meaning.**

Saussure's argument is very much in line with recent proposals that language is not uniquely specialized to the brain in conjunction with the vocal and auditory apparatus per se. Instead, these along with the manual-brachial and visual perceptual-motor systems are all involved with language (Armstrong et al 1995: 19). In this way the linguistic faculty par excellence,which refers to the lower scalar level of the individual dimension of linguistic production and reception – i.e., the body's potential to interact in socially organized ways with others – meshes with the higher-order language or other semiotic systems of a given community. The linguistic faculty, whether natural or not, is common to all individuals, irrespective of which language they speak. A language system, on the other hand, is social-semiological in character and varies from one language community to another (CLG: 44; 311-17). Saussure concludes his discussion of this issue with the following remarks which lend further support to the precursor epigenetic perspective that I proposed above:

"In order to attribute to the language system first place in the study of language, one may finally make this argument prevail, that the faculty – natural or not – of articulating words is only exercised with the aid of an instrument created and provided by the collectivity; it is not, therefore, chimerical to say that it is the language system which gives language its unity". (CLG: 27)

Saussure's ambivalence as to whether this 'faculty' is "natural or not", along with its dependence on a socially organized language system for its full unfolding or 'ecercise', means that (1) he avoids any need to specify a complete, prewired language faculty (cf. module or program) in the brain; and (2) he draws attention to the dialectical interdependence of the two scalar levels. That is, he does not presuppose a simple unilinear causality, whether from organism (inside) to environment (outside), or vice versa.

Signs are not localizeable in any given part of the brain. Rather, they are the result of the global integration of the resources of the brain and the various perceptual-motor systems which are used in the articulating of the various modalities of linguistic semiosis. These resources include specific abilities such as those of articulating speech sounds, tracing visual-graphic images on a treated surface and making manual-brachial gestures. However, these resources have to be integrated with the signifieds – the lexicogrammatical and conceptual structures – of the language system. These articulatory resources constitute the perceptual-motor substrate of the **signifier.** They do not on their own constitute the signs of a given language. The bodily processes of articulation, irrespective of perceptual-motor modality, are integrated into higher-order social-semiological structures and relations.

In the process of integrating the biological into the social-semiological, the latter interpret the former and in this way individuals may establish social contact with others. Meaning is an embodied relation between self and nonself on the basis of the individual's entraining into the higher-order and transindividual structures and relations of langue. For this reason, the social-semiological level of organization cannot be reduced to the lower-level organismic one. Saussure's perspective emphasies the potentially modifying effects of emergent higher levels of social-semiological organization on the lower level biological one. Thus, the various modalities

of linguistic semiosis discussed above constitute parts of a more general sign-making faculty which is subordinated to the supervening effects of higher, emergent levels of social-semiological organization such as langue. From the perspective of the individual, this faculty is a general potential to mean, of which the various linguistic modalities are specific, derived instances. This means that semiosis in Saussure's account cannot be causally located in the lower-level biological organism per se on the basis of, say, natural selection operating on individual genes. The neuroanatomical and perceptual-motor resources which are involved in the production and reception of linguistic signs of various kinds are integrated into and are construed by the higher-order level of the two orders of difference – viz. phonic, graphic-visual, gestural and conceptual – of a given language system. It is this process of integration which enables individuals to create and share experience that is not directly tied to the individual's neuroanatomical capabilities per se or to the world of immediately perceived experience.

Moreover, it is the social dimension of langue which provides the interface between the individual dimension in the brain and the speaker-hearer's interaction with other individuals in the speech circuit. The simultaneously individual and social dimensions of langue provide the bridge between the individual's neuroanatomical capabilities and the individual's use (execution and interpretation) of these resources in specific contexts:

"In order to find in the totality of language [l'ensemble du langage] the sphere which corresponds to the language system [la langue],one must place before oneself the individual act, which allows the speech circuit to be reconstituted". (CLG: 27)

The arguments discussed above draw attention to a complex chain of hierarchically organized factors which relate the general linguistic sign-making faculty to the individual act of in Figure 1:

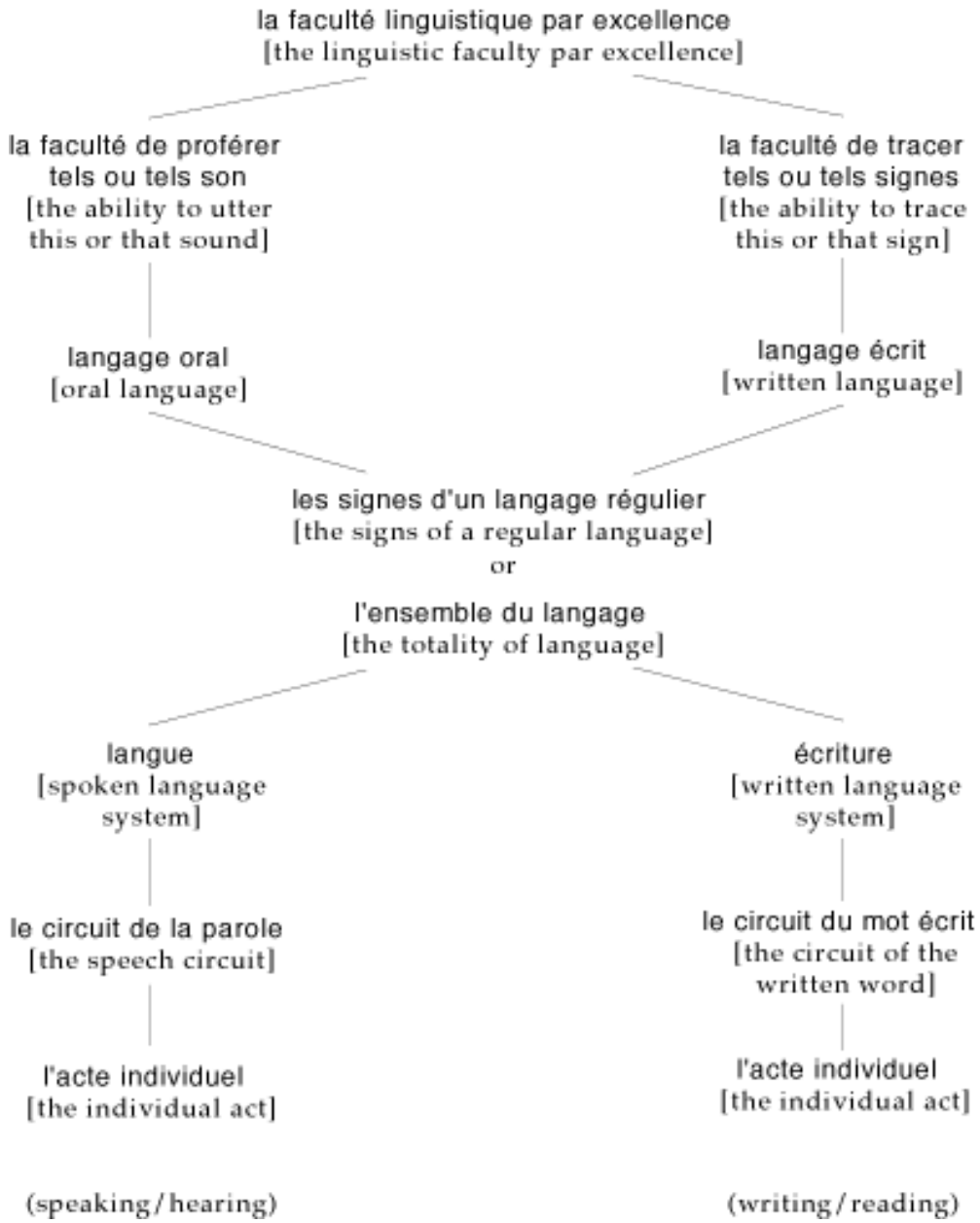

Figure 1: Hierarchical integration of individual linguistic act with general linguistic faculty.

In Figure 1 I have reconstructed a parallel set of possibilities for suggesting how, on the basis of Saussure's own arguments, writing no less than speech and by extension sign language may be integrated into the overall model of meaning-making which Saussure proposes.

Does Saussure Ontologically Privilege the Spoken Word?: A Reply to Derrida.

In section 1, I showed that: (1) the human ability to produce coarticulated speech sounds does not stand in a necessary or privileged relation to the language system; and (2) the language system is a system of pure values whose function is to combine the two orders of difference – phonic and conceptual – in the making of signs (CLG: 156-7). Saussure recognizes that all of the perceptual-motor modalities mentioned above may constitute the basis for linguistic interaction on account of the supervening role of the general sign-making faculty. That is, there is no privileged natural relationship between the spoken language system in particular and the general sign-making faculty. As Saussure points out, this may be materially manifested in speech, writing, and sign language, all of which are globally integrated in the brain by the general sign-making faculty.

In recent years, a number of scholars have advanced arguments that suggest that the intermodal nature of linguistic organization in the individual supports the view that the underlying basis of language is fundamentally gestural, irrespective of the specific modality which is deployed. Thus, vocal articulation, signing, and writing are all forms of gesturing. A gesture

in this view is a coordinated pattern of articulatory movements directed toward some end. In the same way that vocal articulation or gesturing is phonologically directed, all the various gestural modalities may be said to be directed and constrained by a supervening system of social-semiological values. From both the production and reception points of view, vocal articulation is shaped and construed by the phonic values which are internal to the given language system or, more particularly, its phonology. In this way, bodily activity is coordinated and entrained according to the requirements of social meaning-making. This is no less true of writing. In such a view, handwriting is a permanent record on a treated surface of the skilled hand-arm-eye-writing tool movements required to produce the shapes of the individual letters. Such movements may be seen as global-synthetic gestural complexes whose execution leads to a permanent record of their tracing on a surface. These too are shaped by the system of graphic-visual values that are internal to a given writing system. Further, the fact that writing disorders "dissociate" from other disorders of voluntary action (apraxias) lends further support to the hypothesis that the writing action is a gestural modality which is globally integrated with the other linguistic modalities in the left hemisphere of the brain (McCarthy and Waddington 1990: 249).

I have shown above that Saussure ascribes no privilgegd ontological status to speech with respect to writing. In the context of the arguments I shall develop in this lecture, the importance of the above observations cannot be underestimated. This is especially so in the light of Derrida's influential claim that Saussure subscribes to a logocentric 'metaphysics of presence' whereby the signifier and, in particular, the graphic signifier are said to be 'derivative' and 'external' with respect to the phonic signifier. Here is how Derrida puts the matter:

“All signifiers, and first and foremost the written signifier, are derivative with regard to what would wed the voice indissolubly to the mind or to the thought of the signified sense, indeed to the thing itself […]. The written signifier is always technical and representative. It has no constitutive meaning. This derivation is the very origin of the notion of “signifier.” The notion of the sign always implies within itself the distinction between signifier and signified, even if, as Saussure argues, they are distinguished simply as the two faces of one and the same leaf. This notion remains therefore within the heritage of that logocentrism which is also a phonocentrism: absolute proximity of voice and being, of voice and the meaning of being, of voice and the ideality of meaning.” (Derrida ((Derrida, Jacques. 1976 [1967]. Of Grammatology. Trans. Gayatri Chakravorty Spivak. Baltimore and London: The Johns Hopkins University Press.)) 1976 [1967]: 11-2)

Now, Derrida assumes that the signifier has a purely external and ‘representational’ function with respect to the signified. Yet, the signifier, no less than the signified, is constitutive of the meaning-making process in Saussure’s account (Thibault ((Thibault, Paul J. 1996. *Re-reading Saussure. The dynamics of signs in social life.* London and New York: Routledge.)) 1996: chap. 10). Derrida’s assumption fails to understand the semiological reasons for the stratification of the sign in Saussure’s account. Only a non-semiological or formal theory of language in which form is a mere carrier or vehicle for a non-linguistic meaning or content would argue as Derrida does. Both signifier and signified are internal to language form in Saussure’s account. Both are constitutive of the meaning-making process in the sign. The signifier does not, therefore, represent a meaning which is external to it. Rather, it actively constitutes and enacts the overall process of making meaning in and through the signs that the system of values in langue gives rise to (Thibault 1996). Further, and as I shall in more detail in the next lecture, it is the specificallyvisual properties of the written signifier

that enable it to constitute meaning in the particular contextual domains in which writing operates. Nor is there any "absolute proximity of voice and being" in Saussure's account. The notion of a general sign-making faculty discussed above shows that Saussure gives no privileged ontological status to speech. Rather, he makes a methodological decision to focus his theoretical efforts on the spoken language system (langue) while at the same time recognizing the distinctive character of the written language system (écriture). What is fertile and productive about Saussure's distinction is that it leaves open the possibility – both theoretical and methodological – of a no less valid study of the written language system and the visual-graphic principles of organization of its signifiers. There is no reason in principle why a system of visual-graphic terms may not be postulated in relation to the conceptual terms in the written language system, and how these are combined to form the signs of the written language. In spite of Saussure's apparent relegation of écriture to a secondary or dependent status in relation to langue (Harris 1987: 16-7), there are sufficient reasons for arguing that by his own semiological criteria écriture may be studied in its own right. I shall develop this point in Lecture 2.

Derrida's argument also confuses a number of critically important terminological distinctions which Saussure makes in connection with the difference between langue and parole. Commenting on Saussure's decision to make the spoken word the object of linguistic science, Derrida has this to say:

"The form of the question to which he [Saussure, PJT] responded this entailed the response. It was a matter of knowing what sort of ***word*** *is the object of linguistics and what the relationships are between the atomic units that are the written and the spoken word. Now the word (vox) is already a unity of sense and sound, of concept and voice, or, to speak a more*

rigorously Saussurean language, of the signified and the signifier. This last terminology was moreover first proposed in the domain of spoken language alone, of linguistics in the narrow sense and not in the domain of semiology". (Derrida 1976 [1967]: 31)

In this passage, Derrida does not heed the importance of the distinction which Saussure makes between 'concept' and 'acoustic image', on the one hand, and 'signified' and 'signifier', on the other. The two sets of terms are not commensurate. They refer to two distinct perspectives on the sign. The former refers to the sign in the speech circuit. This is the instantial perspective of parole. The latter refers to the sign from the systemic perspective of langue (Thibault 1996: 215-6, 230-1).

In failing to accord this distinction its rightful place in Saussure's theory, Derrida is led to assume that the system perspective is **necessarily** based on the spoken language and that the written language is, therefore, excluded from this definition. However, Saussure's methodological decision to base his theory of langue on the spoken language does not mean that writing is bracketed out, ontologically speaking. Rather, the notion of the language system encompasses, as I shall argue in detail below, both the spoken and the written language systems.

In order to understand this last point, it is necessary to return to first principles. That is, the system of langue, as Saussure defines it, is founded on the two orders of difference – phonic and conceptual – that combine in the making of the forms (signs) of the spoken language. The two orders of difference comprise the differential relations among the phonic and conceptual terms which are selectively combined to produce language forms or signs. The signifiers and signifieds which so combine constitute the signs of the language system as seen from the point of view of the cross-coupling of the specifically phonic and conceptual orders. It does not

follow, however, that the written language is 'external' to the language system per se. More correctly, it is external to langue. That is, to the language system which is founded on the combination of specifically **phonic** and conceptual terms. This is a crucial point to which I shall return later.

Derrida's way of posing the problem is badly formulated. This is so in two ways. First, he does not ask the question as to what the language system would look like from the point of view of the cross-coupling of the **graphic** (not phonic) and conceptual orders of difference. Thus, the possibility that something analogous to the emergence of 'thought-sound' (CLG: 156) may also take place in the cross-coupling of thought-substance and visual-graphic substance is suppressed in Derrida's account. Secondly, he does not ask how the spoken language system and the written language system are systematically and internally related to each other. The one is not external to the other. Instead, there are complex relations of both partial homology and difference between the two systems. For this reason, I do not entirely share Harris's argument that the conclusion to be drawn from Saussure is that "writing is of interest to the linguist only insofar as it is amenable to treatment as a representation of langue: its other properties are strictly irrelevant" (1987: 17). In my view, it is precisely because of its other, specifically visual-graphic properties, that it poses specific methodological problems which Saussure seeks to avoid in his positing of langue as the object of study. This will be discussed in Lecture 2.

In eliding the terminological distinction Saussure upholds between concept/acoustic image (parole) and signified/signifier (langue), Derrida implies that the language system is necessarily based on the spoken language in Saussure's view. On the other hand, Saussure's distinction suggests, by definition, that the system may be variously manifested in spoken, written,

and other modalities. His decision to make langue, in the specific sense of the cross-coupling of the phonic and conceptual orders of difference, focal, does not a priori exclude the possibility that a semiological study of the language system may also take into account other possible manifestations in other linguistic modalities. If linguistic signs are constituted from the combining of the two orders of difference, then there is no a priori reason as to why this cannot take place on the basis of the combining of phonic, visual-graphic, or manual-brachial differences with conceptual differences. Further, Derrida's claim that the word is "already a constituted unity" in itself treats speech as ontologicallly prior, and in ways that Saussure does not. Language forms or signs are NOT pregiven in Saussure's account. Rather, they are **made** in and through the combining of the two orders of difference. That is the semiological principle which underlies all the various classes of social signs system, of which langue is just one instantiation. In arguing in this way, Derrida falsifies the semiologically stratified and emergwent character of the sign in Saussure's account. The spoken word is not 'already constituted' and, hence, ontologically prior to the written word. Rather, it arises from the combining of terms from the specifically phonic and conceptual orders of difference. In exactly the same way, the written word may be said to arise from the combining of terms from the graphic and conceptual orders of difference. There is no prior ontological unity of the voice with meaning. What is 'prior', logically speaking, are the systems of value-producing terms from the phonic, graphic, and conceptual orders of difference which are combined in the various modalities of linguistic semiosis which are based on sound and the visual image.

As Saussure himself points out,"langue is a system of signs for expressing ideas, and for this reason, comparable to writing, the alphabet of the deaf and dumb, symbolic rites, forms of politeness, military signals, etc." (CLG: 33). Now, the basis on which langue may be compared to other sign system depends on specifically semiological criteria. In particular, the ways

in which the two orders of difference are combined to form the signs of a given sign system (see above). langue may be compared to these others on the basis of both the similarities and differences between different sign systems. Saussure points out that in all these cases ‘ideas’ are expressed when conceptual terms are combined with some other order of difference in and through which the signifiers if the given system are constituted. In this connection, I take Saussure’s term ‘ideas’ to mean something like ‘conceptual meanings’, rather than something subjective, psychological and hence pre-semiotic. It follows, then, that signs based on the visual-graphic image, no less than those based on the acoustic image, serve to signify socially made and shareable meanings. There is no a priori reason why phonic substance should be privileged over visual-graphic substance. Both have the potential to enter into the processes of social semiosis, viz. when combined (cross-coupled) with the conceptual order of differences.

This does not mean that there is a language, or other semiological, system whose definition is totally abstracted from questions of which substance – phonic or graphic – is cross-coupled with the conceptual order. This is manifestly clear in Saussure’s phonological theory, where the phonic terms are the first order differences out of which phonological forms emerge (Lesson 3). In other words, the specifically phonic and graphic orders of difference have a shaping influence on the internal nature of the spoken and written language systems.

Saussure’s response to this issue is to propose the spoken and the written language systems as two distinct systems of signs. This follows from the fact that the phonic and graphic orders of difference differentially cross-couple with the conceptual order. Clearly, there is no graphic term comparable to, say, the phonic term [+nasality]. It follows, therefore, that the phonic and graphic orders of difference are not isomorphic. The way in which phonic terms – c.f. features in later terminology – configure to

produce phonological shapes or forms and the way in which graphic terms configure to produce graphological shapes or forms require explanations which deal with the specificity of both phonic and graphic substance. This specificity means, in turn, that their cross-coupling with the conceptual order differentially shapes the internal character of the spoken and written language systems. For this reason, the one cannot be assimilated to the other. Rather, each must be theorized and described on the basis of both the differences and the similarities between the two systems. This leads to the further question as to why Saussure directed his attention to the spoken, rather than to the written, language system.

Saussure's Reasons for the Methodological Privileging of langue.

My contention is, then, that the arguments I have put forward in the preceding sections support the view that Saussure's social-semiological theory of langue can be extended to writing and other modalities of linguistic semiosis. This in no way contradicts any of the basic principles of Saussure's theory. I shall shortly advance more detailed arguments in support of this position. But first a brief word on the reasons why Saussure decided to privilege the study of the language-system-based-on-sound, or langue. These reasons, which are both historical and methodological in character, reflect the kinds of problems which Saussure found himself up against in his attempt to define a place for an 'autonomous' linguistic science at the time that he delivered his lectures on general linguistics at the University of Geneva. These reasons may be summarised as follows:

- The overwhelming majority of the world's languages (past and present) have only a spoken language system
- the child learns to speak his or her mother tongue before learning to write

- 19th century historical and comparative linguistics were massively based on written evidence concerning languages which are no longer extant
- 19th philology was concerned with textual interpretation and commentary, rather than the theoretical reconstruction of the language system and the grammatical forms this makes possible (CLG: 14)
- writing and its associated literary traditions are based on normative and prescriptive codes
- the evolution of the spoken language system and that of the written language system, when the latter exists, are not synchronized
- theories of the sign in the Western tradition since classical antiquity have had no scientifically founded theory of the signifier (c.f. phonology and graphology). Hitherto, discussion of the sign was concerned, above all, with questions pertaining to the signified. In contrast, Saussure's phonological theory represents a pioneering and far-reaching attempt to integrate the study of the signifier with that of the signified in a unified account of language form.

It was for the above reasons that Saussure sets about the task of correcting what he sees as a massive bias towards the study of written texts in previous linguistic and philological studies. Saussure's perception of the problem has proved substantially correct: it is only in the past few decades that linguistics has begun to pay serious attention to spoken language, to analyse the substantial differences between speech and writing, and to show the relationships between them. Saussure did not achieve this. He did not analyse sufficiently large-scale syntagms (texts) so as to reveal the ways in which speech and writing deploy the lexicogrammatical resources of the language system in often very different ways (see Halliday ((Halliday, M.A.K. 1985. *Spoken and Written Language.* Geelong, Victoria: Deakin University Press.)) 1985). However, it must be said that the social-semiological metatheory which Saussure

began to elaborate in his Geneva lectures provides the foundations on which solutions to these problems can be developed. Such solutions simply did not and probably could not exist at the time Saussure delivered his lectures in Geneva.

Spoken and Written Linguistic Signs Are Both Concrete and Tangible.

A further set of reasons has to do with Saussure's focus on the language system. In this connection, it is worthwhile considering the following remarks which Saussure makes on the relationship between langue and parole:

"The language system no less than parole is a concrete object, and this is a great advantage for the study of it. Linguistic signs, in order to be essentially psychic, are not abstractions; the associations ratified by collective agreement, and which as a whole constitute the language system, are realities which have their centre in the brain. Moreover, the signs of the language system are, so to speak, tangible; writing [l'écriture] can fix them in conventional images, whereas it would be impossible to photograph in all their details acts of parole; the phonation of a word, however small it might be, represents an infinity of muscular movements which are extremely difficult to know and to represent. In the language system [langue], on the contrary, there is nothing more than the acoustic image, and this can be translated into a constant visual image. For if one abstracts from this multitude of movements which are necessary for realizing it in parole, each acoustic image is only, as we shall see, the sum of a limited number of elements or phonemes, liable in turn to be evoked by a corresponding number of signs in the written language system [l'écriture]. It is this possibility of fixing things relative to the language system that enables a dictionary and a grammar to be a faithful representation of it, the

language system [la langue] being the store of acoustic images, and writing [l'écriture] the tangible form of these images". (CLG: 32)

In this passage, Saussure points out that there is nothing fixed or tangible about the "infinity of muscular movements" which constitute the act of phonation (articulation) in parole, however concrete these are. The enormous variety of muscular and other movements which is potentially involved in these sensorimotor activities of phonation are 'fixed' or constrained by the acoustic image. It is the latter which belongs to the language system. The acoustic image functions as a higher-order constraint which controls and categorizes the neuromuscular activities involved in the articulation of a given speech sound. These are coordinated and entrained by the acoustic image so as to instantiate a sound which conforms to the schematic criteria imposed by the acoustic image. The acoustic image is a higher-order or more schematic category of sound. According to Wernicke's ((Wernicke, Carl. 1977. 'The aphasia symptom complex: a psychological study on an anatomical basis'. In Gertrude H. Eggert (ed.), *Wernicke's Work on Aphasia: A source book and review,* vol. 1: *Early Sources in Aphasia and Related Disorders,* The Hague and New York: Mouton, 91-145. [*Der Aphasische Symtomenkomplex: eine psychologische Studie auf der anatomischer Basis,* Breslau: Cohn & Weigert.])) (1977 [1874]: 105-6) neuroanatomical research, acoustic images are stored in acoustic memory and linked to the motor speech images by association. Acoustic images 'activate' the motor images whereby the neuromuscular activities of phonation are coordinated so as to produce a recognizeable speech sound (Wernicke 1977 [1874]: 106). The acoustic image is said to be more 'fixed' and 'tangible' because it specifies those structurally stable features which are criterial to the recognition and production of given speech sounds in spite of the many physical-material variations from one instantiation to another. That is why, as Saussure observes, it is made up of a "limited number of elements or phonemes".

These may, in turn, be “evoked” by corresponding signs in the written language system in the sense that there exist conventions for translating between the sound of a word and the sequence of letters corresponding to its spelling. It does not follow, however, that there is always a straightforward correspondence relation between the two systems, as the example of English shows very well.

It is only through parole that the linguist can reconstruct langue (CLG: 30-1). It is no accident that Saussure uses the word parole in this sense. The French word parole may be translated as ‘speech’ in English. That is, speech, rather than writing, is the linguist’s means of access to langue. Saussure does not say what a theory of the language system which is based on writing [écriture] might look like. This does not mean that such a theory cannot be developed. It can. This is an issue I shall return to below. But first, I should like to consider some aspects of the above passage in more detail.

Saussure does not say that the study of langue is based on parole. This would be a contradiction in terms: langue and parole are two methodologically distinct domains of linguistic inquiry. Saussure designates these two domains as ‘internal’ linguistics and ‘external’ linguistics, respectively. Further, both langue and parole are said to be “concrete in nature”. langue is dually concrete: (1) it exists in the conventions which are ratified by “collective agreement”(CLG: 32) and (2) it exists in the brains of each of the individuals whose interactions constitute some social group or language community (CLG: 38).

Parole is concrete in the sense that it is the physical-material instantiation of the language system in some act of phonation by a speaker. The methodological distinction between langue and parole is really a question of two different perspectives on the same overall phenomenon, which

Saussure refers to as “the global totality of language”. The difference between these two perspectives is, then, one of schematicity, to use the term I have borrowed from Ronald Langacker (1987). Thus, langue is more schematic; parole more specific and detailed. The concrete nature of langue also means that this is not a Platonically real, yet abstract object, as in Katz (1981). The methodological distinction between langue and parole does not translate into an opposition between the ‘abstract’ and the ‘concrete’. langue is not divorced from concrete social and psychic phenomena. It refers both to the collective conventions of a speech community as well as to the representations of these which the members of a community have ‘imprinted’ in their brains through the practices of parole.

Having said this, the remainder of the passage under consideration merits close reading. Saussure says that the signs of the language system [la langue] are “tangible”: “writing”, Saussure points out, “can fix them in conventional images”. Now, it is necessary here to heed very carefully the precise contours of Saussure’s argument. He does not say that writing makes the signs of the spoken language system [langue] ‘tangible’. Rather, they are already ‘tangible’ from the point of view of langue itself. That is, the acoustic image is itself ‘tangible’. The fact that this may be ‘fixed’ by a conventional graphic image in écriture only provides further evidence for this tangibility. Saussure does not say that linguistic signs are intangible until their ‘fixing’ as written images makes them ‘tangible’. The fact that they can be so ‘fixed’ is evidence of their tangibility in the first place. The word ‘tangible’, then, refers to the system perspective, irrespective of whether that system is based on the acoustic image or on conventional graphic-visual images. This is verified by the use of the epithet “conventional” in connection with the visual-graphic image. The real contrast in Saussure’s argument at this point is that between the conventional or schematic, yet tangible, character of acoustic and graphic images from the system perspective, on the one hand, and the far more specific and detailed

material reality of the muscular movements involved in phonation from the instance perspective, on the other. The use of the adversative conjunctive relation ‘whereas’ [tandis que] signals this very clearly. That is, the contrast Saussure sets up is one between a system perspective based on either speech **or** writing and an instance perspective, which is exemplified here by parole. The importance of this step in Saussure’s argument cannot be underestimated.

The tangibility of linguistic signs from the system point of view is not to be confused with the material specificity of concrete acts of parole. These are too detailed and subject to individual variation to be easily tangible in the way Saussure intends. Saussure’s point is that it is the schematic character – their structural stability – of acoustic and graphic images in the system which makes them tangible. Phonation, on the other hand, refers to the physical-material domain of the neurophysiological substrate which underpins acts of parole. In a given act of parole, this domain is cross-coupled with the social-semiological resources of langue to produce an act of social meaning-making. Thus far, Saussure’s arguments hinge on the possibility that the language system, at some suitably high level of generality, encompasses linguistic signs which are based on both the acoustic and the graphic image. That is, there are two distinct possibilities, systemically speaking, for making the linguistic sign tangible. These are the two systems which Saussure refers to as langue and écriture, respectively. The first refers to the language system as based on the acoustic image; the second to the language system as based on the visual-graphic image.

Langue and Écriture are Two Distinct Systems of Signs.

The fact that there are two distinct systems of signs is further evidenced by the fact that Saussure derives the acoustic image by a process of abstracting from “the multitude of muscular movements necessary for

realizing it in parole". Saussure's term 'realizing' means, in actual fact, instantiation. The move from langue to parole is an intra-stratal one of increased specificity. That is, from most schematic to most specific (Langacker ((Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar, Vol. 1: Theoretical prerequisites.* Stanford, Ca.: Stanford University Press.)) 1987: 68; Thibault 1996: 173-80). The crucial point here is that it is only after (not before) this process of abstracting from parole has taken place that the acoustic images of the spoken language system may be translated into "a corresponding number of signs in the written language system".

Langue and écriture are not, therefore, opposed to each other, as in Derrida's reading. Rather, the two terms are co-hyponyms on the same level of generality. They stand in a relationship of hyponymy to some still more superordinate notion of "the global totality of language" from which both are derived. This relationship may be schematized as in Figure 2.

system:	LANGUE	ECRITURE
instance:	PAROLE	?

Figure 2: langue and écriture as cohyponymous terms standing in a specific-general relation to "the global totality of language".

Both langue and écriture are specific and distinct systems of signs which are derived from "the global totality of language". In turn, the spoken system of langue is instantiated in acts of parole. Saussure does not provide a corresponding term to indicate what the instantiation – Saussure's term is 'realization' – of the system of écriture in acts of writing might be called. The reason he does not do so almost certainly lies in his decision to focus on langue, rather than écriture. Therefore, the further

question as to the instantiation of the system of écriture in acts of writing is not taken up in CLG.

The difficulties Saussure refers to in 'photographing' the muscular movements involved in phonation serve to illustrate the material differences between speech and writing. Both acts of parole and acts of writing are different semiotic modes of deployment of the resources of the language system. That is, speech and writing coordinate and entrain different material resources in the cross-coupling of these with the social-semiological resources of the language system. Acts of parole entail the cross-coupling of acoustico-articulatory and other bodily processes (facial expressions, gestures, posture, and so on) with the resources of langue. Acts of writing, on the other hand, cross-couple the processes of muscle-joint-skin kinaesthesis with the resources of écriture. This is so when a surface (paper, etc.) is treated so as to deposit on it by means of engraving, indenting, tracing, and so on invariant structures (drawings, pictures, graphic images) which alter the transmitting and reflecting qualities of the hitherto untreated surface (Gibson ((Gibson, James J. 1986 [1979]. *The Ecological Approach to Visual Perception.* Hillsdale, N.J. and London: Lawrence Erlbaum.)) 1986: 272). The 'fixed' character of the written image and the mobile character of the acoustic image do not refer to properties of the language system. Rather, they refer to the material resources with which the two systems are cross-coupled in acts of parole and in acts of writing, respectively. In the first case, the visual image occurs in the spatial dimension; in the second, the acoustic image unfolds in time. The word 'tangible' means 'able to be perceived', i.e., having the potential to be perceived. Acts of parole and acts of writing are, then, specific manifestations of this potential in their respective semiotic modalities.

The arguments I have made thus far concerning the nature of the relationship between langue and écriture are further evidenced by the next

move which Saussure makes in the passage cited above. Again, the particular conjunctive relation Saussure uses is most revealing. In this case, I am referring to the use of 'on the contrary' [au contraire], which construes a relationship of contrast between the new move in the argument and some aspect of the prior discourse. Specifically, langue is contrasted with the materiality of the muscular movements involved in phonation. The contrast Saussure makes is pivoted on the introduction of a new term, 'acoustic image', into the argument. This belongs to langue, rather than parole. The contrast Saussure is drawing out at this point is one between the materiality of acts of phonation in parole and the purely schematic character of the acoustic image in langue.

In langue, Saussure points out, "there is only the acoustic image". langue is a system of phonic and conceptual differences which have been abstracted from phonic substance and thought-substance, respectively. A system of differences per se has no cross-coupling with the material. For this reason, it is mono-modal. From the system perspective, there are no cross-couplings with other semiotic modalities. The reason for this is very simple: a system of pure differences has no phenomenal status. It exists outside semiosis; abstracted from specific contexts of use. It follows that a system of differences which is based on langue, rather than on écriture, is based on differences in patterns of **sound.** That is why, from the system perspective, differences based on phonic substance and differences based on graphic substance must not be confused. To confuse the two would result in a methodological monstrosity. Saussure expresses this problem with greater clarity in Engler's *Critical Edition:*

"langue and écriture are two systems of signs of which the one has as its sole mission to represent the other. It seems that this distinction can run no risk of being misunderstood. It would be an error to conceive of the relationship of the written word to the spoken word thus:

written word
————— = object (of linguistics)
spoken word

(We would then have an indefinable unit which would be neither the written word nor the spoken word nor both". (Saussure/Engler 1957: 67)

As systems of differences per se based, respectively, on the acoustic image and the visual image, neither langue nor écriture are cross-coupled with the physical-material domain. The description of these two systems of signs is necessarily mono-modal because, from the system perspective, there are no intra-semiotic cross-couplings with other semiotic modalities.

On the other hand, all acts of social semiosis deploy and orchestrate a diversity of semiotic modalities in the making and enacting of a given text. In acts of parole, for example, the linguistic semiotic combines with gesture, kinesics, prosodies, and so on. Similarly, a written text simultaneously deploys and orchestrates linguistic, visual, spatial, and graphic modalities of semiosis in order to produce a composite visual text. The diverse semiotic modalities so deployed do not operate independently of each other. Rather, they contextualize one another in the making of an integrated textual meaning.

Saussure goes on to say, as I pointed out above, that the acoustic image "can be translated into a constant visual image". The question I wish to focus on here concerns the meaning of Saussure's term 'translated' in this connection. Again, it is important to bear in mind that Saussure is adopting the system perspective of, respectively, langue and écriture. The semantic and lexicogrammatical parallelism between the terms **acoustic image** and **visual image** indicates that these are on the same level of abstraction in Saussure's framework. langue is founded on the cross-

coupling of terms from the phonic and conceptual orders of difference. If the acoustic image can be 'translated' into the visual image, then this suggests that there is no reason why an account of the language system which is founded on the cross-coupling of the graphic and conceptual orders of difference is not also possible. The further question arises as to the relationships between the two systems of langue and écriture. This is both entirely consistent with, as well as being an extension of the claim that systems of difference per se are semiotically mono-, rather than multi-, modal.

The two systems of langue and écriture would, therefore, stand in a relationship of **complementarity** to each other. They constitute different domains of meaning potential in a given language. There are both points of intersection and points of divergence between the two systems of signs. Acts of parole and acts of writing may, of course, interact in semiosis, but in the system perspective they are kept apart.

Now, given his methodological privileging of langue as the object of study, Saussure is obliged to choose as to which semiotic modality the system of pure values is to be based on. This follows from the fact that the system perspective is necessarily mono-modal. That is, he must choose whether to base his theory on a system which is based on phonic differences or one which is based on visual-graphic differences. The two cannot be mixed from the monomodal point of view of the system. Saussure could just as easily have decided to base his theory on the written language. There are no ontological reasons as to why he should not. However, given the historical and other factors concerning the state of language studies in the early twentieth century, Saussure had good reason to adopt the course of action he did. That an account of the language system which is based on the visual image is both possible as well as important in its own right will be discussed further below. Suffice to say for now that langue, which is based

on the combining of the phonic and conceptual orders, represents Saussure's methodological base-line for the construction of a social-semiological theory of language in relation to other systems of signs in a given society.

In section 7 I shall discuss a further reason for this choice. But first a brief word on Saussure's use of technological metaphors in his discussion of spoken language and written language.

Saussure's Use of Technological Metaphors.

Photography.

During the period from 1905 to 1915 the transition from typographic to electronic culture took place. In his study on the history of bourgeois perception in European culture, David Lowe ((Lowe, Donald M. 1982. *History of Bourgeois Perception.* Chicago: University of Chicago Press.)) refers to this period as "a switch from communication by means of the type to that by means of the bit" (1982: 5). This does not mean that the latter is discontinous with respect to the former. There are continuities and discontinuities as the electronic culture of modernism is overlayed on typographic culture. Typographic culture privileges the linear, rational, and visual modes as exemplified in alphabetic writing systems. It separates knower from known as knowledge becomes increasingly objectified. Electronic culture is based on probabilistic and stochastic processes. Such processes are based on the binary digitalization of an analogue continuum into distinctive oppositions.

Saussure is a leading exponent of the new view of language as a probabilistic system based on pure values. It is revealing, in this connection, to examine the technological metaphors which Saussure, at

times, uses in order to conceptualize the distinction between langue and écriture. In particular, the dominant visual technologies in typographic culture were those of the printed word and the photograph. Metaphors based on both of these visual technologies inform Saussure's discussion of the relations between langue and écriture.

At the beginning of section 2 of the chapter entitled 'Representation of langue by writing', Saussure makes the following observation:

" … the linguistic object is not defined by the combination of the written word [mot écrit] and the spoken word [mot parlé]; the latter alone constitutes the object of study. But the written word gets so intimately mixed up with the spoken word of which it is the image, so that it finishes up usurping the principal role; one comes to give much more importance to the representation of the vocal sign than to the sign itself. It is as if one believed that, in order to get to know someone, it is better to look at his photograph rather than his face". (CLG: 45)

The analogy which Saussure proposes between langue and écriture, on the one hand, and between a photograph of a person's face and the actual face, on the other, is most revealing. Superficially, Saussure's metaphor suggests the methodological and descriptive difficulties the linguist encounters if he or she tries to describe langue on the basis of the visual image of the written word. However, Saussure's metaphor is symptomatic of a still more far reaching problem. The mapping of the two distinct thematic domains in Saussure's metaphor also suggests the ways in which dominant technologies of the media shape our perception and understanding of language and other semiotic modalities, and in ways that are not unrelated to the ways in which these are used in a given society.

Susan Sontag ((Sontag, Susan. 1977. *On Photography*. New York: Delta.)), in her book *On Photography* (1977), has drawn attention to the fact that the photographic image is a transformation or recontextualization of the original context of which the photograph is an image. Saussure's 'photographic' metaphor recognizes, if only implicitly, that the written word is a cultural technology which transforms and recontextualizes the spoken word on analogy with the way that a photograph transform and recontextualizes the human face of which the former is an image. Saussure's view of this relationship is not a naively realist one. Neither photography nor writing simply replicate, respectively, human faces or speech. In each case, the former transforms (re-contextualizes) the latter into a new semiotic modality. In other words, Saussure displays an awareness of the **semiological** potential of the visual media of writing and photographing to transform speech and our perception and understanding of the 'real'. This has important implications for Saussure's understanding of the relationship between langue and écriture. Saussure takes the written language system, on analogy to photography, to be a meanings of 'fixing' some prior semiotic modality. It is not possible, he argues, to 'photograph' the "infinity of muscular movements" involved in phonation. But it is possible for a "constant visual image" to 'translate' acoustic images into visual images.

This is an accurate enough analogy. A written transcription of some prior speech event cannot 'translate' all of the details – semiotic and material – of that prior event. Any attempt to do so would condemn the analyst to an infinite regress of recursive attempts to approximate by other semiotic means all of the detail of the original speech event. This is an impossible task: the written 'translation' is a necessarily incomplete record of the prior speech event on account of the fundamental irreversibility of the physical-material processes involved. Saussure's photographic metaphor recognizes this most fundamental limitation. This is so in the sense that the

photograph of the face cannot return us to the infinite detail of the original. Saussure's solution lies in the fact that écriture, rather than evoking a potentially infinite regress of material and semiotic differences in acts of parole, may 'translate' from langue and écriture. Of the difficulty in representing the "infinity of muscular movements" involved in phonation he observes:

"In the language system, on the other hand, there is only the acoustic image, and this can be translated into a constant visual image. For if one abstracts from this multitude of movements necessary for realizing it [the acoustic image] in parole, each acoustic image is, as we shall see, no more than the sum of a limited number of elements or phonemes, susceptible in turn of being evoked by a corresponding number of signs in écriture". (CLG: 32)

This is why the system-system complementarity I discussed above is important. The 'translation' from acoustic image to visual image always takes place in and through the meaning potential of the systems of langue and écriture. The translation is never directly from acts of parole to the written word. This better explains why Saussure concludes the paragraph from which the above quotation is taken as follows:

"It is this possibility of fixing things relative to langue which makes it possible for a dictionary and a grammar to be a faithful represention of it, langue being the repository of acoustic images, and écriture the tangible form of these images". (CLG: 32)

The point is that the acoustic images in langue both 'fix', in the sense of categorize, the "infinity of muscular movements" in phonation as structurally stable acoustic images relative to a given language system. This does not mean that the relationship between system – the acoustic images in langue

– and environment – the muscular movements in phonation – is a rigidly patterned and sterotypical one. Rather, it is best described as one of symbolic transduction: the acoustic image modulates the flux of muscular movements in phonation but does not rigidly determine it. In turn, the acoustic image may be 'fixed' by a visual image in écriture according to this same principle. This is always "relative to langue" because the 'translation' always occurs on the basis of the system-system complementarity referred to above. The system of écriture does not simply replicate that of langue. Instead, one system of values is reconstrued in relation to the values which are intrinsic to the second system. This point has been entirely lost in Roy Harris's translation of the passage quoted above. Here is Harris's translation of the same passage:

"Our ability to identify elements of linguistic structure in this way is what makes it possible for dictionaries and grammars to give us a faithful representation of language. A language is a repository of sound patterns, and writing is their tangible form". (Saussure/Harris, 1983: 15)

The "things [les choses] relative to langue" that Saussure speaks of are not "elements of linguistic structure", as Harris would have it. Rather, Saussure is talking about the 'things' which are outside langue. In this particular case, these are the muscular movements which are categorized by the acoustic images (the phonological categories) of the language. These are categorized by the system of values internal to langue. In this case, Saussure draws attention to the fact that the multitude of muscular movements involved in phonation is reconstrued as specific categories of phonemes in a given language system. This can only occur on the basis of a stable system of phonological categories in langue. Saussure's point is that it is only by virtue of the fact that such a stable spoken language system exists that acoustic images may in turn be 'translated' into visual images in and through the resources of the written language system.

The Phonograph.

The other technological metaphor of interest here concerns Saussure's reference to the phonograph. The phonograph can extend sound across space and time. For Saussure, it represents a means of storing and accessing langue in ways which extend across historical time and geographical space. Unlike the photograph, Saussure sees the phonograph as a means of providing "direct" evidence of langue. This suggests a revealing asymmetry in Saussure's conception of visual and acoustic modalities of semiosis. The photograph transforms the face just as the written language transforms speech. On the other hand, the phonograph, for Saussure, provides direct documentary evidence – in the form of acts of parole – whereby the linguist may reconstruct langue itself. Saussure also points out that the evidence gathered in this way would nonetheless need to be transcribed into written form in order to make it available to a wider audience. Saussure speaks in a period prior to the mass use of audio recordings. By contrast, the mass production of photographic images was already wide spread at the time Saussure gave his lectures in Geneva.

The phonographic recording of speech, like photography, cannot bring the original semiotic-material event back to the listener. The context, which occurred in some specific time and place, is irreversibly transformed by the technology of the phonograph and the meaning potential which this affords its users. Saussure does not actually say that the phonograph can provide the linguist with direct access to langue. It can only record particular acts of parole. Nevertheless, the asymmetry which I mentioned above rests on the implicit assumption that Saussure appears to make that semiosis which is based on the visual image (writing, photography) has the power to transform other semiotic modalities, whereas those based on speech sounds do not.

Both photography and the phonograph are technologies which belong to what Walter Benjamin ((Benjamin, Walter. 1977 [1955]. 'The work of art in the age of mechanical reproduction'. In *Illuminations,* 217-51. Trans. Harry Zohn. New York: Schocken Books.)), in a remarkable essay, has referred to as 'the age of mechanical reproduction' (1969). Photography and the semiotic effects of its technology and patterns of consumption were already well absorped into contemporary patterns of experience and behaviour. Not only did a "plurality of copies" substitute for the original experience, but the viewer's experience was much more privatised (Benjamin 1969: 221). Further, the 'transitory' and 'reproducible' character of the photographic image as an object of mass consumption is emphasised (Benjamin 1969: 223).

Susan Sontag, in her book *On Photography* (1977), provides ample documentation of the transformations in visual perception which photography brought about. Photography isolates and analyses phenomena in the visual field which previously had no special significance. This has brought about what Benjamin has called "a deepening of apperception" (1969: 235). How does this relate to Saussure? Saussure clearly appreciates the transformative powers of the visual image. As far as writing is concerned, this poses a problem. I shall return to this point below. By the same token, he also sees the phonograph as a means of obtaining "direct documents", i.e., without the distorting – re-contextualizing – effects of writing. Saussure clearly appreciates the potential that this technology has for collecting and storing permanent records of speech. However, Saussure does not mention the fact that the phonograph, no less than the photograph, has a transformative potential in relation to that which it records. That is, the semiotic potential of this technology transforms the speech events which are so recorded. Like photography, the phonograph is not a neutral means of gathering and preserving spoken documents. It, too, entails a "deepening of apperception", to borrow once again Benjamin's

expression. It, too, isolates and analyses speech sounds in ways not available to the unaided ear in the contexts in which spoken interaction occurs.

This assymmetry in Saussure's understanding of the transformative power of both visual and audio-based technologies of reproduction carries over into his understanding of the relationship between langue and écriture. The reason for this asymmetry is probably cultural. Photography was already well established in European culture. Its potential for cultural transformation was already evident. The phonograph, by contrast, was a recent technological innovation. Its power to extend over time and space in the documentation of various languages was confined to the collections held in Vienna and Paris. The reproductive and transformative potential of the phonograph was, at that time, restricted to a small number of specialists. Unlike the photograph, it was not yet available to simultaneous collective experience.

In my view, this asymmetry in the cultural reception of the technologies of the visual and the audio persuades Saussure that writing is the representation of langue, whereas the reverse is not true. It needs to be kept in mind here that the phonograph records acts of parole, rather than langue. This fact, along with Saussure's conviction that the phonograph may provide direct evidence of speech, appears to lead Saussure to assume, albeit implicitly, that the visual image is technological, whereas the acoustic image is not. He does not account for the fact that written language may be reenacted as speech, as in reading aloud and other kinds of semiotic performances. In other words, the system-system complementarity is a two-way one in the sense that a written text may be recontextualized as spoken performance in and through the stable phonological categories of the language system. Saussure does not account for this possibility.

Some Theoretical Implications of the Meaning of the French Terms langue, parole and écriture.

I have already pointed out that Saussure takes langue and écriture to be two distinct systems of signs. Now, the translation of the French word langue as ‘language structure’ (Harris 1983) or my own preferred ‘language system’ does not reveal the semantic connection which the French word has with the spoken language. This may lead one to conclude that Saussure’s conception of the language system per se is one sidely based on the spoken language at the expense of the written language. In my view, the distinction Saussure makes between langue and écriture shows that this view is mistaken. For reasons I have already discussed, Saussure builds his theory on the basis of the former rather than the latter.

What, then, is the relationship of parole to langue? parole is the instantiation of langue. It is also the basis on which the linguist analytically reconstructs langue. In French, the word langue means ‘language’ or ‘tongue’, as in, for instance, *la langue française* (‘the French language’ or ‘the French tongue’), *la langue maternelle* (‘the mother tongue’), *la langue écrite* (‘the written language’), *la langue parlée* (‘the spoken language’), or in expressions such as *il ha une langue très pure* (‘his spoken language is very pure’). In these examples, the word langue is not used in the technical sense intended by Saussure. Nevertheless, they reveal the intimate semantic connection which Saussure’s use of this term has with the **spoken** language. There is, then, a high degree of systemic, and not merely instantial, coherence between the terms langue and parole in Saussure’s theory.

What, then, of Saussure’s use of the term écriture? Saussure places this term on the same level of schematicity as langue. The two terms are co-hyponyms. For this reason, one is not superordinate with respect to the

other. As co-hyponyms, langue and écriture stand in a hyponymous relationship to the superordinate term ‘the global totality of language’ (see section 4). Co-hyponyms also imply a weak semantic relationship of antonymy. This is evidenced in Saussure’s insistence that langue and écriture are “two distinct systems of signs”. That is, they stand in a relationship of contrast to each other.

At this point, the following question arises. If parole stands in a hyponymous relation to langue, and langue and écriture are co-hyponyms in relation to the still more superordinate term ‘the global totality of language’, then what is the term which is hyponymously related to écriture? In French, the meaning of the word écriture refers to the system perspective. It is therefore parallel to langue. In nominal groups such as *écriture phonetique* (‘phonetic writing’) and *écriture hiéroglyphique* (‘hieroglyphic writing’) the Head, écriture, designates the general category of writing system and the Classifier some subclass of this. In the attributive clause *il ha une belle écriture* (‘he has beautiful writing’), the personal pronoun *il* (‘he’) instantiates a graded quality, *belle* (‘beautiful’) of the type-class, écriture. In all of these examples, the linguistic analysis shows that the word écriture designates a general or superordinate type-class. That is why, semantically speaking, Saussure uses this term to designate the written language system, rather than specific instances of writing.

What, then, is the term which is subordinate to écriture? In French, the word *écrit,* which variously means ‘piece of writing’, ‘document’, or ‘written work’, serves this purpose. The nearest Saussure gets to this term is when he uses the expression *mot écrit* (‘written word’) (see Saussure/Engler 1957: 67). Indeed, he even goes so far as to say: “The true relationship is expressed by the equation: spoken word [mot parlé] = object (written word, document)”. (Saussure/Engler 1957: 68) Here, the terms mot parlé and mot

écrit are co-hyponyms. The former is also an approximate synonym of parole. That is, parole and mot parlé are both hyponyms of langue, whereas mot écrit is a hyponym of écriture. By the same token, mot parlé and mot écrit are also weak antonyms of each other for the reasons explained above. The relations referred to here imply a hierarchy of generality which links the superordinate terms to the lower-level ones. This is schematized in Figure 3.

Figure 3: Criteria for the study of the spoken and written language systems.

Figure 3 also includes Saussure's notion of the language faculty [le faculté du langage] as the most superordinate term in the hierarchy. This is a faculty with which all individuals are endowed. For this reason, it is the most superordinate term in the proposed hierarchy. However, Saussure devotes little attention to it. The next level down the hierarchy is that of the phenomenon of language as it appears in all of its heterogeneity before the linguist imposes a specific conceptual order on it. Thus, 'the global totality of language' may be taken to refer to all manifestations of language phenomena, both spoken, written, and signed. At the third level in this ascending hierarchy, Saussure introduces a specific methodological and conceptual order into this heterogeneity. langue and écriture, as two distinct systems of signs, specify two possible objects of theoretical study. They both stand in an instantial relation to the superordinate term 'the global totality of language'. Finally, the lowest level in the proposed hierarchy brings us to the instantiations of langue and écriture, i.e., parole/mot parlé and mot écrit, respectively. In so far as the latter two terms are the instantiations of the spoken and written language systems, they are also the linguist's means of access to these.

Figure 3 shows very clearly that there is no theoretical subordination of écriture to langue. There is nothing in Saussure's position which would prevent the development of a parallel linguistic science in which écriture is the object of study. Such a study would be complementarity to, rather than opposed to, the study of langue. This follows from the fact that the study of, say, spoken and written English is still the study of the same language system, in spite of the important differences between the spoken and written modalities of linguistic semiosis. The reasons why Saussure privileged the scientific study of langue rather than écriture have been discussed above. In the next lecture I shall turn my attention to the specific problematic of écriture which Saussure finds it necessary to negotiate in connection with this endeavour.