Encoding the lexicon

A lexicon in HPSG is an ordinary implicational principle on objects of type *word*.

The lexicon in ConTroll can be expressed as:

```
word ==> <LE1> ; <LE2> ; ... ; <LEn> .
```

where the <*LE*> are the different lexical entries.

This lexicon disjunction can get very large, which is

- hard to specify correctly
- outside of the term size handled by most Prologs

⇒ ConTroll has a special notation for lexical entries.

A special syntax for lexical entries

Fixing the type serving as antecedent:

```
lexicon_type(<Type>).
```

Encoding a lexical entry:

```
<Desc1> ---> <Desc2>.
```

Specifying the mapping to ordinary disjuncts:

```
lexicon_style(<Var1>,<Var2>,<Desc>).
```

For example:

```
lexicon_style(P,Q,(phon:[P],Q)).
```

- The special notation is compiled exactly like an ordinary implicational statement on the type defined to be the lexicon type.

- Additional implicational constraints with the lexicon type as antecedent are interpreted conjunctively (as always).