

Planet Holonforth

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I described the first version of Holon in the paper "Not Screens nor Files but Words" at EuroFORML 1989 in the village Forth near Nuremberg. Holon was warmly received, and I naively expected the concept to spread in the community and spawn an evolution of similar systems. That did not happen. Instead, Holon began its long, exciting non-standard voyage around the Forth galaxy.

Please join me for a visit to planet Holonforth and a look at the results of a little refactoring of Moore's classical Forth system.

The main change concerned the rôles of editor and compiler regarding the dictionary. In Holon, the editor creates the dictionary, whereas the compiler concentrates on compiling and optimizing and merely adds the code pointer.

In Holon86, a Smalltalk-inspired fully integrated Forth IDE, the source is handled in a structured browser, with immediate access to and change of every word in the target program, including its code. The target resides in a separate code space independent of the development system and is controlled by an umbilical connection.

As a particularly useful feature, the permanently available dictionary allows selective loading of only the code that is used in the target. Which, by the way, lets you use Holon86 as a Literate Programming system with intrinsic TANGLE.

HolonS is a multi-platform source code management system that uses a real database to implement the Holon dictionary structure and browser. The source is presented in a book structure of chapters, sections, and unit pages. The chapters are copied to external files, and the files are updated with every change in the browser. Thus you have the source stored in a database - with all the pleasant features that I want to illustrate - yet constantly available in source files for code production.

For a closer inspection of planet Holonforth, see www.holonforth.com.