

How Does Language Work And To What Extent Are We Aware Of It?

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One way of exploring our topic today is to start by answering one of the most commonly asked questions concerning language: "Which language is the is most difficult to learn?" I like responding to this question by asking a simple counter-question. If a very young American baby were adopted by a Japanese family in Japan, and if a Japanese baby were adopted by an American family in America, wouldn't the American baby grow up as a fluent speaker of Japanese, and wouldn't the Japanese baby grow up as a fluent speaker of American English? Obviously the answer is "Yes." All languages have the same level of complexity and share the same general abstract properties.

All human babies with normal brain function find it equally easy to learn Japanese or English or any other language. Babies allover the world learn their native languages effortlessly, without formal instruction, because their brains are predisposed to learn whatever language happens to be spoken in their environment.

For an adult, however, learning a new language that is significantly different from the mother tongue is harder than learning a language that belongs to the same language family as the mother tongue. For an adult American it would generally be harder to learn Japanese than to learn German because English and German belong to the same language family.

Since babies do not make a conscious effort to learn their mother tongue, we can conclude that the most basic unconscious aspect of language can be seen in the effortless way billions of babies acquire their first language. Something unique in human brains enables us to learn the rules of language without explicit formulation and to go on using these rules throughout life.

In the rest of this discussion, I will explore three other areas that highlight unconscious aspects of language: {1} literary, (2) psychological, and (3) structural. The third aspect is not as well-known as the other two. An example of how literary language functions simultaneously on conscious and unconscious levels can be seen in a famous poem by W.H. Auden:

Musee des Beaux Arts

- 1 About suffering they were never wrong,
- 2 The Old Masters: how well they understood
- 3 Its human position; how it takes place
- 4 While someone else is eating or opening a window
or just walking dully along;
- 5 How, when the aged are reverently, passionately waiting
- 6 For the miraculous birth, there always must be
- 7 Children who did not specially want it to happen, skating

8 On a pond at the edge of the wood :
9 They never forgot
10 That even the dreadful martyrdom must run its course
11 Anyhow in a corner, some untidy spot
12 Where the dogs go on with their doggy life and the torturer's horse
13 Scratches its innocent behind on a tree.
14 In Brueghel's Icarus, for instance, how everything turns away
15 Quite leisurely from the disaster; the ploughman may
16 Have heard the splash, the forsaken cry,
17 But for him it was not an important failure; the sun shone
18 As it had to on the white legs disappearing into the green
19 Water; and the expensive delicate ship that must have seen
20 Something amazing, a boy falling out of the sky,
21 Had somewhere to get to and sailed calmly on.

The title of the poem ("Museum of Fine Arts") refers to the museum in Brussels that contains The Fall Of Icarus by the sixteenth century artist Pieter Brueghel. Icarus was the son of Daedalus, the mythic craftsman. Daedalus built wings for himself and his son that were attached to their shoulders by wax. In the course of their flight, young Icarus flew too close to the sun. The wax melted, and Icarus fell into the sea and drowned. In Brueghel's depiction, most of the painting is devoted to showing the larger scene that seems totally unconcerned with the tragic failure of Icarus' attempt to rise above his earthbound limitations. In the foreground, a farmer continues to plough his field, while on the sea a ship sails on. The universe is indifferent to the failure of Icarus' human aspirations. Almost the entire canvas is devoted to the unruffled sea, sky, landscape and people. Icarus' legs, the central subject of the painting, occupy barely a thousandth of the actual surface of the painting. The mythic character Icarus can be seen as an iconic figure, personifying human tragedy



In the first stanza, Auden refers to various paintings that juxtapose scenes of suffering and incongruous events. In the second stanza, he focuses on the fall of Icarus. The poem is structured by four clauses starting with the word how (in lines 2, 3, 5, and 14) and one phrase (in line 11) starting with Anyhow. The word how has, in addition to subsidiary meanings, at least four major meanings. These different meanings can involve (1) degree (as in "I know how well he writes"); (2) manner or method (as in "He knows how to charm people" or "He knows how to make an omelet"); (3) state or condition (as in "I know how he is today"); (4) reason or for what reason (as in "I know how he came to do it").

In Auden's poem, the first how, in line 2, ("how well they understood...") is clearly a "degree" marking how. The second one, in line 3, ("how it takes place...") is a "manner" how. The third one, in line 5, ("How...there always must be children...") involves "state" or "condition." The fourth one, in line 14, ("how everything turns away...") is a "manner" how. The Anyhow in line 11 involves "manner."

Significantly enough, there is not a single instance of "reason" how in this poem, which is concerned with the seeming absence of reason behind human suffering. Icarus' legs disappearing into the sea are the main subject of the painting, despite the limited space they occupy, and so the absence of "reason" how in the poem becomes a crucial means of reinforcing the theme of the poem. Even though readers may not consciously notice the absence of "reason" how, they still sense that the poem presents an indifferent universe that juxtaposes the trivial and the sublime and does not respond to the desperate human search for ultimate meaning or reason.

Literary language is not unique in terms of functioning simultaneously on conscious and unconscious levels. The language of conversation, too, can have powerful psychological implications on unconscious or partially conscious levels. In the book Therapeutic Discourse by William Labov and David Fanshel, we have an accurate transcript of actual conversations between an anorexic young woman and her therapist.

The young woman, Rhoda, has been dependent on her mother in away that raises questions about her adult status, and she is also jealous of what she perceives as excessive attention her sister receives from their mother. Rhoda used to be overweight, and when her family suggested that she ate too much, she practically stopped eating and became anorexic. In her comments on her family, especially in her comments about her mother, she often says, "I jist [sic] get annoyed...", not realizing that the words "jist get annoyed..." are hear means of trivializing the serious issues she has with her family and of covering up the deep anger she feels toward her family on an unconscious level.

At one point, when she says, "Well, when I said I could get along without my mother...", the therapist interjects: "...she's making you get along entirely without her..." After Rhoda begins to recognize her suppressed feelings, the therapist says, "So there's a lot of anger passing back and years of therapy for Rhoda to understand her feelings.

Such examples could lead us to explore the fundamental structures of language that serve as the vehicles of meaning, not only in poetry or therapeutic discourse, but in language as a whole. All languages function on three levels (1) individual sounds, (2) combinations of one or more sounds that constitute words, and (3) combinations of one or more words that form sentences. Meaning pervades all three levels. Generally, people are far more conscious of the middle level of words than they are of sounds or syntactic patterns of sentences.

There are languages that use only about a dozen different sounds and at the other extreme some languages use five or six dozen sounds. English falls in the middle range, with about three dozen sounds. When any human being (with normal brain function) speaks, he or she uses about 100 muscles, and I doubt if anyone who is not a neuroanatomist cannot identify these 100. We articulate the sounds of speech without being particularly conscious of how our vocal apparatus produces the fundamental phonetic units of language.

We are also only dimly aware of the phonetic rules we use constantly in speech. If you ask a speaker of English how many consonants can appear at the beginning of a spoken English word, and what these consonants are, you will probably not get an organized answer, even though the speaker always uses the rule for initial consonants correctly in actual speech. Those who have been made conscious of the rule know the answer is: 3 consonants such as in splash or stretch. When there are 3 initial consonants in an English word, the first must be s. The second must be a "stop" sound like p or t, and the third must be a "liquid" sound (l or r). All speakers use the rule routinely, but most do so unconsciously.

In an attempt to understand language on the level of sentence structure, some basic facts were carefully considered in the middle of the 20th century. Humans constantly utter new sentences and listen to new sentences spoken by others. Generally, people have no difficulty in understanding all these novel utterances. When we learn a language, we cannot learn all these specific sentences. What we start learning as babies must be a set of rules that our mind abstracts unconsciously from the innumerable utterances that pervade the environment in which we happen to grow up.

The thousands of languages that are still spoken around the world do differ in terms of details, but they all have the same kinds of basic rules that babies learn unconsciously. Human brains are remarkably plastic and receptive in the first few years. Let us try to prove these claims by examining the fundamental rule that produces the basic structure of an English sentence:

$$S \rightarrow \underset{1}{\text{NP}} + \underset{2}{\text{Tense}} + (\underset{3}{\text{Modal}}) + (\text{have} + \text{-en}) + (\text{be} + \text{-ing}) + \underset{4}{\text{VP}}$$

The "S" represents a sentence. The arrow \rightarrow means "consists of," while "NP" represents the noun phrase that serves as the subject of a sentence, and "VP" represents the main verb phrase. The four elements between NP and VP represent the auxiliary verb structure. The numbers 1- 4 represent the sequence in which the auxiliary items appear, while the

parentheses around items 2 - 4 indicate that 2 - 4 are optional elements that do not have to be chosen in order to produce a sentence. "NP" and "Tense" and "VP" must be present in the basic English sentences.

Tense is an element that can cause a great deal of confusion if one fails to make a distinction between inflectional tense and phrasal tense. In "Bill plays" and "Bill played," the inflectional suffixes -s and -ed indicate present tense and past tense. In "Bill will play" or "Bill might have played", the auxiliary phrases will and might have involve words, not inflectional suffixes like -s and -ed. English, in its 1,500 years of has always had only two inflectional tenses: present and past.

These two tenses of English are not necessarily the same as present time and past time. In a sentence such as "Joel Grey performs at the Play House," the verb performs is in the present tense and the time reference could be the past or the future. Performs refers to habitual activity. In the sentence "Joel Grey performs at the Play House to tomorrow," the same present tense verb performs refers only to future time as indicated by the adverb tomorrow. Clearly tense and time are not necessarily the same.

In a sentence such as "The sun rises in the east," the present tense verb rises refers to past, present, and future time. The sun has been rising in the east for billions of years and will continue to rise for billions of years. In short Tense in the rule cited above can only be present or past, and the sequence indicates that Tense gets attached to the verb that appears immediately to its right, be it an auxiliary verb or a main verb.

If present is chosen, then Modal, the first optional item in the in Modern English as one of the following five present tense words: can, may, will, and must. The past tense forms of these words could might, should, would, and must . The choice of present or past combines with Modal and causes the modal auxiliary to appear in sentences such as "Bill will play" or "Bill would play." Those who are tempted to think of "Bill will play" a sentence involving "future" tense should note that the time reference of will play may be future, but the tense is present. Tense and time often have a disjunct relationship.

The third element (have + en) can also cause confusion if one fails to note the distinction between have as an auxiliary and have as a main verb. In the sentence "The boys have eaten," have is an auxiliary verb which shows that the taken has been completed, while in "We have five dollars," have is the main verb that shows ownership of five dollars. Clearly, the auxiliary meaning is vastly different from the meaning of have as main verb.

The auxiliary form of have is called perfect tense by some people, but such usage blurs the distinction between suffixes such as -s or -ed or -en and words such as have, had (the past tense form of have) , and has (the third person singular present of have) .

In the basic rule, have is followed by the suffix -en. This suffix is the past participle, and it gets attached to the verb to its right, either the verb be of item 4 (be + -ing) or, if the optional item 4 is not chosen, to the main verb. Thus one may produce

sentences such as "Bill has eaten" or the "Bill has been eating."

The -en should be viewed as an abstract entity that in actual speech or writing can appear in a variety of forms such as -en or -ed or -0 (zero) or zero + internal vowel change in irregular verbs, as in the following examples: "Bill has taken his medicine," "Bill has started working," "Bill has cut his finger." and "bill has sung."

Item 4 (be + -ing) produces the "progressive" verb forms as in "Bill is singing," "Bill has been singing." These forms show ongoing action. The suffix -ing can also create adjectival forms as in "dancing girl" (a girl who is in the process of dancing) or a noun form as in "dancing girl" (a girl who earns a living by dancing).

If all four optional items in the basic rule are chosen, we will get sentences such as "Quasimodo may have been ringing the bell." If none of the optional items is chosen, we will get a sentence such as "Quasimodo rings the bell." If 2 and 4 are chosen, we can get "Quasimodo should be ringing the bell, 'I and so on.

Even before starting kindergarten, children intuitively know most or all the combinations permitted by the basic rule. They may not be able to explain the patterns, but they do know how to produce and understand the linguistic combinations. Subsequently, the basic sentences can be transformed to produce all the other possible sentences of English. For example "Quasimodo has rung the bell" can be transformed into its passive counterpart "The bell has been rung by Quasimodo." Such transformations can be formulated as precisely as the basic rule itself. Unconscious knowledge of these rules enables us to produce or understand the new sentences we utter or hear in everyday situations.

All languages have similar rules, even though different languages may use different means to achieve the same meaning. Main verbs in Modern English have 5 forms, as illustrated by the following example: do, does, did, done, doing. My mother tongue happens to be Bengali, a language in which every verb has 53 forms. The optional auxiliary forms that are separate words or phrases in English appear in Bengali as suffixes attached to the main verb. The equivalent of English! I am having it done would in Bengali be just two words: ami korachhi. There are about 240 million speakers of Bengali, and I have one who could list all 53 forms of a Bengali verb, even though he or she 53 forms correctly in spontaneous speech. Such examples show how language can function more or less simultaneously on conscious and unconscious levels.

I am stressing the role of verbs because in all languages they are most important words. Verbs are the engines that propel the mind towards perceiving cause and effect relationships. When Rhoda talked to her about her family, she used many verbs but did not understand how the action represented by one verb caused effects represented by other verbs she used. Generally speaking, we all tend to be more aware of individual words may, shall, have, and be than we are of the deeper relationships among the words.

Notice the parallel between linguistic relationships and psychological or emotional relationships. Rhoda, for example, was conscious of entities such as mother, sister, and self, but she was not fully aware of the deeper aspects of the relationships among these entities. There are parallels between linguistic analysis and psychological analysis that should be explored systematically. If the structures of language and mind are isomorphic in certain areas, it might be helpful to identify these areas.

Gaps also exist between awareness of parts or units in literature and awareness of the relationships between the units. We saw that in Auden's poem repeated use of the word how plays a prominent role in structuring the poem. Even a casual reader is likely to be aware of the multiple occurrences of how, but only careful analysis reveals the relationships among the meanings of how and the linkage between these meanings and the theme of the poem.

When we move beyond single sentences and focus on narrative or discourse structure, we are generally far more conscious of narrative or discourse patterns than we are of sentence-internal issues such as auxiliary verb structure or pronoun reference or ways of transforming individual sentences. While readers may be aware of narrative patterns, characters in themselves not be aware of the implications of their own utterances. Novels such as All the King's Men by Robert Penn Warren, The Summer Before the Dark by Doris Lessing, and Surfacing by Margaret Atwood are replete with troubled characters who use compelling language but are not fully aware of what they are really saying.

In Lessing's novel, for example, Kate Brown, who thinks of herself as a sophisticated person, minimizes the significance of her physician husband's affairs with young women: "Perhaps we all make too much fuss of this kind of thing when we are young--the little affairs..." Subsequently (136 pages later) she realizes that "...the truth was she had burned with jealousy, had made herself with it..." She pays a heavy emotional price. The language by its Nobel-Prize-winning author serves as a perfect illustration of the dictionary definition of conscious as a word referring to "that part of one's mental activity of which one is fully aware."

At the beginning of this paper, I noted that babies begin to learn language through an unconscious process. As they grow older, they may learn words consciously, even though they remain unconscious of the structural patterns that combine words in phrases or sentences. As adults, it is possible for them through conscious analysis, to become aware of patterns of the type exemplified by the basic rule for English sentences, and we are all linguistic details which we may not be able to list systematically but can use successfully in actual speech. In spoken English, for example, there are about 10 different ways of creating plural forms of nouns. Very few people can list all 10 forms, but all native speakers spontaneously utter the 10 forms correctly when the need arises in actual speech.

These facts suggest that we should recognize at least three levels of linguistic awareness: (1) an unconscious level on which babies learn language and later internalize

complex syntactic rules; (2) a slightly or partially conscious level on which the mind deals with diverse matters such as language for repressed feelings or phonology or pronoun reference; (3) a conscious level involving matters such as names, vocabulary items, conversation, stories, literary eloquence, and so on. These three levels are not mutually exclusive, and we grow aware of how they overlap when we try to describe how language works normally or when we have to deal with aphasic individuals.

In this discussion, I have avoided a larger philosophical question: What exactly is consciousness in terms of self-awareness and brain structure? Answering this question would require a discussion focusing on that topic alone. Woody Allen once satirized the tangled scholarly notions of consciousness by making up an imaginary college course called "Introduction to Psychology." The course description was the following. "The theory of human behavior....Is there a split between body and mind, and, if so, which is better to have? Special consideration is given to a study of consciousness as opposed to unconsciousness, with many helpful hints on how to remain conscious." I hope my remarks today have not caused you to drift away from consciousness.