Construction Driven Language Processing

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A basic mechanism of language comprehension that involves the *activation*, *selection* and *integration* of *constructions* corresponding to the linguistic input is put forward. During the processing of the sentence

He is kicking the ball

the following constructions are likely to be accessed:

he $\rightarrow$ [$he_{\text{3-sing-male-human-pron}}$] $_{\text{nominal}}$
is $\rightarrow$ [$be_{\text{3-pres-sing}}$] $_{\text{verb}}$
he is $\rightarrow$ [$\text{Ref-Pt}_{\text{comp}}$ be_{spec} $\text{Predn}_{\text{head}}$] $_{\text{clause}}$
kicking $\rightarrow$ [$kick_{\text{v-ing}}$] $_{\text{verb}}$
kicking $\rightarrow$ [$\text{Subj}_{\text{comp}}$ $kick_{\text{head}}$ Obj_{comp}] $_{\text{proposition}}$
kicking $\rightarrow$ [V_{head} Obj_{comp}] $_{\text{predication}}$
is kicking $\rightarrow$ [be_{spec} $\text{V-ing}_{\text{head}}$] $_{\text{predicator}}$
the $\rightarrow$ [the_{spec} Head] $_{\text{nominal}}$
the ball $\rightarrow$ [the_{spec} $ball_{\text{head}}$] $_{\text{nominal}}$

The [$he_{\text{3-sing-male-human-pron}}$]$_{\text{nominal}}$ construction encodes the knowledge that pronouns like "he" (3rd person, singular, male, human) function as full nominals, encoding both a referential specifier function and an objective head function (see Ball, 2005, "A Bi-Polar Theory of Nominal and Clause Structure and Function", this proceedings). The [$be_{\text{3-pres-sing}}$]$_{\text{verb}}$ construction encodes the status of "is" as the 3rd person, present tense, singular form of the verb "be". The [$\text{Ref-Pt}_{\text{comp}}$ be_{spec} $\text{Predn}_{\text{head}}$]$_{\text{clause}}$ construction captures the use of a reference point complement and a referential specifier (be_{spec}) to tie a predication functioning as head of a clause to the larger discourse situation via the reference point and referential specifier. This construction is related to the basic *subject-predicate* form of a clause with be_{spec} and

$\text{Predn}_{\text{head}}$ together constituting the *predicate* (which is not a distinct functional element in this construction) and $\text{Predn}_{\text{head}}$ alone constituting a *predication* (i.e. head, and post-head complements—syntactically a VP when the head is a verb). In the case of a tensed verb without a separate auxiliary (e.g. "kicked"), the construction has the form [$\text{Ref-Pt}_{\text{comp}}$ $\text{Pred}_{\text{head}}$]$_{\text{clause}}$ where $\text{Pred}_{\text{head}}$ constitutes a *predicate* (and distinct constituent) which encodes the tensed verb and post-head complements and $\text{Ref-Pt}_{\text{comp}}$ corresponds to the *subject*. The [$kick_{\text{v-ing}}$]$_{\text{verb}}$ construction captures the "V-ing" (i.e. progressive) verb form of "kicking". The [$\text{Subj}_{\text{comp}}$ $kick_{\text{head}}$ Obj_{comp}]$_{\text{proposition}}$ construction captures the basic relational meaning of the verb "kick" which combines with a subject and object complement to form a proposition. This construction is closely related to the basic SVO form of a clause. The [V_{head} Obj_{comp}]$_{\text{predication}}$ construction captures the combining of a tenseless verb head with an object complement to form a predication that functions as the head of the [$\text{Ref-Pt}_{\text{comp}}$ be_{spec} $\text{Predn}_{\text{head}}$]$_{\text{clause}}$ construction. The [be_{spec} $\text{V-ing}_{\text{head}}$]$_{\text{predicator}}$ construction captures the combining of the auxiliary verb "be" functioning as a specifier with the progressive form of a verb functioning as the head in forming a *predicator*. The [the_{spec} Head]$_{\text{nominal}}$ construction captures the encoding of a referential specifier and objective head to form a nominal. The [the_{spec} $ball_{\text{head}}$]$_{\text{nominal}}$ construction captures the encoding of "ball" as the head of the [the_{spec} Head]$_{\text{nominal}}$ construction.

Assuming the activation, selection and integration of these constructions during the processing of this linguistic input, the following linguistic representation is suggested: