
INFINITE USE OF FINITE MEANS: COMPETENCE AND PERFORMANCE

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U SING our knowledge of the grammar of our language¹ means mainly using our linguistic intuitions. Linguistic intuitions enable a native speaker to discriminate between acceptable and unacceptable utterances, to attribute a degree of deviance to unacceptable utterances, to relate structure to meaning, and to generate all the possible utterances of a language.² A child is capable of inferring the underlying patterns of the language he is exposed to, and from these regularities he is able to recognize other acceptable structures of the system. This knowledge that a human being must have in order to use language is termed 'competence', part of which consists of the grammar of the speaker.

Competence and Performance

The distinction between COMPETENCE (or the native speaker's knowledge of his language) and PERFORMANCE (or the actual use a speaker makes of his language in real situations) is fundamental and was made for the first time by Noam Chomsky. It is similar to the distinction made previously by Ferdinand de Saussure between *langue* and *parole*, where *langue* (or the entire system of forms represented in the language-users' brains) corresponds to competence, and *parole* (or an individual's speech act at a point in time) to performance.³ If in the communication process we ignore grammatically irrelevant conditions like inattention, distractions, lack of interest, and memory limitations, we shall have an idealized form of performance that reflects competence. The task of the linguist is to analyse performance data to discover the underlying system of rules mastered by the native speaker

1. David Crystal's *Linguistics* (Harmondsworth, 1985), 102–104, should serve as an introduction to what follows in this article.
2. These linguistic intuitions have been explained at length in Charles Briffa, 'Psycholinguistic Aspects of Language', *Hyphen*, Vol. VI, No. 1 (1989), 37–45.
3. John Lyons (ed.), *New Horizons in Linguistics* (Harmondsworth, 1971), 25; A. Bullock, O. Stallybrass, St. Trombley (eds.), *Modern Thought* (London, 1988, new and revised second edition), 464.

and used in actual performance. The linguist is thus concerned with 'discovering a mental reality underlying actual behaviour',⁴ and these mental structures may lead us to interpret the world in matters related to the acquisition of knowledge:

By studying the representation of sound and the representation of meaning in natural language, we can obtain some understanding of invariant properties that might reasonably be attributed to the organism itself as its contribution to the task of acquisition of knowledge, the schematism that it applies to the data of sense in its effort to organise experience and construct cognitive systems.⁵

The linguist's interest lies in the underlying linguistic ability in ideal situations, whereas the psychologist's interest often centres on those psychological factors which allow performance to deviate from competence. It is generally assumed that the speaker-hearer's linguistic rule system, or competence, has psychological reality,⁶ in the sense that it exists in a psychological sense.

A language-user's competence includes the ability to recognize grammaticality and ungrammaticality, the ability to identify and analyse grammatical relations, the ability to perceive synonymy among utterances, and the ability to specify and understand ambiguity. Competence is therefore responsible for a speaker's linguistic judgements.⁷ Chomsky refers to the 'underlying competence as a system of generative processes', that is why he calls his grammar *generative grammar*.⁸

To conceptualize better what is meant by competence, we may think of a computer programmed to deal with utterances in terms of their grammar. The computer is thus given instructions (i.e. linguistic rules) on which commands are based to indicate grammatical, synonymous, and ambiguous utterances. Other commands could include the production of acceptable sentences and their parsing. In our example, the machine would be performing human-like operations. Competence is like the computer, indeed it is much more, since a speaker-hearer's competence is creative.

Creativity

Human beings have the ability to produce and understand an indefinite

4. Noam Chomsky, *Aspects of the Theory of Syntax* (Massachusetts, 1965, reprinted 1970), 4.

5. Noam Chomsky, *Problems of Knowledge and Freedom* (London, 1973), 26.

6. Dan I. Slobin, *Psycholinguistics* (Illinois, 1971), 7; Danny D. Steinberg, *Psycholinguistics: Language, Mind and World* (London, 1982), 64; Chomsky (1965), 4.

7. Slobin, 7.

8. Chomsky (1965), 4.

number of novel sentences in their native language. For instance, the following are, as far as I can tell, new utterances:

- a. Il-ferħ poġġa bil-qieghda fil-plattina.
- b. L-istudent berbaq moħħu.

The construction and comprehension of sentences like these which have never been heard before is often done naturally and unreflectingly, in the sense that the Maltese speaker creates or understands these utterances (even when the language is metaphorical) without the conscious application of grammatical rules. This creative aspect is a human phenomenon of language productivity. Despite the fact that a robot can be programmed to identify correctly by name objects in the physical environment, we still do not say that it *knows* the language because knowledge of the language involves production of and responding in an appropriate manner to new sentences just like human beings do. Human creativity paves the way to freedom and attempts to change the world.

When we rate utterances for grammaticality or when we produce sentences in isolation, we are actually dealing with a very limited sort of idealized performance. From a speaker's performance, the linguist tries to characterize competence (or the abstract, underlying form of linguistic knowledge). In normal human communication, performance of speaking and understanding is often distorted by various psychological variables which warp the behavioural predictions linguists offer after examining a pure competence model.⁹ This linguistic model of competence does not take into consideration extralinguistic factors like inattention, excitement, distractability, or fatigue that affect linguistic performance. Human capacities are subject to several limitations which may be non-essential to the abilities themselves. Limiting factors (like inattention, excitement, distractability, memory, and fatigue) apply to all mental activities. By omitting these limiting factors in the production and understanding of sentences, the linguist simplifies the characteristics of linguistic abilities (or linguistic competence).

Linguistic creativity is an indication of the existence of an internalized system of rules that help us to produce and understand new utterances like:

- c. Mitt kelb sparaw 'il barra malli bdew jinqraw l-aħbarijiet fuq it-televixin.

Although such a sentence was never actually uttered before, yet Maltese

9. Ibid., 3–4.

speakers are able to understand it without much difficulty. A speaker is able to understand new utterances because of an internalized mechanism that breaks the string into its structural components to which the speaker refers:

mitt kelb – numeral + noun

sparaw 'il barra – active verb + adverb

malli – conjunction

bdew jinqraw l-ahbarijiet – passive verb + noun

fuq it-televixin – preposition + noun

By manipulating structural components like these a speaker can produce an infinite number of utterances.

A Model

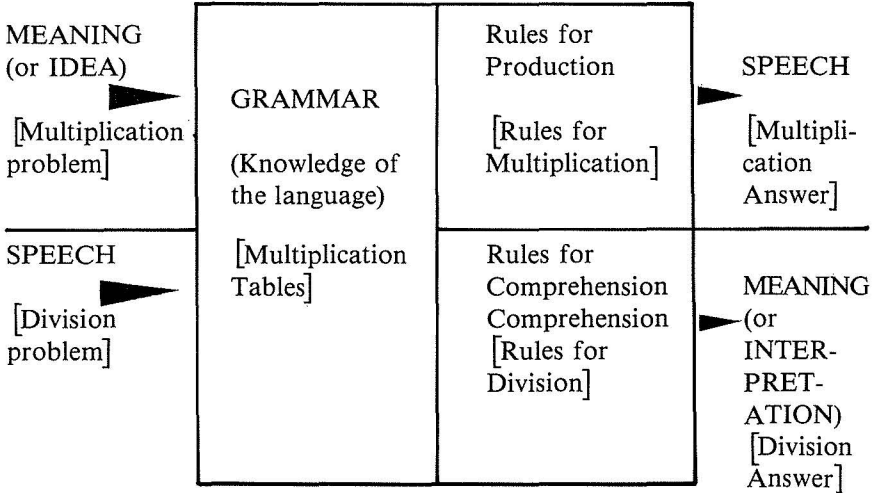
The psycholinguistic purpose of a grammar is to describe the knowledge a speaker-hearer has of his language (i.e. to describe his competence). This is evidently a psychological aim, distinct from that of a grammar describing a language (or performance). The linguist's task is to try to discover the role of competence in performance, mainly in the production and understanding¹⁰ of utterances. The process of sentence production includes the speaker's attempt to convert ideas into speech and the process of understanding involves the hearer's mental efforts to convert speech into meaning. A speaker-hearer has various components in his competence, one of which is grammar. Some of the components interact for the production and comprehension of sentences. So knowledge of the grammar interacts with knowledge of how to use the grammar.¹¹

The analogy quoted in this matter involves the role played by the Multiplication Tables in problem solving. Knowing the Tables is not enough to help a student work 573×64 . The student must also have guiding rules for the use of the Tables – for instance, he must know what digits have to be multiplied together and in what order. The Tables provide knowledge to help us solve problems, but they do not give us the entire multiplication process: they must be complemented with a set of rules for use. Analogously, grammar (like the Tables) is a component in the process of language performance (like the process of multiplication). The Tables, however, are also useful for division problems, though now we have to employ a different set

10. The understanding of sentences is often referred to as 'comprehension' or 'perception'.

11. Steinberg refers to this process as 'the componential role of grammar' (pp. 65 – 67).

of rules. Similarly with grammar: we use it in both processes of production and understanding with two sets of different rules – one for production and the other for comprehension. The following representation (with a corresponding arithmetic performance) clarifies our language performance model:



The production of an utterance starts with an idea as input and finishes with speech as output; and comprehension starts with speech as input and finishes with meaning as output. In each case the grammar interacts with a set of rules to provide an output. The task of the psycholinguist is to specify the details of these processes that make use of this grammar for performance. The distinction between competence (identified with capacity) and performance (imperfectly reflecting underlying capacity) is accepted by psychologists and is applied in the formulation of the performance model (which in actual fact serves as a model for competence as well).

Contextual Constraints

Generative grammar claims to be an attempt to characterize the nature of those human abilities specific to language (i.e. the nature of competence). However, linguists often direct their efforts to the contextual appropriateness of language use, since 'Knowledge of language results from the interplay of initially-given structures of mind, maturational processes, an interaction

with the environmental.’¹² Although generative grammar concentrates its attention largely upon the productivity and creativity that is implicit in normal language use to explain grammatical appropriateness, it must be realized that language is often constrained in an important way by the special circumstances in which one speaks. Contextual information (as distinct from the non-essential limiting factors mentioned earlier) involves situational features like the relationship between the producer and the receiver of language, social status, individual attitudes, moods, and the like. Language selection depends upon contextual features that relate to the ideational content of speech, to the interpersonal roles of the participants, and to the situationally relevant elements of discourse.¹³ By way of explanation, let us look at the following three different ways of asking someone for a drink:

- d. Luminata, jekk joghġbok.
- e. Aġhtini nixrob.
- f. Newwel il-flixxkun!

Native speakers can easily recognize the social event each utterance may fit into, and they can also imagine a suitable situation for each:

- (d) is a polite order – a gentleman in a restaurant politely giving an order to a waiter – FORMAL;
- (e) is a gentle request – a child tamely asking for a drink from an adult – FAMILIAR;
- (f) is a rude command – a worker snapping sharply at an equal or an inferior – SLIPSHOD.

Much of a user’s speech is constrained by particular circumstances, so that it is an accepted fact that language acquisition and use depend on creativity and context both of which are relevant to psycholinguistic studies: ‘an adequate psychology of language must take account not only of the creative aspects of language use but also of the important role played by contextual factors.’¹⁴ Every behavioural acquisition is generally the result of the interaction of innate predispositions. In the process of acquiring a language, we are innately predisposed to structure our ideas in specific ways, with en-

12. Chomsky (1973), 26.

13. M.A.K. Halliday, ‘Language Structure and Language Function’ in Lyons (1971), 140 f.

14. R. Campbell, R. Wales, ‘The Study of Language Acquisition’ in Lyons (1971), 248.

vironmental variables. In the case of language our speech depends to some extent on features related to the time and place of discourse and to the social roles of the participants.

The innate predispositions are invariant properties of human language: 'the invariants in question result from certain well-defined "learning strategies" applied to a sufficiently uniform environment.'¹⁵ A speaker's competence, therefore, includes a grammatical component (the result of the fact that the speaker is a human being endowed with the faculty for language) and a communicative component (the result of the fact that the speaker is a social being learning and acting in a specific environment). 'Intrinsic principles of mental organization permit the construction of rich systems of knowledge and belief on the basis of scattered evidence.'¹⁶

15. Chomsky (1973), 27.

16. *Ibid.*, 45.