

HyperCard was introduced in 1987 and made the "personal computer" truly personal by enabling people who weren't hackers or computer experts to create their own programs. David Drucker calls computers "soft machines" because they constantly change shape and function. By running an application, the Macintosh becomes a new tool. Nothing makes this more true than HyperCard.

HyperCard is called everything from an "accessible software erector set" (John Scully) to a user friendly programming "environment". David Drucker says its a little like the story about the blind men and the elephant. How HyperCard is defined depends on where you "touch" or use it. HyperCard's developer, Bill Atkinson, says HyperCard empowers people with specialized interests to express their interests in new ways.

However you define it, HyperCard offers educators a powerful tool for constructing new ways of teaching students. Any teacher who can use a Mac and is prepared to study some stacks and do some reading can construct programs which will help them do nearly any facet of their job more effectively.

The Getting Started with HyperCard: StackTools series is a six disk collection of "tools" for learning about HyperCard. "StackTools" in this sense are stacks which help you construct various elements of your stacks as well as stacks which help you learn by demonstrating elements of stack construction. StackTools is intended to speed the process with hints and tips and by directing your attention to various stacks which will either help you understand HyperCard or point out some ways you can express your ideas in HyperCard. HyperCard authors are especially generous with their help in that many document their work and encourage you to study and borrow it including parts of stacks and many scripts.

My purpose in this article and with this disk is not to give step by step instructions. For that, there is no substitute for the various manuals that come with HyperCard and some of the books on the market. (I like Danny Goodman's "Complete HyperCard Handbook" from Bantam the best.) Read them in front of your computer and try what they say. Experiment. Learn from the results. After you have learned a few basics about HyperCard, try some of the things discussed here... tear apart some of the stacks and borrow some ideas.

Some of those basics include just what a stack is, the index card metaphor, layers, how to use the toolbox and other tools, how to navigate through stacks and how various stack elements can be linked. You need to have some idea of buttons, backgrounds, and fields. Find out how to use the message box and how to draw. Danny Goodman refers to the following HyperCard "building blocks": stacks, backgrounds, cards, fields, buttons, the home stack, recent, the help stack, the message box, and the scroll

window, with the first five being the basic building blocks and the rest being "an important communications medium between you and HyperCard."

During this process, I especially urge you to construct a "practice stack" as the HyperCard manual I began with urged. It can be your experiment stack. Try some of the special effects. Construct some buttons. Copy things to and from it. Play with the art tools. Try a few scripts.

When you have experimented with the parts for awhile, try to construct your own stack. Construct a stack according to the directions in some of the books and publications recommended later or modify one of the stacks on this disk to suit your purpose. Scripting can be the most complicated element of all of this, but you don't need to do extensive scripting to get started as you'll see when you begin examining stacks.

An important step in all of this is if you haven't upgrade to at least HyperCard 2.0, do so! The upgrade is \$49.00 from Claris and is well worth it. (I'm told not to buy the \$199 HyperCard Development Kit....it provides more documentation, but not more HyperCard.) The "power tools" section of beginning with 2.0 alone, are worth the money.

If you have the crippled version of HyperCard which Claris began shipping when Classics were introduced, you can "uncripple" (see notes below) it. It is a complete HyperCard program with some features hidden. However, you will not have some important features of HyperCard which come as separate stacks in the upgrade kit.

## More Complications

Sometime during 1992, Apple further complicated the way HyperCard was packaged and there were some rumors that HyperCard development would stop all together. For a time, HyperCard was sold by Claris (and still is I think). At some point, HyperCard has or will become a package sold, with certain distribution rights, by the APDA or Apple Program Developers Association.

All of this is apparently in response to HyperCard not selling as well as Apple had originally hoped, but selling too well to stop work all together. Or it is a result of Apple needing to make more money from that product.....or perhaps both.

Rumors also abounded about HyperCard 2.5 which was originally to be released in the Spring of 1992. It was said to be capable of supporting color and creating "stand alone" stacks, i.e., stacks which could be used on Macs without HyperCard. As far as I know, 2.5 has not yet been released and its the Spring of 1993.

New Macs, like my new LC III, are being sold with a HyperCard "Player" which as near as I can determine, allows you to do anything with a stack except scripting and creating new stacks. The "Player" allows access to all the paint tools in the usual way.

Apple seems to be drawing a distinction between people who will use stacks and those who will create them. Not as many are creating as they had anticipated so the tools are not as readily available. If you have purchased one of the new Macs, you will be able to utilize some of the material in this series, but you will definitely need to purchase the complete HyperCard package to take advantage of all of it. If you're going to create with HyperCard, you'll need to do that anyway.

### "Uncrippling" Crippled HyperCard

The easiest way is to open HyperCard, type [command M] and type the word "magic" in the message box. Press return and the "hidden" features will be revealed.

Another way is to go to the "preferences" card by hitting the left arrow while on the Home Card or by pressing [command 2] which will move you one card backwards. You will then see the preferences card. Select the button tool and the option and command keys together to see hidden invisible buttons. Click on one with the button tool. Press [command x] and it will be erased. Continue until all hidden buttons are gone. You may have to remove a few from the home card as well.

If you access to the button tool is blocked, open the message box [command m] and type "set userLevel to 5". That should do the trick.

### Locked Stacks

If you have HyperCard version 2.0, for example, and go to work on a stack with an earlier version of HyperCard, you will notice a little lock at the right end of the word in the menu bar. You will also notice that you can't make any changes to that stack. We have left most of these alone for those of you still working with earlier versions of HyperCard.

However, if you see the lock and want to change the stack, just select "Convert" from the file menu while you are in that stack and the stack will be converted to a newer version. So far, that has not made any of our stacks unworkable.

### A NOTE TO BEGINNERS....

I began this project thinking most teachers would have certain resources available and know some of the very basic processes necessary to proceed. I assumed you would know how to make a new stack, how to make a button, how to do some navigating, that HyperCard needs to be installed on your hard drive, how to open HyperCard, what a stack is and so on.

If you do not understand these processes, you will have difficulty with the material in this article and on this disk. I again urge you to read the manual that came with HyperCard. Its not perfect, but it covers the very basics. If you have not upgraded or purchased a Mac with a "crippled" HyperCard, you will have inadequate resources to get started. I urge you to upgrade to get the rest of the tools and the manuals.

If there is sufficient interest, members of our user group are willing to write a very basic starter, so let us know if that would help!