Visual programming: Let’s be scientific about it

To The Editor:

As a working computer scientist and a graduate student (my thesis subject is concerned with visual programming), I must thank you for the wonderful issue on visual programming (August 1985). I am well on my way to having it cover to cover.

As much as I join in the enthusiasm toward the possibilities of visual programming, I must ask if we are letting the enthusiasm cloud our reason when stating the advantages of visual programming over conventional programming. Drs. Grafton and Ichikawa overstate the findings of Gilnert and Tanimoto, I think, by saying that “95 percent of the programmers [surveyed in the PICT project] definitely preferred it to conventional methods.” Gilnert and Tanimoto did not seem to make such a definitive statement in their article, admitting that “the experiments . . . can be criticized on the grounds that they lack the methodology commonly used in the behavioral sciences” and that “under the circumstances, we should probably avoid analyzing our data with powerful statistical tools.”

It is my opinion that we should carefully consider the advantages that visual programming might offer over conventional textual programming methods, perhaps taking a semiotic approach to our analysis, and not rush too quickly to conclusions based on “common knowledge” of informal surveys of small populations (possibly making poor choices based on our intuition or scant evidence that we might be years in “undoing”). Are we too quick to use icons, metaphors, and animation before we understand more about the visual representation of information and its interpretation (both machine and human)? Would a combined visual and textual language be more “readable” than a purely visual one? As Dr. Raeder advises in the closing remarks of his article, should we not take a more systematic and reasoned approach in investigating this new communication medium?

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