

## Simulated Visuals: Some Rhetorical and Ethical Implications

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### Abstract

This poster introduces some of the rhetorical and ethical dimensions that underpin the graphics and visuals designed to illustrate results from a computer simulation. Simulations have been used by meteorologists to predict and report weather behavior, by climatologists to forewarn about the inevitable damage that global warming will cause, and by government officials to foresee the potential destruction of a major hurricane. In particular, my poster examines the latter — a set of visuals from Hurricane Pam, a computer simulation and set of training exercises that predicted the devastation that Hurricane Katrina would cause one year prior to the tragedy. FEMA conducted preparation workshops for state and local officials, arming them with workbooks with projection maps, conceptual models, and other visuals meant to help ready them. This poster seeks to understand what part the visuals might have played in preparation failure.

### Poster Abstract

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1

The poster raises questions pertaining to the nature and ethics of the simulated illustration, first by engaging simulated visuals in terms of visual rhetoric, or their capacity to persuade. Computer simulations are meant to stand-in for the real thing. Simulated visuals represent virtual events in much the same way that photographs represent actual events. However, since simulated visuals represent predictions, they vary in the extent to which they capture all of the fine-grained surface details of the source — the more accurate the simulation, the more the simulated visual can have the realistic value of photographs (or what Benjamin calls “aura” or authenticity). Unfortunately, in the case of visuals from Hurricane Pam, design decisions *further removed* the representations from the potential tragedy.

2

The poster also broaches issues of visual ethics. If simulated visuals parallel photographs, then do they have capacity for photographic truth? In some cases, even when simulated visuals are not perfect replicas, they still manage to convey a virtual truth sufficient to teach and inform audiences. In the case of Hurricane Pam’s maps and illustrations, major design elements did not paint a humane, complex, or realistic enough picture to help prepare workshop attendees. The poster explores these questions and draws some basic conclusions about the verisimilitude and veracity of simulation visuals.

3

### Poster

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