Syntax-relevant Dimensions, p. 1

During a discourse involving two professors, A and B, in which they are talking about B, A asks "Who did you teach?" and B answers (pointing):

<p style="text-align:center">I taught her.</p>

This sentence can be analyzed along various dimensions, representing different types of relations within the sentence. The textbook discusses thematic ("semantic") roles, pragmatic roles, grammatical functions ("grammatical relations"), and Case. To this we will add constituent structure.

The precise analysis on each of these dimensions depends on the linguistic theory; the descriptions here are approximate and roughly in line with the textbook's analyses.
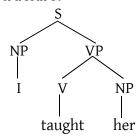
Thematic roles:

$$\text{teach} \langle \text{Agent}, \ \text{Patient} \rangle$$
$$\text{'I'} \qquad \text{'her'}$$

Pragmatic roles:

I taught her
      FOCUS
TOPIC COMMENT

Grammatical functions:

$$\begin{bmatrix} \text{SUBJ} & [\text{"I"}] \\ \text{PRED} & \text{'teach} \langle \text{SUBJ, OBJ} \rangle \text{'} \\ \text{TENSE} & \text{PAST} \\ \text{OBJ} & [\text{"her"}] \end{bmatrix}$$

Case:

$$\begin{bmatrix} \text{NOM} & I \\ \text{ACC} & her \end{bmatrix}$$

Constituent structure:

```
              S
          ┌───┴───┐
         NP       VP
          │    ┌───┴───┐
          I    V       NP
               │        │
            taught     her
```

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To summarize:

	'I'	'her'
Thematic roles	Agent	Patient
Pragmatic roles	TOPIC	FOCUS part of COMMENT
Grammatical functions	SUBJ	OBJ
Case	nominative	accusative
Structure	under S	under VP

From the perspective of the typological study of syntax, it makes sense to think about syntax from this multidimensional perspective, because the differences between languages can often be identified with differences in the relationship (correspondence, mapping) between the different dimensions.

Some theoretical approaches to syntax are based on this multidimensional conceptualization, while others model syntax in terms of a single type of representation (usually constituent structure) which expresses all syntactically relevant relationships. Of the contemporary theoretical approaches to syntax, the one which is most explicitly multidimensional (and therefore the most congenial to typological work) is the theory of Lexical-Functional Grammar (LFG). In fact, the representation of grammatical functions on this handout is adapted from the formal notation of LFG, where it is called **functional structure** (or **f-structure**). While the focus of this course is not theoretical, this informal use of LFG notations will occasionally prove useful. For an introductory survey of LFG, see:

Yehuda N. Falk (2001) *Lexical-Functional Grammar: An Introduction to Parallel Constraint-Based Syntax*. Stanford, Calif: CSLI Publications.

(Current plans are for a course in LFG to be offered next year.)