EL MOUATAMID BEN ROCHD

Words

Traditions in Linguistics

(Revised)

To Patrick Griffiths

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PREFACE

Einstein once said, ‘it’s a miracle if you don’t see a miracle in everything.’ So, obviously LANGUAGE is a miracle, if not the miracle of miracles. It is such a wonderful miracle that is has attracted the attention of many, such as early Greek philosophers like Plato and Aristotle, and modern philosophers like Austin and Wittgenstein. They all tried to capture the nature of this ‘miracle’ by giving it acceptable – reasonable – definitions. Some have succeeded, to some extent, in their endeavour and some have only “lured the fly into the bottle!” (Wittgenstein)

Man has been given the secret/power to assign symbols to referents e.g. different places (Paris, NY), people (Jesus, Marx), concrete objects (tree, table) and abstract concepts (freedom, justice). By naming these, man has been able to connect utterances to objects in the real world. This has a tremendous importance for man. We can appreciate its value only by imagining a world without language: the extreme difficulty to keep life going on, if we did not have this semiotic power; the hardship of communication and bitterness of people’s interrelations. We would have to bring about the thing itself that we want to talk about in front of our eyes, say a tree, or go to the Himalaya Mountains, or have to bring the person we want to talk about. This would have been a tremendous hardship next to impossible. Each nation is keen on preserving its culture and language as part and parcel, if not the hub, of that culture; so each nation has produced bright scholors to deal with it, from the Far East, the Middle East, Europe and finally America; all contributed

from antiquity, the Middle Ages, the Renaissance and the Modern Times.

Starting from the nineteenth century, language has become the field of research of the specialists, viz. philologists such as Paul and Schleicher, and more recently – modern linguists, such as Saussure, Bloomfield and Noam Chomsky (in the western tradition).

The more than 3.000 languages spoken in the world nowadays can be seen as just one coin with two faces ‘sound/sense’ or ‘signifiant/signifié’ (Saussure, 1916), ‘deep/surface structures’ (Chomsky 1967), or simply the matching of ‘expression and meaning.’ The components of language have been studied scientifically by the specialists of phonetics (Henry Sweet), morphology (Leonard Bloomfield), syntax (Noam Chomsky), semantics (Aristotle) and pragmatics (Charles Pierce). Each discipline is a man’s life consumer. It is indeed as big as the earth!

INTRODUCTION

‘Why study language, in the first place?’ you may ask.

To answer this question, I may quote Noam Chomsky’s answer to Dr Mazen Al-Waer: “When someone introduces himself in a party as a doctor, people will wonder in which hospital he works, and when somebody introduces himself as a lawyer, everybody will think when he has a legal problem, the lawyer would be able to help. But when you introduce yourself as a linguist people will be astonished and ask what do you mean by linguistics? And when you try to explain to them that linguistics is a scientific study of languages, they will say, ‘well, why do you bother and study languages since we speak them naturally?’ Do you think that linguistics can change people’s opinions one day, and do you think the study of linguistics is important?”

Chomsky: “In our own intellectual tradition going back to the Greeks it has always been assumed, and I think correctly, that the most important topic to study is the human being, the question what is the nature of humans, and in particular, how the human mind works. There can hardly be a more significant topic for investigation for us than the human mind and how it functions. The most interesting aspects of the human mind are those intellectual achievements that are carried out naturally, that seem so obvious to us that we cannot even see at first that there is a problem to be studied. The first difficulty that you have to overcome if you want to study human beings is to try to attain a sense of wonder and surprise at the fact that you are able to do what you are able to do normally. If you do not think about it, it seems obvious that you just talk and say what is on your mind. But the

question is: how are you able to do this? What is about the child that makes it possible for the child to acquire this ability but does not make it possible for *an ape or a dog* [italics mine] or any other organism to acquire this ability? What is this capacity? What underlies it? What are its properties? What are its features?"

The psychologist, Wolfgang Kohler, once remarked that it is necessary to develop a kind of "*psychic distance*" [italics mine] from the acts that you perform naturally. You have to be able to look at them as it were from the outside, to recognize how amazing they are, before you can begin to try to find out what are the capacities on which these acts are based. It is not a problem when you study, say, physics, since we are studying something that is external to us, we already have psychic distance. We do not move the planets so therefore the fact that the planets move already seems remarkable. But since we are the ones who are doing the speaking, what we are doing sometimes does not seem remarkable, but rather somewhat obvious. However, it is really much more remarkable than the fact that the planets are moving the way they are."

(Mazen Al-Waer, 'An Interview with American Linguist Noam Chomsky', Dept. of Linguistics and Philosophy. MIT. 1980).

1. Philosophy

The ultimate goal of philosophers has always been the pursuit of TRUTH. But usually, they (and people in general) disagree about what is true and what is false [cf. Shakespeare's "wisdom"]. In Europe alone, there were indeed big and bitter intellectual fights, in the Middle Ages, about the sources of (true) knowledge to begin with. Some said it should be ecclesiastic (Martin Luther/Pike), others opted for rational (De-cartes/Chomsky), still others for empiricist

(Francis Bacon/Bloomfield) sources. The Pope in Rome, Martin Luther and Hegel represent the first trend. French René Descartes (*Discours de la méthode*) represents the second [cf. Deists]. English Roger Bacon is considered to be the pioneer of the last one (followed by Francis Bacon's *Novum Organum*).

There are, at least, three levels of influence of philosophy on linguistics, viz. 'ideological umbrella', epistemology and (more specifically) linguistic theory. The first one – ideology [cf. Marr] or religion [cf. Pike] – concerns the linguist as much as the layman in a given society. It is a sort of general umbrella that covers all members of a given society. Epistemology [theory of knowledge] touches the scientist – whatever his specialty may be; as each researcher is busy digging his own (narrow) field not knowing how to situate himself vis-à-vis other scientists. Epistemology will help him find his position and his relation with researchers in neighboring disciplines.

The last level of philosophical influence on linguistics is found in linguistic theorizing. After observation and many experiments, the linguist, like all other scientists, opts for the construction of general theories – using reason and logic. He is actually philosophizing (cf. PhD).

2. Psychology

Many people believe that the structure of language and its general features are universal and are deeply embedded in the human mind. At any rate, the human body displays an amazing organic unity synchronized and harmonized by God. Without signals from the nervous system no air would escape from the throat to produce speech sounds. So no separation is possible between speech, biology and physiology, nor is it

possible to separate them from the ideas which are shaped by speaking.

Language is closely linked to psychology. In the 19th and early 20th centuries, language had soon attracted the attention of American psychologists such as Watson and Skinner (*Verbal Behaviour*), among others. They were the representatives of the Bahaviourist School of psychology in the US in the 50s. They were themselves influenced by the works of Russian biologist Pavlov [see glossary]. The latter is the initiator of 'stimulus-response' brain mechanism. He used dogs for his experiments.

By opposition to this school, Chomsky's innate theory suggests that *the human child is unique* as he comes to life preprogrammed for language acquisition. Chomsky seems to have revived Plato's notion of 'prenatal life' [see Psycholinguistics].

3. Language

Language is a conscious articulated means of communication shared by a speech community. It is, I believe, the best thing that the human being has been given. Thanks to it, we can speak about Chicago while we are thousands of miles far from it. We can also write about Moses while living in the 21st century. Without language, we would have to bring the Atlas chain right here, or at least go to Morocco if we want to point to those huge mountains. But, thanks to language, the distances, both in time and space are magically shortened.

Man communicates with his own species and with the other living creatures using a large set of different means. He can communicate his happiness, his anger, his excitement… by smiling, frowning, whistling, by gestures… or by the use of

language, which is the best and the most sophisticated medium. Simply by using the air of his lungs, man can, tacitly, control his breathing and produce different organized and meaningful stretches of sounds.

Language use is shared by all (normal) human beings. Among the intellectuals, it is used by the man of letters to express his feelings in beautiful articulated forms. It is used by the philosopher to shape ideas and doctrines. It is used by the scientist to describe what he observes from the constituents of nature.

Now scientists are divided into many specialties, among which we find chemistry, medicine, physics, astronomy… and linguistics. All of them need language. For the linguist language knows a kind of reflexive reality. He uses language to describe language. The linguist is a scientist both rationally and empirically. He attempts to describe language by explicit formal means.

His objective and systematic approach applies on several levels: phonetics and phonology for the study of the speech sounds, morphology and syntax for the patterns, semantics and pragmatics for meaning; not to forget the psychological, historical and stylistic dimensions of language.

4. Phonetics

We may imagine language as a semi-conscious (we think about what to say but not about how to speak) string of sounds originating in an air chamber (lungs, glottis, mouth) by an initiator and passing through a particular shape of the oral cavity.

The speech sounds can be viewed within three dimensions: the place of articulation (lips, teeth…), the manner of

articulation (stop, fricative…), and the presence versus absence of voice (vibration of the vocal cords). They can vary in a very large way; following a *'faisseau de traits pertinents'* (distinctive features) and this fact shows the tremendous ability of the speech organs which allow the production of a large set of sounds.

The most important parts of the oral tract are the *tongue*, the lips, the uvula, the glottis and the lungs. The speech sound is an acoustic wave carried by the air from the mouth of the speaker to the ear of the hearer; the lungs being the main air chamber. This air has to go first through the glottis, in which it comes across the best 'musical' strings of the world; or ligaments called 'vocal cords'. Further up, it may go to the nasal cavity if the uvula is lowered producing nasal sounds [m], [n], [ŋ], [ɲ] or 'color' other sounds like the French vowels [ɛ], [ɔ], and [a] which then become [ɜ̃], [ɔ̃], and [ɑ̃].

The air stream, however, goes mainly through the mouth and finds there the predominant speech organ which is the tongue – a very mobile muscle and the principle shaper of the oral tract. The speech sounds have been divided into two main categories: contoids and vocoids. The contoids are mostly stops [b], [t], [d],… and fricatives [ʒ], [ʃ],… The first ones stop the air for a moment before releasing it out of the mouth; the second ones narrow its space and cause its turbulence. The rest of the sounds are voiced and are subdivided according to a front-back dimension and a low-high one, representing their place of the hump of the tongue in the oral cavity.

The speech sound can be a stop, a fricative or a nasal. Each sound has many characteristics that differentiate it from the others. Sounds also vary in space and time. Not all of them are used in a single language; and throughout history, some are acquired and some are lost unlike the phonological system which persists relatively longer.

Phoneticians have come to draw a crucial distinction between articulatory phonetics, auditory phonetics and acoustic phonetics. Linguists are mainly concerned with the first.

5. Phonology

Many physiologically possible sounds are found in none of the known languages. Sound systems differ from language to language and there is no complete analogy between the sounds of different languages. One of the facts that betray non-native speakers.

Each language uses its share from the universal speech repertoire according to its particular sound system. The sounds behave differently in different linguistic environments of speech communities, of dialects or even idiolects. The reason why we recognize the voice of a speaker on the phone.

Some sounds like [X], [ɣ], [ʕ] are used by Arabic speakers but not by French and English speakers, while [θ] and [ð] are used by both Arabic and English people but not by the French. [p/b] and [f/v] are respectively distinctive in French (*pain* vs. *bain*, *feu* vs. *voeux*) and English, but [b] and [f] alone exist in Arabic. English has no [ʒ] in initial position of words (unless borrowed from another language). French has no [ʤ] while Arabic has no [ʒ].

Phonology is sometimes called phonemics because it is centered around the concept of the phoneme (minimal unit of sound capable of distinguishing words of different meanings (cf. Bloomfield). The English word ‘man’ contains three phonemes. It can be contrasted to ‘ban’, ‘men’ and ‘map’.

Some segmental features like voice [pin/bin], length [read/read [past]) change the meaning of the words (minimal pairs). Velarization can also be phonemic. In Arabic for instance [t] and [ŧ] give a minimal pair [ti:n] (i.e. fig) and [ŧi:n] (i.e. clay), whereas in other languages they are merely allophones. Still in Arabic, we do not start with a consonant cluster and never end a word with a vowel.

Some stops like [q], [ŧ], [b], [ʤ], [d], have to be glottalized in order to be heard in final position. There are also some non-phonemic assimilations like the use of [u] which is deleted when it occurs before one of the following phonemes [j], [r], [m], [l], [ŭ], [n] and colored (doubled) before, [ʂ], [ð], [θ], [k], [ʤ], [ʃ], [q], [s], [d], [ŧ], [z], [f], [t], [ ], [ ], or substituted for by [m], before [b] (this rule happens in French as well).

English is well known for its stress and intonation systems which affect (the) meaning, for instance *'English teacher vs. English 'teacher*. The phrasal verb ‘to run up’ is either ‘the waiter [ran up the Bill]’ (made the total), or ‘the waiter ran [up the hill]’. Intonation distinguishes also questions, orders, statements: falling pitch e.g. in *‘eh bien!’* meaning pity (in French), whereas the rising one means anger in *‘Eh alors?’* When you have stepped on the toe of a French person.

It is the task of phonology to study the meaningful differences that exist in the phonetic data. It is also its task to discover the combination rules that make the words and utterances of a given language.

6. Morphology

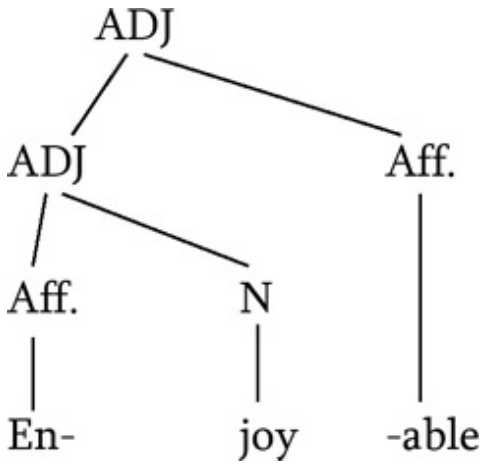
The phoneme alone is not an independent linguistic unit as it has no meaning. We could accept it on the fringes of language; ‘n!’ could mean ‘yes!’

Phonemes cannot, generally speaking, stand alone; so they are grouped into morphemes in order to be meaningful. There are free morphemes in English like ‘open’, ‘table’, etc. and bound morphemes like ‘ed’ and ‘s’ (that the students usually forget!) which have grammatical functions but cannot occur alone. They express past and plural respectively. The plural and the past forms can be also realized by other devices as in ‘men’ and ‘sang’.

The morphology of a word may express endless functions. For instance the use of the prefixes un-/dis- gives the negation of a word, e.g. un-able, dis-able-ed; the adjunction of the suffix -ly to an adjective gives an adverb, e.g. nice-ly.

In Arabic, the three consonantal stem expresses a verbal entity and is sometimes provided by a diacritical system of vowels (*harakat*). The inflection /a/ gives the past tense; /at/ gives the feminine, /ja/ gives the present, the initial /ʔ/ gives a category of plural when coordinated with an infix /aa/ ʔaṯfaal, ʔabqaar, ʔaqsaam…

Another dimension of morphology is compounding, e.g. wind-mill, white-board, face-cloth, etc.



Morphology deals with the internal structure of the word (Bloomfield), while syntax deals with the internal structure of

the sentence.

7. Syntax

Neither phoneme nor morpheme is enough for the study of the structure of language. Language must be approached syntactically as well. The linguist must show the recurrent elements and the recurrent patterns both on the categorial side NP, VP, Det… and on the functional one S V O. The linear structure of language presents the sentence as its upper limit. It is isolated in speech by pauses and a particular intonation. It is distinguished from the other sentences – in the written language – by the punctuation (full stop, exclamation mark, etc…). The sentence usually consists of a series of words and could be considered as the ideal utterance. An utterance like ‘going home?’ can convey the same meaning as ‘Are you going home?’ but it is not a complete sentence.

Each sentence is meaningful when it is placed in its right context. And again word order is essential, at least in English and French, because each sentence form corresponds to one type of meaning. The sentence *Jean a aperçu le loup* is different from *le loup a aperçu Jean*.

1 2 3 vs. 3 2 1

In an inflectional language like Arabic, however, order is merely stylistic. Although the primary sentence pattern is VSO:

ʔ*akala Ali alXubza.*

Ate Ali the-bread.