Foozles: A retrospective

or

Anatomy of a programming languages fad

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Martin Minton, a mid-career academic, writes a paper about a new approach to software development he calls *Foozles*. Old-timers grumble that Foozles were well-known in Lisp, under a different name, and that it is all laid out clearly in Erik Sandewall's 1978 Lisp survey.

Students of Martin Minton release a module for the popular software development environment *Equinox* that makes writing Foozles easy and fun.

Phil Wadler writes a beautiful paper about Foozles with a clever title. Everyone reads it.

Foozles

2010

Foozle-Oriented Software Development conference held, with moderate success. Successive iterations will grow in popularity, with ever more complex tool and language support for Foozles proposed and implemented. The book Mastering Foozles: Foozle-Oriented Software Development in Java appears, aimed at real-world programmers.

Franz Högler, the noted type theorist, publishes the acclaimed paper A Theory of Foozles that presents the $\lambda^{\rm fooz}$ calculus.

First ever *Foundations of Foozles* conference held. Now Foozles are on a rigorous foundation, but also weirder and hard to understand. The λ^{fooz} calculus is acknowledged as a good start, but supplanted by the $\lambda^{\text{fooz}}_{\circlearrowleft}$ and $\pi^{\text{foo}/\mathcal{Z}}_{\circlearrowleft}$ calculi. Francoise Boisbleu proves that under a certain formulation, Foozles are a categorical dual to Aspects, which gets everyone terribly excited.

Waning interest in Foozles; they are increasingly marginalized by the newly-popular Nimble Arrows, which itself is about to be overtaken by Magic Mixin Markups (M^3)

Foozles

2016

First-ever usability study of Foozles with real programmers suggests that their benefits are outweighed by the code maintenance problems they create. Study politely criticized by young academics who wrote their dissertations on Foozles. The paper is rejected from FOSD VIII (Foozle-Oriented Software Development); reviewers remark that although the paper presents a promising research direction, the sample size is too small to draw conclusions, the study "feels preliminary," and authors are criticized for insufficiently explaining what they mean by "Fisher's test". A short version is published at PPIG and cited heavily by proponents of the M^3 paradigm.

The 800-page tome *Handbook of Foozle Theory* is published in hardcover (retail price \$ 265 to compensate for the small print run). Now largely divorced from its roots in programming languages, Foozle Theory has evolved into a deep and complex subject that lies at the conjunction of category theory, term rewriting, and topology. An MSRI workshop is held. Papers on Foozle Theory still start with the sentence, "Foozles are increasingly recognized as a promising approach to managing program complexity, and an elegant theory has been developed to explain why [1,3,17,24,25,32,43,57,58,59,60]" even though most practitioners gave up on Foozles a decade ago.