Chapter 3
Explaining Linking Regularities

In the examples we have considered so far, the linking of CS arguments to syntactic positions is stipulated on an entry-by-entry basis, which suggests that these associations are arbitrary and can be different for each verb. In fact, however, the syntactic realization of thematic roles is generally predictable cross-linguistically, as has been well-known since the early work of Fillmore (1968), Carter (1976), and Ostler (1979). For example, for causative verbs \textit{(read, break)}, the agent, if it links, links to the external argument, and the theme, if it links, links to an internal AS argument. We do not find verbs like the hypothetical verbs \textit{shmead} or \textit{shmeak} in (1), which are identical in all respects to the English verbs \textit{read} and \textit{break} except that the syntactic realizations of agent and theme are reversed.

(1)  
\begin{enumerate}
  \item *Books shmead librarians. (meaning = Librarians read books.)
  \item *The eggs shmoke the chef. (meaning = The chef broke the eggs.)
\end{enumerate}

Such generalizations have been called linking regularities, and a principled account of them – a theory of linking – is the focus of this chapter.

Before we begin, it is useful to point out that we have been using (and will continue to use) fully-specified lexical entries with each linking CS constituent mapped with a linking line to our AS interface. Alternatively, lexical entries could be underspecified: CSs could simply designate which constituents link but not where, their syntactic position derived as the output of the linking rules acting on the CS. But it is no more costly to assume fully-specified entries than underspecified entries plus linking rules (which, like lexical redundancy rules, discount all but the unpredictable information (Jackendoff, 1975; Aronoff, 1976)). Thus the two representations are essentially equivalent. As we introduce our linking theory, we will couch our discussion in terms of an underspecification model, in terms of the principles that “fill in” the linking lines connecting CS elements to AS positions. But this is only an expository device; nothing we will say hinges on it.

Our linking theory will have to do better than the two classic hypotheses concerning linking regularities in the literature, and their offshoots. The first one is the Thematic Hierarchy Hypothesis (or THH), exemplified by the work of Ostler (1979), Carter (1976), Carrier-Duncan (1985) and Jackendoff (1990). The second hypothesis is exemplified by Baker’s (1988, 2001) Uniformity of Theta Assignment
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Hypothesis, or UTAH, and the linking rules of Levin & Rappaport Hovav (1995) and Rappaport Hovav & Levin (1998a and later). After we lay out our linking theory, we will compare it to these two approaches to see how it solves a number of problems that they leave unsolved.

3.1 A New Linking Proposal: The Isomorphic Linking Hypothesis

It is possible to explain the prevalence of certain linkings cross-linguistically if we take seriously the claim that theta roles are relational notions (Jackendoff, 1983, 1990) in a hierarchically structured representation. “Agent” stands for “first argument of CAUSE”, “theme”, for “first argument of BECOME”). What we will exploit about these relations is their structural difference in CS. We will claim that linking patterns are a consequence of CS geometry. Precedence in linking reflects not some arbitrarily stipulated hierarchy, but the hierarchy encoded in CS.

A typical CS like (2), consisting of terminals dominated by CS function nodes, can be represented schematically, as in (3).

(2) \[
\text{CAUSE} \\
[\text{THING}] \\
\text{BECOME} \\
[\text{THING}] \\
[\text{PLACE}] \\
\]

(3) \[
x \\
y \\
z \\
\]

The syntactic positions to which CS elements link also have a geometry. At the most abstract level, an argument position is either external or internal. We can represent this schematically using a maximal three-argument Argument Structure (AS) “template”, with one external and two internal arguments, (4), which translates into the tree in (5).\footnote{As we mentioned in the Introduction, this template abstracts away from the particulars of the clause nucleus, which we want to avoid so as to be theory-neutral. But in all syntactic representations, even if internal DS arguments are not sisters, as in Larsonian shells (Larson, 1988 and after) such as (i), or more articulated structures, such as those proposed in Borer (2005), Bowers (1993), Chomsky (2000, 2001), McGinnis (2004), Ramchand (2008), Ritter & Rosen (1998), and Travis (2000), among others, the external argument, (1), is always higher than and c-commands any...}