Errata for
Prolog and Natural-Language Analysis

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The following listing comprises the errata in the book *Prolog and Natural-Language Analysis* known to the authors as of February 29, 1996. Our thanks go to the following people for identifying one or more of the items below: Cecile Balkanski, Mark Johnson, Iraklis Kourtidis, Karen Lochbaum, Kuniaki Mukai, Ted Nesson, John O'Neil, Wheeler Ruml. We would appreciate having errata not on this list brought to our attention. Please send email to `shieber@das.harvard.edu`.

Negative line numbers are used when specifying a count from the bottom of the page.

- Page 33, line 1: "positions for the the sample" should be "positions for the sample".
- Page 42, Figure 2.9: The arc labelled "'s" has the arrow at the wrong end.
- Pages 78–79, Program 3.12: Missing braces around the goals `det(Det)`, `n(N)`, `pn(PN)`, `tv(TV)` and `iv(IV)`.
- Page 79, line 14: A comma should follow the close parenthesis.
- Page 80, line 14: "iff" should be "if and only if"
- Page 81, Problem 3.18: "trees like the one given above" should instead be "trees like the one shown in Figure 3.4."
- Page 84, line -13: "pronounciation" should be "pronunciation"
- Page 101, line -5: Last paragraph should be:

Finally, modifying the transitive verb phrase rule, again changing the direction of application, consider the verb phrase "wrote a program", which should have the LF $\lambda z.(\exists p) program(p) \wedge wrote(z,p)$. Recall that the LFs for "wrote" and for "a program" are, respectively, $\lambda x.\lambda y.wrote(y,x)$ and $\lambda q.(\exists p) program(p) \wedge q(p)$. For convenience, we will modify the LFs for transitive verbs so that they apply to the subject before the object, e.g., $\lambda x.\lambda y.wrote(x,y)$. Then, we want the VP's LF to be $\lambda z.NP'(TV'(z))$.

- Page 111, line -9: "and, applying the range to the quantifier," should be "and, applying the quantifier to the range,"

- Page 121, Program 4.4: First rule at top of page should have `np(nogap)` rather than `np(Gap)`

- Page 124, Program 4.5: Seventh rule should have `optrel(N1^N2)` rather than `optrel(N1, N2)`

- Page 125, line 5: The variable `Relpron` should be `RelPron`

- Pages 131ff, Section 4.3.4: This problem section should be moved to after Section 6.5.2, because the problems in it cannot be done using the obvious top-down parsing approach.

- Page 132, Problem 4.10: The terms `NP`, `S\NP`, and `(S\NP)/NP` should instead be `np`, `s\np`, and `(s\np)/np`.

- Page 142: The third clause in the second definition of `merge/3` should be

```
merge([A|RestAs], [B|RestBs], [A|Merged]) :-
    A < B,
    !,
    merge(RestAs, [B|RestBs], Merged).
```

- Page 156: The head of the first displayed clause should be

```
read_sent(Char, [Word|Words])
```

- Page 173: The definition of `match_exists` is incorrect. The correct definition is

  ```
  match_exists(Literal) :-
      setof(Body, clause((Literal:-Body)),
            [_Clause|_Others]).
  ```

  Furthermore, the following simpler definition is also sufficient, since `setof` fails if there are no solutions for the goal encoded by its second argument:

  ```
  match_exists(Literal) :-
      setof(Body, clause((Literal:-Body)), _Solutions).
  ```

- Page 183, line 13: "`right(Rest)`" should be "`parse_rest(Rest)`".

- Page 207, line 11: "...matching $p(succ^n(0))$..." should be "...matching $P(succ^n(0))$..."

- Page 208, line -12: "...by eliminating all but a finite..." should read instead "...by eliminating all but a bounded...".

- Page 215: The last subgoal of the last clause of `print_answers/1` should be `print_answers(Rest)`.

- Page 221, line 10: "`` X^`halt(X) ``" should be "`` X^`halts(X) ``" (This is uniform with the logical forms for the other verbs. Furthermore, without the change, the Quintus Prolog system complains on attempting to assert a clause defining the built-in predicate `halt/1`.)

- Page 224: The dynamic declarations for `(--->)/3` and `parse/3` are unnecessary.