

Grammar is not Autonomous: In Favor of Functionalism

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Abstract

There is too much controversy on the plausibility of autonomous nature of grammar. To some (e.g., Halliday, 1973; Hymes, 1972; Mckenzie, 2005) grammar is not respected autonomous; however to others (e.g., Chomsky, 1957; Fodor, 1983), it is. The present study is an attempt to justify the plausibility of Hallaydians' perspectives on the concept of grammar autonomy. However, even in Chomsky (2000) we see a kind of shift in paradigm. Up to the beginning of his Minimal Program, language, along with its grammatical structure, was autonomous and independent of performance forces, but in his Minimal Program's fundamental hypothesis "language is an optimal solution to legibility conditions" (p. 96), which are imposed by the performance systems. The paper is not an attempt to condemn either of the two views, but has shifted his inclination towards Halliday's systemic functional linguistics.

Key words: functionalism; formalism; autonomy; determinism; modularity

Introduction

When you surf the net, you see that in the majority of material, Chomsky stands on a platform, but Halliday, in comparison, sticks to the margin (Mason, 2004). What makes us avoid a contradictory stance towards Chomsky's trends of thought in second language acquisition (SLA) is what Bourke (2005) declares. Bourke asserts Chomsky "has never suggested in any way that his work might be of benefit to L2 teaching" (p. 85). Thus, the paper is an attempt to redress the balance. To better appreciate Chomsky's and Halliday's stance in language acquisition, and to be more specific, let us concentrate on the notion of grammar.

No one denies that second language teachers are one of the greatest consumers of grammar. However, their perspectives toward the stance of grammar in SLA are totally distinct. For some, grammar could be investigated through syntagmatic relations, while for others through paradigmatic relations. As Bavali and Sadighi (2008) put forth, Chomsky's generative grammar is in favor of the former; that is syntagmatics, whereas Hallidays' systemic functional linguistics is in favor of paradigmatics. Both of these stances are inspired by Saussure (1916). Thus, the stance of Saussure (1916) as the predecessor of these two must not be disregarded. Saussure, in contrast with Chomsky's (1957) competence, sees langue as an idio-synchronic system. That is, language is a system of which all parts can and must be considered as synchronically interdependent. In a nutshell, his linguistics is in line with that of functionalists; however, his linguistics in contrast with functionalism is internal. An internal linguistics is composed of a system that is subordinate to its own order. In fact, in studying this system "there is no need to know the conditions under which a particular language developed (de Saussure, 1916).

There is not much place to deal with what is meant by syntagmatics and paradigmatics, but what makes these two distinct is that in the former linguistic items are said to be linearly related, but in the latter

there is a network of relations with structures (Beaugrande, 2002). Henceforth, the paradigmatic nature of Halliday's functional grammar indicates that his system, in contrast with Chomsky's, is dynamic, interactive, and not linear. To the writers, these two views seem to stand more in a contradictory position rather than a complementary one; however, research witnesses a kind of shift in Chomsky's perspectives.

No one is dubious about the inevitable effect of Chomsky's views of grammar on the teaching of grammar. In fact, in favor of the nativists who claim no formal grammar teaching is required, second language learners, as Bourke (2005) puts, "can acquire grammar naturally in their own way and in their own time according to their built-in syllabus" (p. 92). Bourke continues formal teaching of grammar may hamper the process of grammar instruction. Cook (1994) also in disfavor with those who claim any teaching could be based on universal grammar asserts universal principles are built into the mind; universal principles are not learned, so they do not need to be taught. What the writers force a dilemma is Chomsky's reductionist philosophy that claims syntax is an autonomous entity. That is, the behavior of a whole system can be determined by the analysis of its components.

Claiming that the relationship between grammar and the analysis of language production is a vexed one, the writers find better to initiate with three stances regarding the autonomous nature of syntax that cited by Jackendoff (1997, cited in Mackenzie, 2005, p. 117). Jackendoff maintains, there are three logically possible stances: (1) there is no relationship; (2) one can separate the process of language production and the grammar, but permit the former to consult the latter; and (3) one can hold that language production and grammar are not distinct; grammar is embodied in processes of production. In the paper, we adopt the third position. Accordingly, functionalist approaches are elucidated first and foremost by the claim that language is seen primarily as a means of human communication in sociocultural and psychological contexts. The linchpin of consensus among functionalists is that the language system is not autonomous from, or self-contained with respect to, external factors. As Hopper (1998) suggests, "structure, or regularities, comes out of discourse and is shaped by discourse as much as it shapes discourse in an ongoing process" (p. 156). This implies that grammar is a part and parcel of discourse, and these two are not separable.

To take a critical look at the first stance, i.e., no relationship between form and meaning, we can assert that it is more or less attributed to formalist linguists (e.g., Chomsky, 1957), that totally isolates form and function, and declare grammar is independent of meaning. In this regard, Mackenzie (2005) maintains such a position cannot contribute to clarifying how language helps speakers to achieve their communicative purposes. To the writers, even the second position, i.e., despite their separation, grammar consults language production, does deny the stance of grammar either as a communicative tool or at least ignore its role as a system that exists co-productively with the other systems. As Mackenzie declares this stance has nothing to say about the generalizations across different languages that are so essential to typological adequacy of Functional Grammar.

What makes the autonomous nature of syntax implausible is the flexible nature of meaning and structure in relation to the demands made on language in its contextually-appropriate use. What makes this view on language acquisition in sharp conflict with the formalist, as to Croft (1999), is that the formal approach focuses on the structure of the language, emphasizing the deductive properties of the language system, while the functional approach, emphasizing the inductive aspects of language, focuses on communicative properties. Along the same vein, Croft declares linguistic elements are studied in terms of how they contribute to the functions of language. This approach questions the autonomy of language. Croft maintains formalism has a tendency toward reductionism in analysis and representation; that is, a much higher value placed on formal syntactic analysis over semantic/pragmatic/discourse explanations; and the

heavy reliance on introspective data. In contrast, functionalists make more or less opposite methodological commitments: non-reductionist analysis; a much higher value on semantic, pragmatic, or discourse-functional explanations. In this regard, Thomson (2002) in an attempt to steer syntactic theory away from reliance on introspective data and towards naturally occurring discourse argues that grammar emerges from discourse and can be understood only in terms of the discourse strategies employed in everyday conversation. Elsewhere, Thomson (1983) asserts that “understanding grammar is inseparable from understanding the principles by which language users decide how to package and entire discourse” (p. 64). More comprehensively, in *Functional Grammar*, as Mackenzie (2005) claims, “linguistic phenomena are explained in terms of their instrumentality, i.e. the contribution they make to language users’ attempts to influence one another by using language” (p. 114). Mackenzie disfavoring the view regarding the autonomous nature of syntax elucidates that “the structures we encounter in languages can be understood as having arisen from myriads of communicative events” (p. 114).

Moreover, according to Mackenzie (2005), what makes Chomsky’s grammar distinct from Halliday’s grammar is that a functional grammar has psychological adequacy, that Chomsky’s grammar ignores. Accordingly, a functional grammar relates as closely as possible to psychological models of linguistic competence and linguistic behavior (Dik, 1989, cited in Mackenzie, 2005, p. 117). More comprehensively, Hegeveld and Mackenzie (2008a; 2008b) in an implicit comparison with Chomsky’s grammar adequacy, outline three types of adequacy of particular importance that seems to be ignored in Chomsky’s formal grammar: (1) typological adequacy: that is, the theory should be formulated in terms of rules and principles which can be applied to any type of natural language; (2) pragmatic adequacy: that is, what the theory says about a language should be such as to help us understand how linguistic expressions can be effectively used in communicative interaction; and (3) psychological adequacy: that is, what the theory says about a language should be compatible with what is known about the psychological mechanisms involved in natural language processing.

Defending his systemic functional grammar, Halliday (1994) also asserts it is functional in three distinct, although closely related, senses: in its interpretation of texts, (2) of the system, and (3) of the elements of linguistic structures. To Halliday, every text unfolds in some context of use, and it is the uses of language that have shaped the system. Put simply, systemic functional linguistics holds the use of language determines the form. Put another way, function always determines the form. In this regard, Halliday asserts that meaning is expressed through three metafunctions: ideational, interpersonal and textual. Ideational metafunction refers to the use of language in order to represent the world and how we experience it; interpersonal metafunction refers to language as an exchange between people; and textual metafunctions refers to the ways language holds together as a text. This whole takes place when the system network is traversed (Lin & Peng, 2006). Accordingly, Lin and Peng hold, “to generate an utterance, the system network is traversed, certain semantic features are selected, and the relevant realization rules are fired” (p. 331). They also put forth that in language acquisition “children gradually acquire a full system network, and use it to produce a large number of sentences”(p. 331).

A shift in Chomsky’s perspective

Almost half a century ago, in 1957, Chomsky came to this conclusion that the fundamental aim in the linguistic analysis is to separate grammatical sentences from ungrammatical ones. By grammatical sentences Chomsky means acceptable sentences to a native speaker. In a nutshell, he concludes, that grammar is autonomous and independent of meaning, and that probabilistic models give no particular insight into some of the basic problems of syntactic structure. However, more recently, in 2000 a shift in Chomsky’s

perspective toward grammar is visible from extravagancy to parsimony, by proposing the minimal program. To Chomsky, meaning takes place at two interface level. According to Chomsky (1957), the faculty of language engages other systems of mind at two interface levels: sound level and meaning level. In other words, an expression produced in a particular language contains a phonetic representation and semantic representation that the former is legible to sensorimotor systems and the latter to conceptual systems. This shift in Chomsky toward lexical items in lexicon seems to result in a change in his reductionist perspective. Nevertheless, as Zahedi (2008) declares, even in Chomsky's attempt to provide association between sound and meaning, lexical creativity has been ignored.

Moreover, claiming that all functionalists are in conflict with what formalists, in general, and Chomsky, in particular, follows is not plausible. Accordingly, even among functionalists, there is not an absolute consensus that grammar is not autonomous. As Croft (1995) distinguishes, there are two camps of functionalists: external and integrative functionalists. To the former group the existence of autonomous grammar is not rejected; however, external functionalists take issue with the other major tenets of Chomsky's Universal Grammar. To the latter, majority of functionalists subscribe to claim that the language system, though highly arbitrary, is closely bound up with external motivating factors (Butler, 2005). Bourke (2005) decisively declares that "there is no clear separation between grammar and discourse; they melt into each other in the process of generating a text" (p. 93). Also, Bourke metaphorically continues, "the school curriculum is a seamless garment and grammar permeates it all" (p. 93).

To delve into the source of contention from a philosophical perspective, let us put differently. What makes a minimalist (e.g., Chomsky, 1957) distinct from a maximalist (e.g., Halliday, 1973) is that for the former thought is directly externalizable and the mind does not need to incorporate a specific grammatical system (Longa & Lorenzo, 2008). This implies that the mechanisms of the faculty of language are not different from the external systems. As to maximalists, in contrast, language is a specific faculty that imposes the output. By the same token, the form of language is determined by the use of language. In fact, according to maximalists language is a specific faculty that imposes the representational format (grammar) on thoughts in order to be translatable into psychomotor instructions (Longa & Lorenzo, 2008, p. 549).

Similarly, Butler (2005) claims, the central focus of functionalists is that both the language system as a whole and the formal structures it uses in large part motivated by external factors such as cognitive structures, processing constraints, and social factors. However, no one can claim that these three factors exist co-productively. Many of these external factors are more distant from each other, but there are some features outlined by Givon (1995) that makes functionalist distinct from Chomskians:

1. Meaning is context-dependent and non-atomic
2. Categories are less-than-discrete
3. Structure is malleable, not rigid
4. Grammars are emergent
5. Rules of grammar allow some leakage. (p. 9)

Critically, what we see in these features is a kind of flexibility in meaning and structure in relation to the demands made by the context of communication. This flexibility in functional linguistics is in sharp contrast with Chomsky's reductionist determinism, although in Halliday's systemic functional linguistics, a sort of determinism exists. That is, language determines its functions.

Chomsky's determinism versus Halliday's determinism

Chomsky's determinism stands in opposition to not only empiricists who declare language is determined and shaped by its environment but relativists who assert language determines and shapes thought. Chomsky's determinism which is rational in nature is respected as a priori/innate/genetic codes peculiar to language which are to express thought. To Chomsky (1957), the knowledge of language (competence) is virtually the steady state which the biologically-determined human language faculty (state zero) takes only triggered by experience. Thus, Chomsky considers thought to pre exist language. Hence, in this theorizing, thought is not influenced by language and is only expressed by it; thus, no interaction seems to take place, as this knowledge informationally encapsulated (Fodor, 1983); that is, it is modular.

In this regard, Zahedi (2008) puts forth Chomsky's conception of autonomy and internalism has a genetic twist. His autonomy of syntax is based on the assumption of the modularity of mind, and his notion of internalist-language to simply mean the genetically pre-determined make-up of language. Hence, such a reductionist attitude according to Zahedi is termed as Chomsky's Internalist Bias which implies Chomsky's standing against all other approaches identified by him as being E(xternalist)-language outlooks. In sum, his attitude is not in favor of integrative functionalists who stand against the autonomous nature of syntax.

Another sort of determinism in Chomsky's grammar is found in the finite set of means. If creativity is defined as a human capacity that let the generation of infinite number of sentences never heard before, the use of a finite set of means to generate such an infinitivity involves a sort of determinism (Zahedi, 2008).

The determinism that we find in functionalism, in contrast, merits from the dynamic nature of language. To elucidate functional determinism, let us call your attention to a sentence by Halliday (1978). Halliday maintains "the nature of language is closely related to...the functions it has to serve ... [which] are specific to a culture" (p. 141). If we look functionalism from this stance, it stands against post-Bloomfieldians, and linguistic determinism of Sapir-Whorfians and rationalism of Chomsky (Zahedi, 2008). As Zahedi continues, like Chomsky's rationalism, in functionalism, there are language universals, but not of the biologically-determined type. To functionalists, language is defined and motivated by communication and language structure has biologically evolved to adapt itself to language external function(s).

In a nutshell, to us, functionalists take a paradoxical nature. Zahedi claims functionalism is empiricist in that it simultaneously denies genetic pre-determination, while stressing the formative role of external communicative purpose of language; it is anti-empiricist in that it offers functional universals; it is Saussurean in that functions may not be separated from forms; and it is anti-Saussurean in that it denies Saussurean autonomy, synchrony and, to a large extent, arbitrariness of language.

Making a judgment regarding who stands in a platform is not an easy task, but to us in Chomsky's ideology a sort of deterministic reductionism exists that makes comparison incommensurable. That he reduces everything to competence and sees performance as an imperfect reflection of competence is indicative of the fact having originated from a dualistic and deterministic philosophy. In contrast, Halliday (1978) takes a deterministic holism in his approach that implies to understand a behavior, we cannot go through parts.

Furthermore, in Chomsky (2000) we see a shift in paradigm. Up to the beginning of Minimal Program, language along with its grammatical structures, was autonomous and independent of performance forces. Chomsky (1957) sees performance as degenerate reflection of competence. Nevertheless, in

Chomsky's (2000) Minimal Program's fundamental hypothesis "language is an optimal solution to legibility conditions" (p. 96), which are imposed by the performance systems, external to language but internal to mind (Chomsky 1995, cited in Zahedi, 2008, p. 36). These output conditions imposed externally is labeled 'bare output condition' (Chomsky, 2000) as they operate on interface levels, and it is called bare as it is not part of computational system.

The importance of form-function mapping

In the Oxford Dictionary of philosophy, based on logic and mathematics, Blackburn (1996) defines function a map or mapping, that associates members of one class with some unique member of another class. In SLA, this mapping is between form and potential meaning, here called function. There is always a meaning-making attempt on the part of learners that is constant interact with the development of formal grammatical system (Mitchell & Myles, 2004). Regarding the credit that must be given to form-function (also function-form) mapping, McLaughlin (1987) declares researchers need to look at how forms are mapped onto functions and how functions are mapped onto forms. This is not in the realm of this paper to decide which precedes the other: form or function. But what is lucid is that functionalists, in contrast with formalists, are one step ahead in indicating that beginning second-language, learners express functions in their native language with limited syntactic and lexical command of it. Again there is not a much consensus among researchers even in these two camps that which one precedes the other. To Ellis (1985), for instance, SLA involves the sorting out of form-function relationships, in which learners begin with forms. In contrast, according to McLaughlin (1987), second language data shows evidence of the acquisition of functions without the acquisition of forms. He maintains the learner learns how to do conversation, and how to interact verbally, and then out of this, syntactic forms develop. This is in stark contrast with what Chomsky believes. In fact, learning, as to Chomsky, involves knowing a multiplicity of linguistic forms.

In disfavor with autonomous nature of syntax, Givon (2009) also tackles syntactic complexity as the integral part of the evolution of human communication. To Givon (2005), the context is the core notion of pragmatics and the context of social interaction and communication as a mental representation of other minds. In other words, communication involves the ability of members to construct mental representations held by other members and thus to know other minds. Favoring Halliday's functional linguistics, Givon says that semantics is not autonomous with respect to pragmatics, and that pragmatics provides part of the necessary input to a semantics theory. Givon also believes syntax comes from the properties of human discourse, not simply a single language. Put similarly, Nicholas (1984) also maintains, functionalists maintain that the communicative situation motivates, constrains, or otherwise determines grammatical structure.

Conclusion

In line with Halliday (1973), Hymes (1971, cited in Warschauer and Kern, 2000, p. 4) maintains "language is not just a private, 'in the head' affair, but rather a socially constructed phenomenon" (p. 4). Hymes' (1972) communicative competence in response to Chomsky's mentalistic concept of linguistic competence insisted on the social appropriateness of language remarking, that there are rules of use without which the rules of grammar would be useless. For Hymes (1971, cited in Warschauer and Kern, 2000, p. 4), syntax and language forms were best understood not as autonomous, acontextual structures, but rather as meaning resources used in particular conventional ways in particular speech communities. In much the same way, Warschauer and Kern (2000) put that "grammaticality was not separable from social acceptability, nor was cognition separable from communication" (p. 5). They claim what makes Halliday's notion of grammar more plausible than Chomsky's notion is that Haliday "is not interested in the artificial concept of

competence that is what the speaker-hearer knows” (p. 4). They also put forth that Halliday “is interested in ‘what speaker-hearer does in language in sociolinguistic or functional terms” (p. 4).

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