

## Thermoacoustic animations for old Macs GWS, 8/2014

To run thermoacoustics animations on old Macs, such as Classic Mac (OS 8, OS 9) or Mac OS X 10.2, 10.3, 10.4, use DOSBox, which is a free program for running old DOS games and other visually interesting programs on computers that don't automatically support DOS. Here's how:

Download and unzip the self-extracting zip file of the animations themselves. On an old Mac, use StuffItExpander (free). Discard the \*.pif files that result from the unzipping, keeping only the DOS folder and its contents, and the readme.txt file. Put these in an otherwise empty folder in your computer. It is easiest if you name your folder something with 8 characters or less, such as bookanim or dos or dosanim, avoiding spaces or punctuation.

Go to [www.dosbox.com](http://www.dosbox.com), get the installation package for your operating system, and install it. (Stay ready to consult with the on-line DOSBox documentation if the following brief instructions are insufficient.)

The first time you run DOSBox, it should open a window with a prompt

Z:\>

To gain access to the animations, you must "mount" the folder containing them, which requires knowing the full path to the folder name. In this example from my Windows-Vista pc, the path is c:\users\greg\Desktop\bookanim. This can be "mounted" in DOSBox using any DOSBox drive letter other than Z. I'll use T in this example. When I type this in the DOSBox window:

```
mount t c:\users\greg\Desktop\bookanim
```

DOSBox responds with

Drive T is mounted as local directory c:\users\greg\Desktop\bookanim

to show its success. Now type

t:

to change DOSBox's focus to this location. You can type

dir

to see a list of the animations (\*.exe) and text-file descriptors (\*.txt) of them.) To run an animation, simply type its name and follow its instructions, if any.

[On a Mac, when an animation asks you to "hit any key" (either starting the animation or returning to the system at the end), you can avoid an intermittent sticky-key syndrome by using "Return" (= "Enter" on a pc keyboard) instead of any other key. Unfortunately, if you run Ani. Standing (with no option), there is no substitute for the space bar to get past the start-up display, and it tends to be sticky. Try to hit it as quickly as possible. ]

When you're back to the T:\> prompt after one animation closes, you can run another by typing its name.

The most difficult part of using DOSBox for the first time may be figuring out the path. You can right-click a file or folder and select "Get Info." (The full path of the Desktop may not otherwise be obvious.) Folders with blanks or with more than 8 characters are handled differently in DOSBox. For example, c:\Users\My Documents\bookanim would be mounted in DOSBox as c:\users\mydocu~1 . On a Mac, the symbol "~" indicates the current user's home directory, and it can be used in the DOSBox path, so, if you put the animations folder on your desktop, DOSBox should respond correctly to something like mount t ~/desktop/bookanim

Finally: After you've verified the operation of the animations with DOSBox on your computer, you can configure DOSBox so it will automatically mount the bookanim folder when DOSBox starts. To do this, search your computer for \*.conf to find the the DOSBox configuration file (e.g., dosbox-0.74.conf, which showed up in the \users\greg\appdata\local\DOSBox folder in my Windows Vista pc). Open the configuration file in a text editor, and look near the bottom for the [autoexec] section. Below the line [autoexec], add these lines:

```
mount t c:\users\greg\Desktop\bookanim
```

```
t:
```