

# Notes from the Co-Editors

—Ray Polivka and Jon McGrew

## The past, present, and future of J

**T**HIS ISSUE OF APL QUOTE QUAD focuses on the APL derivative language, J. For those of you who are new to J, let us point out to you that J was originally devised ten years ago by Ken Iverson, the creator of the APL language. Ken is now part of a team working on the development of J in Toronto. We are pleased to be able to show you the J team on our cover.

In these first ten years that J has been available to the programming community, some APL users have embraced the new language, while others have been slow to move in that direction. In this issue, we would like to reintroduce the J language to the APL audience, and repeat a bit of the introductory information that some of the APL users may have missed when it originally appeared.

One of the stumbling blocks in moving to a new language—even one with roots in APL—is new terminology which must be learned. This issue will bring you up to date with those terms. You may already have studied adverbs and conjunctions (as they apply to J), but have you read about tacit programming? Do you understand forks and hooks? ... Trains? None of these concepts are difficult—they simply require an understanding of some new terminology.

So where does someone new to the language learn the terminology? Well, as we looked to find which papers would appropriately introduce J to APL programmers, we found that all of this—and more—had already been covered, in a paper published back in 1991 in a special APL-focus issue of the *IBM Systems Journal*. The paper was “A Personal View of APL,” by Kenneth Iverson, who created both APL and J. The paper gave an overview of both languages, and introduced many of the fundamental points of J that a newcomer to the language

needs to know, so it is still very relevant today. That issue of the *IBM Systems Journal* (Vol. 30, No. 4) was published back in 1991 to commemorate the twenty-fifth anniversary of the APL language. We are pleased to be able to reprint that paper here, and make it available to a new audience, through the kind permission of the Editors of the *IBM Systems Journal*.

Next, Keith Smillie, Professor Emeritus of Computing Science at the University of Alberta in Edmonton, provides us with “A Lecture on Array Languages.” Many of you may already know Keith as an interesting writer. Here, his tracing of languages shows J in an historical perspective. This paper is actually the one that first got us thinking about creating a J-focus issue. We think you’ll enjoy this.

For the decade that J has been available, it has always been the practice of *APL Quote Quad* to publish articles on both APL and J; in fact, the first introduction of APL to the general public was right here in the pages of *APL Quote Quad*. In this issue, we are placing most of our focus on J. We welcome papers on APL and J and other related languages. In the future, our issues will continue to feature some of each.

We have talked about the past and present of APL and J... what does the future look like? Ken Iverson addresses this in his new paper, entitled “APL In the New Millennium.”

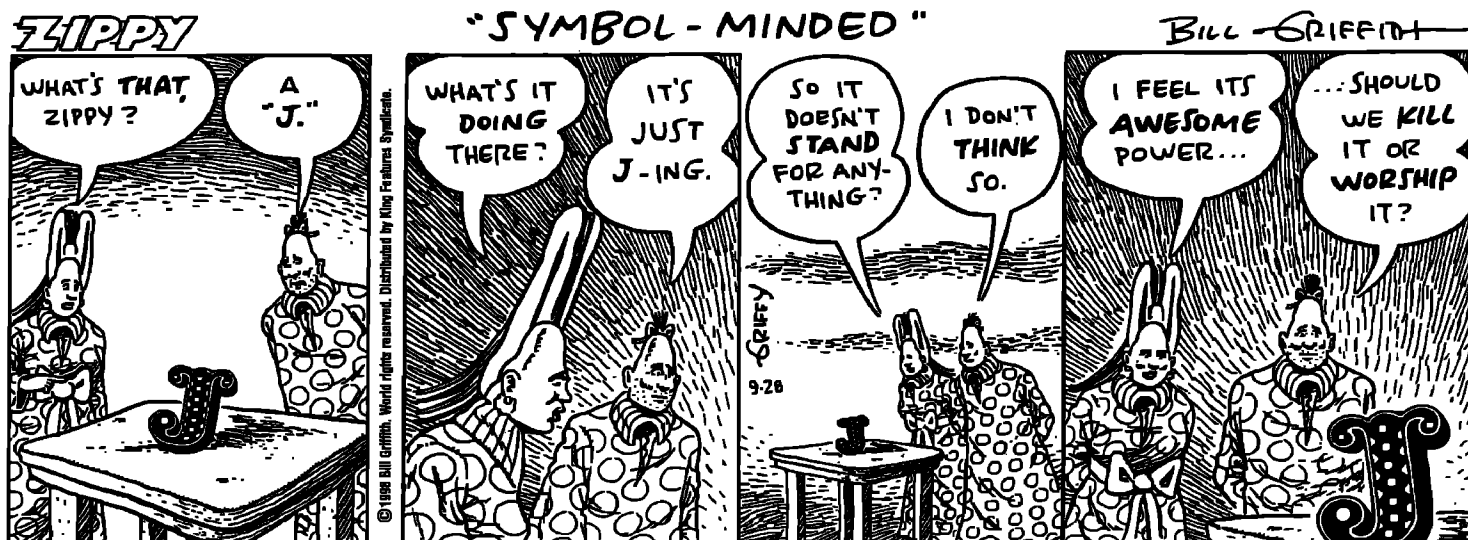
In the remainder of the issue, regular contributors Cliff Reiter, Eke van Batenburg, and Walt Neihoff demonstrate both J and APL in action.

We hope that this material is useful to you. ...*Let us know!* ■

## Just for fun

**Z**IPPY THE PINHEAD is a long-running, well-established cartoon series, seen in newspapers across the U.S. One of Zippy’s episodes in particular caught our eye a while back. We present it here—unaltered—just in case it somehow has some bearing on the discussions of this issue. ...We’re just not really sure....

Our thanks to the cartoon’s creator, Bill Griffith, for granting us permission to reprint his work here. ■



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