Object-Oriented Working Group Report

There were 18 attendees.

There seemed to be general agreement that OOP was very
useful, especially for large, complex projects. Most of the
discussion centered around implementation concerns. The
problems with trying to implement a "pure" OOL (in which
everything is an object) within an RPN interpreter were
discussed. RPN is dangerous because of the open stack and
indeterminate condition of the stack at runtime.
Nevertheless, it seems that much is to be gained by adding
object-oriented constructs to Forth. Two existing
implementations, Pountain's extensions and Neon, were
briefly discussed.

The usefulness for OOP in AI was a topic, continuing the
discussion from the AI working group. One attendee
discussed implementing OOP in Lisp and Forth, and the use of
frames, object-like constructs from Lisp.

Efficiency and various implementations of method lookup were
examined. The lookup problem was explained, and strategies
for method caching and hashing techniques were presented.
One attendee discussed an approach for doing lookups by
class rather than by function name as the primary key.

The advantages of late versus early binding were discussed,
along with strategies for incorporating early binding
without compromising the system.

It was suggested that OOP techniques can be added to Forth
without a radical modification of the language, as
demonstrated by Pountain's extensions. This seems to be a
ripe area for further work, and possible incorporation into
a standard.