TREES

I think that I shall never see
A string as lovely as a tree.
For strings are made by fools like me,
And only parsers make a tree.

A string just lies there, plain and flat,
As boring as a welcome mat--
A rather dreary, flabby sight,
Of symbols stretched from left to right.

While trees, whose branches downward drop,
Grow gracefully from root to top,
Arcing down from node to node
Until they reach an antipode.

The trees I mean aren't found in parks.
Their branches are thin airy arcs.
Their leaves aren't eaten by giraffes.
They're finite and acyclic graphs.

Such trees have academic glamor,
Suggesting hints of math and grammar
That draw forth papers theoretic
(As trees to dogs are diuretic).

Parsers grow trees with productions
Using weird and looped construc-
 tions.
But though I labor day and night
I cannot get a parser right.

I try to get my trees to grow,
But parsers I write never go.
So I leave parsing, growing trees,
To men like Aho, Knuth and Gries.

Some parsers gaily go to town,
Working from the root on down.
While others go from top to bottom,
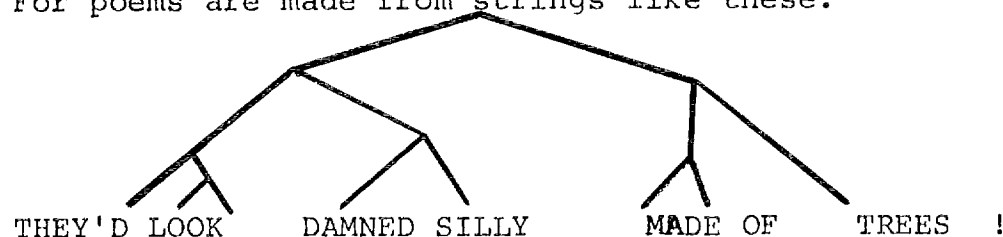Assigning forms to strings that's
 got'em.

There are some strings that do not
 parse,
Whose structure is an utter farce.
A parser indicates the error
In ways that make one quake with
 terror.

They tell you what you've written
 wrong
In messages both short and long
That really are incomprehensible
And make you feel quite repre-
 hensible.

And there are parsers that are able
To drive constructions from a table,
Keeping guesses good and warm
With hints in Backus-Naur form.

A parser glues our A's, B's, C's
Into graceful, arcing trees,
Finding forms in LISP and COBOL,
FORTRAN, PL/I and SNOBOL.

But I, for one, would rather grow
Plain strings that lie there, in a row.
For poems are made from strings like these.

THEY'D LOOK　　DAMNED SILLY　　MADE OF　　TREES　!

-- Peter Kugel
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