

# The `syntrace` package\*

Mathieu Boretti  
mathieu.boretti@gmail.com

August 13, 2006

## Abstract

This file describe the `syntrace` package. This package is intended for  $\LaTeX$  users who must deal with traces in `synttree`.

## 1 Usage

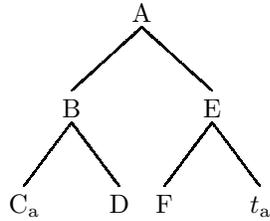
The `syntrace` package add a way to deal with trace in tree produce using the `synttree` package.

- `\traceLabel`      The `\traceLabel{label}` set and draw a start trace. The parameter is the label to use for the reference.
- `\traceReference`      The `\traceReference{ref}` draw a trace linked with the specified reference.
- `\synttree`      The `\synttree` is redefined to auto reset the counter of trace at the start of a tree. The `\synttree*` work as the standard `\synttree` command (without auto resetting the counter).

## 2 Examples

### 2.1 Simply example

```
% \synttree[A %  
%            [B [C\traceLabel{11}] [D]] %  
%            [E [F] [\traceReference{11}]]%  
%            ]  
%
```



---

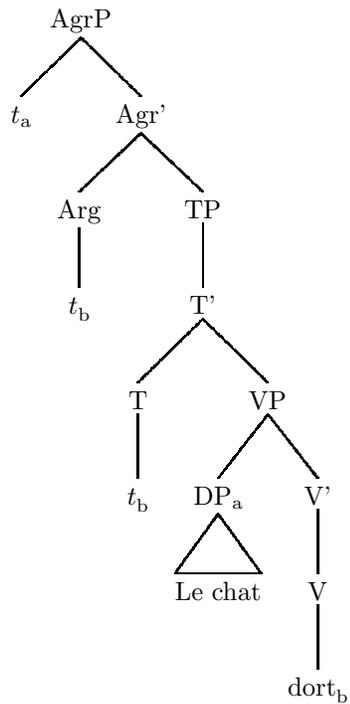
\*This document corresponds to `syntrace` v1.0, dated 2006/08/13.

## 2.2 One complexe example

```

% \synttree[AgrP
%       [\traceReference{sujet1}]
%       [Agr'
%         [Arg [\traceReference{verbe1}]]
%         [TP
%           [T'
%             [T [\traceReference{verbe1}]]
%             [VP
%               [DP\traceLabel{sujet1} [.t Le chat]]
%               [V' [V [dort\traceLabel{verbe1}]]]]
%           ]
%         ]
%       ]
%     ]
%   ]
% ]

```



## 3 Implementation

`syntrace@startvalue` This counter define the start value of the trace numbering

```

1 \newcounter{syntrace@startvalue}
2 \setcounter{syntrace@startvalue}{0}

syntrace@labelcounter This counter count the trace
3 \newcounter{syntrace@labelcounter}
4 \setcounter{syntrace@labelcounter}{\arabic{syntrace@startvalue}}

\thesyntrace@labelcounter This macro display the value of the trace counter
5 \renewcommand*\thesyntrace@labelcounter{%
6   \alph{syntrace@labelcounter}%
7 }

\syntrace@labelletter This macro display the default letter for the trace
8 \newcommand*\syntrace@labelletter{%
9   \ensuremath{t}%
10 }

\syntrace@displaytrace This macro display the value of a trace
11 \newcommand*\syntrace@displaytrace[1]{%
12   \raisebox{-.5\height}{\scriptsize\mbox{#1}}%
13 }

\traceLabel This macro add a start trace
14 \newcommand*\traceLabel[1]{%
15   \refstepcounter{syntrace@labelcounter}%
16   \syntrace@displaytrace{\thesyntrace@labelcounter}%
17   \label{syntrace-#1}%
18 }

\traceLabel This macro add a reference to a trace
19 \newcommand*\traceReference[1]{%
20   \syntrace@labelletter\syntrace@displaytrace{\ref{syntrace-#1}}%
21 }

\syntrace@reset This macro reset the trace counter
22 \newcommand*\syntrace@reset{%
23   \setcounter{syntrace@labelcounter}{\arabic{syntrace@startvalue}}%
24 }

synttree This macro add the autoreset to the synttree command
25 \let\syntrace@syntree=\synttree
26 \def\synttree{\@ifstar%
27   \syntrace@syntree%
28   \syntree@star%
29 }
30 \def\syntree@star{%
31   \syntrace@reset%
32   \syntrace@syntree%
33 }

```