having fun studying fun:
research in
improvisational acting

brian magerko
adaptive digital media lab
georgia tech
defn: a performance in real-time in front of an audience that is not completely prescribed in terms of structure and / or content and places a high priority on artistic goals.
improvisation
spontaneity
def^n: a performance in real-time in front of an audience that is not completely prescribed in terms of structure and / or content and places a high priority on artistic goals.
improv agents
improv theatre

un/structured creative goals

multi-modal communication

varied aspects of cognition

sans explicit coordination

maps to agents
methodology
performance
retrospective protocols
group interview
build agents
findings

Magerko, et. al, Creativity and Cognition 2009
shared mental models

cognitive divergence

cognitive convergence
character divergence
attributes
relationships
history
goals
emotions
character divergence
environment
divergence
attributes
location
objects
environmental divergence
cognitive convergence
observation
repair
acceptance
repair techniques

presentation
clarification
deferment
verification and assessment
reverse scaffolding
blind offer
acceptance

acknowledgement

groupthink

rejection

perceived (full/partial) consensus
narrative development
environment
character
actor intent for events
deconstruction of offer

Baumer and Magerko, ICIDS 2009
basic cognition

mental imagery

narrative / social / everyday schemata

categorization

planning

theory of mind
referent
use

“yes and..”

finding the tilt

(side) support

platform
examples
Why / how are offers made and responded to?
micro-agents

Magerko et. al, 3rd Interactive Narrative Technologies Workshop, 2010
current agents

“interesting” characters

conflict creation

cognitive convergence
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<th>Prototype</th>
<th>Is Strong</th>
<th>Wears Cape</th>
<th>Wears Mask</th>
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micro-agent examples
party quirks
current issues
why is this a motivating topic?
thanks

nsf creativeIT

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Improvisation is a constant process of receiving new inputs and producing new outputs.
Improvisation is a “continuous and serial process as opposed to one that is “discontinuous and involving iteration,” such as music composition
Improvisation involves decision-making based on domain-specific as well as real-world knowledge.
Collaborative improvised pieces (as opposed to solo works) may involve both explicit and implicit communication.
Improvisation is a process of severely constrained human information-processing and action.