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

The [$he_{3\text{-sing-male-human-pron}}$]$_{nominal}$ 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 [$be_{3\text{-pres-sing}}$]$_{verb}$ construction encodes the status of "is" as the 3rd person, present tense, singular form of the verb "be". The [Ref-Pt$_{comp}$ be$_{spec}$ Predn$_{head}$]$_{clause}$ 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

Predn$_{head}$ together constituting the *predicate* (which is not a distinct functional element in this construction) and Predn$_{head}$ 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 [Ref-Pt$_{comp}$ Pred$_{head}$]$_{clause}$ where Pred$_{head}$ constitutes a *predicate* (and distinct constituent) which encodes the tensed verb and post-head complements and Ref-Pt$_{comp}$ corresponds to the *subject*. The [$kick_{v\text{-ing}}$]$_{verb}$ construction captures the "V-ing" (i.e. progressive) verb form of "kicking". The [Subj$_{comp}$ kick$_{head}$ Obj$_{comp}$]$_{proposition}$ 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$_{comp}$]$_{predication}$ construction captures the combining of a tenseless verb head with an object complement to form a predication that functions as the head of the [Ref-Pt$_{comp}$ be$_{spec}$ Predn$_{head}$]$_{clause}$ construction. The [be$_{spec}$ V-ing$_{head}$]$_{predicator}$ 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]$_{nominal}$ construction captures the encoding of a referential specifier and objective head to form a nominal. The [the$_{spec}$ ball$_{head}$]$_{nominal}$ construction captures the encoding of "ball" as the head of the [the$_{spec}$ Head]$_{nominal}$ construction.

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