Ethical Proactive Threat Research

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A dramatick performance in four acts, presenting

the paper of Messrs. Aycock and Sullins.

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Dramatis Personae

Adversary

Moral agent

Security personnel

Internet-using public

Researcher

Act the First:

The Tradgedie

of the User

Reacting to an adversary is not sufficient.

Proactive threat research: research that attempts to identify threats and appropriate defenses *before* the threats are seen in the wild.

Act the Second:
Ethical Standards for Proactive Research

Ethical standards: a précis

1. No negative impact to Internet-using public

2. Must demonstrate that research is not harmful, and ideally improves safety

3. Proactive threat research is necessary for a functional, moral digital environment

Act the Third:

Ethical Research Methods

Research methods

- Mathematical modeling
- Simulation
- Component test
- Existence proof
- *Gedanken* experiment

But not…

Act the Fourth:
Ethical Dissemination

The key: anti-virus software and automatic software patching

Exeunt.