

# Further Reading

## *Interpreters & Emulators for Electronic Literature*

Nick Montfort  
University of Pennsylvania  
Computer & Information Science

e(X)Literature // UCSB // 4 April 2003

## Outline of this FAQ-format talk:

- 1 What are interpreters and emulators?
- 2 How can I gain access to hundreds of electronic literature works today, using an interpreter?
- 3 How can interpreters and emulators help us teach and study electronic literature?
- 4 How can we help electronic literature readers now and in the future by developing these?
- 5 Why are interpreters and emulators only part of PAD's plan?

## 1 What are interpreters and emulators?

They are computers, implemented in software.

But why ... ?

## 1 What are interpreters and emulators?

An *interpreter* is like a “player” for programs that are written in a standard format.

Interpreters can be implemented many different platforms (Mac, Windows, Linux, Palm, etc.) and the same standard-format program will then run on all these systems.

- Java Virtual Machine
- P-Machine
- Flash Player
- Z-Machine

## 1 What are interpreters and emulators?

An *emulator* allows one type of computer to act like another, so that programs written for the other computer can be run on it.

Emulating older (much slower) machines is easiest.

- Stella (Atari 2600)
- AppleWin, Catakig (Apple II)
- MAME (Arcade)
- Basilisk (Mac)
- Special-purpose emulators for PDP-1, Imlac, etc.

2 How can I gain access to hundreds of electronic literature works today, using an interpreter?

Get a Z-Machine interpreter and lay pillage to the Interactive Fiction Archive:

<http://www.ifarchive.org> (IF Archive)  
<http://www.wurb.com/if> (Baf's Guide)

IF is mostly free, but with other types of e-lit there are legal (nontechnical) issues.

A demo and capsule history of interpreting IF.\*

### 3 How can interpreters and emulators help us teach and study electronic literature?

- Better access to the authentic work
- Save state to allow returning to certain points\*
- Can disassemble the original format for analysis
- Can be augmented for annotation

#### 4 How can we help electronic literature readers now and in the future by developing these?

- Develop “e-lit critical” interpreters (e.g., for HyperCard)
- Add scholarly and teaching tools to existing open-source interpreters
- Contribute to emulator development to ensure that free, open-source emulators work with e-lit

## 5 Why are interpreters and emulators only part of PAD's plan?

- Not everything is best modeled as a “program” to be interpreted or emulated (e.g., HTML work)
- It will sometimes be cheaper and just as effective to reimplement
- All works in the standard X-lit format can be studied with the same scholarly/teaching tools
- We still need metadata and to save the bits

But interpreters and emulators will still be quite helpful, and an essential part of PAD's strategy.

Questions?

[nickm@nickm.com](mailto:nickm@nickm.com)  
<http://nickm.com>