Matching Methods

Guiding and Evaluating Interdisciplinary Projects

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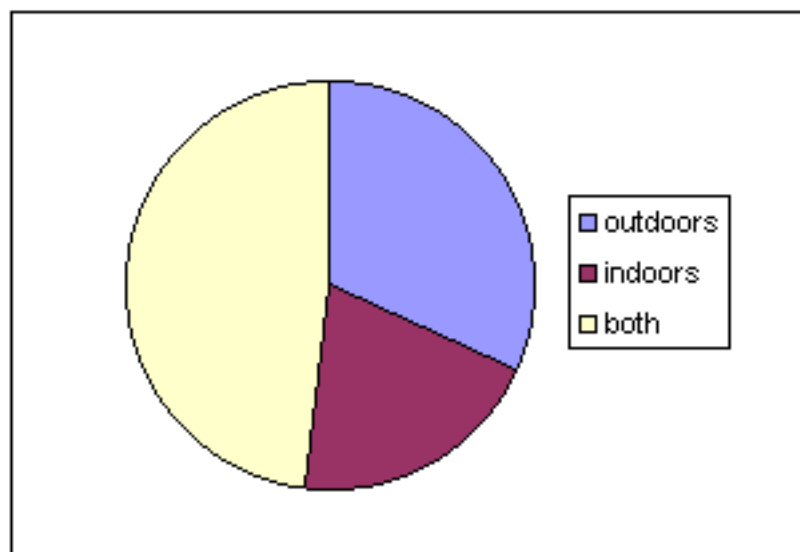MIT

Two

Examples

Two

(cautionary?)

Examples

In general, would you rather see paintings of outdoor scenes or would you rather see paintings of indoor scenes?
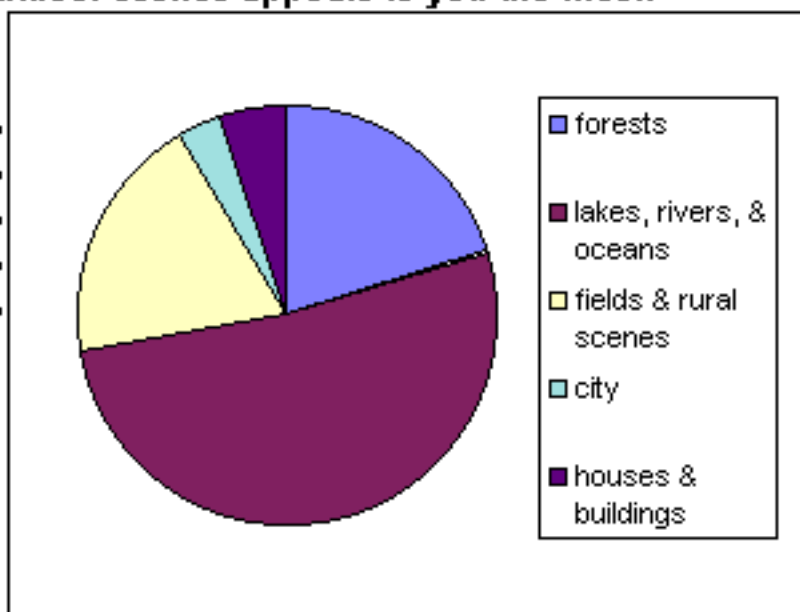
outdoors	32%
indoors	20%
both	48%

Which of the following outdoor scenes appeals to you the most?

Paintings of:

forests	19%
lakes, rivers, & ocean	49%
fields & rural scenes	18%
city	3%
houses & buildings	5%

Vibration Dampener

relay rod bracket

dampener

reinforcements

frame bracket

hardware kit

tie rod end

clamp w/bolt

sleeve

tie rod end
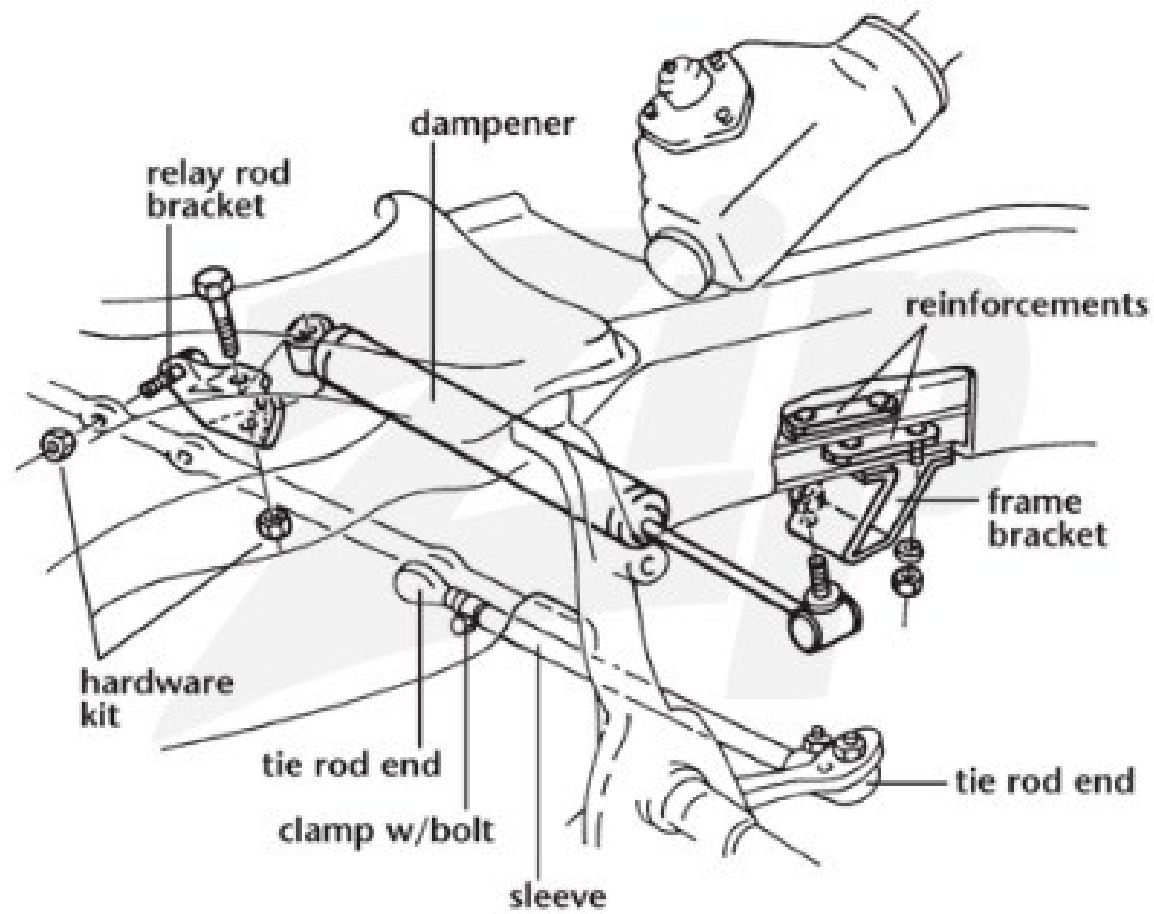
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- The painting is displayable as an interesting conceptual artwork, but not as an earnest example of artistic excellence in painting.

- The quotation describing Cezanne's "vibrating sensations" was publishable as a critical account of a venerable painter, but not as an account of an engineering outcome.

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- In the examples, the values used for development or evaluation did not match those of their communities of practice.

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- In the examples, the values used for development or evaluation did not match those of their communities of practice.

- These were tongue-and-cheek, yet all too often these kinds of examples happen in earnest.

Matching Methods:
Beyond Quantitative vs. Qualitative

We must consider issues such as:

- Cultural Critique vs. Evaluation

- Creating Culture vs. Serving Needs

Cultural Critique vs. Evaluation

Henry Squirrel was thirsty. He walked over to the river bank where his good friend Bill Bird was sitting. Henry slipped and fell in the river. Gravity drowned.

Cultural Critique vs. Evaluation

Still it would be marvelous
to terrify a law clerk with a cut lily,
or kill a nun with a blow on the ear.
It would be great
to go through the streets with a green knife
letting out yells until I died of the cold.

Creating Culture vs. Serving Needs

Start with a snapshot

Your profile begins with a quick summary of who you are, giving friends an easy way to see where you live now, where you're working and more. A collection of recently tagged photos also shows what you've been up to lately.
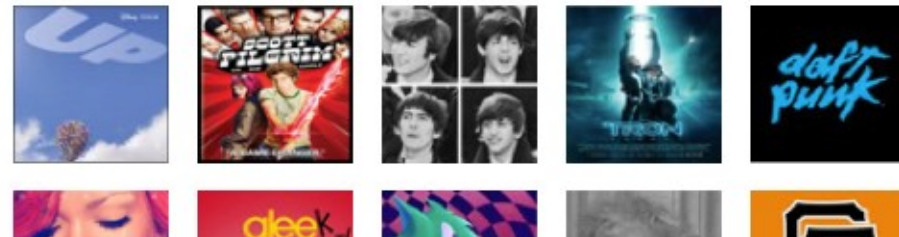

Share your experiences

Give a more complete picture of how you spend your time, including your projects at work, the classes you take and other activities you enjoy (like hiking or reading). You can even include the friends who share your experiences.
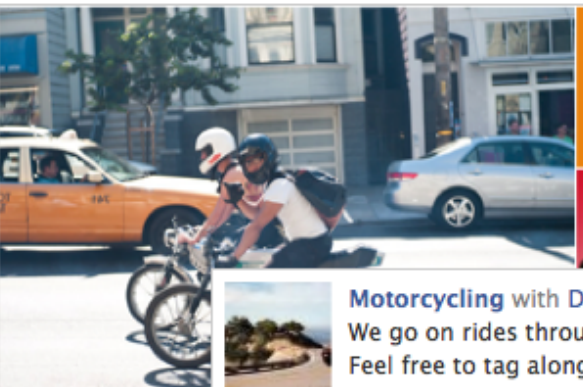
Motorcycling with Drew Hamlin and 2 others
We go on rides through the bay every Sunday. Feel free to tag along!

Discover common interests

Showcase the things you care about most and connect with friends who share the same interests, including sports teams, the people who inspire you and more. Your top interests now appear as a row of images — just drag and drop to put your favorites first.

Creating Culture vs. Serving Needs

Genderfork.com
beauty in ambiguity

All Content | Photos | Videos | Quotes | Profiles

You can call me...

"Joey."

"Girlyboi"

I identify as...

"a butch tranny."

"a genderqueer polyamorous goth."

As far as third-person pronouns go, ...

"I prefer 'ze' and 'hir'."

"please use the female ones when you describe me."

I'm attracted to...
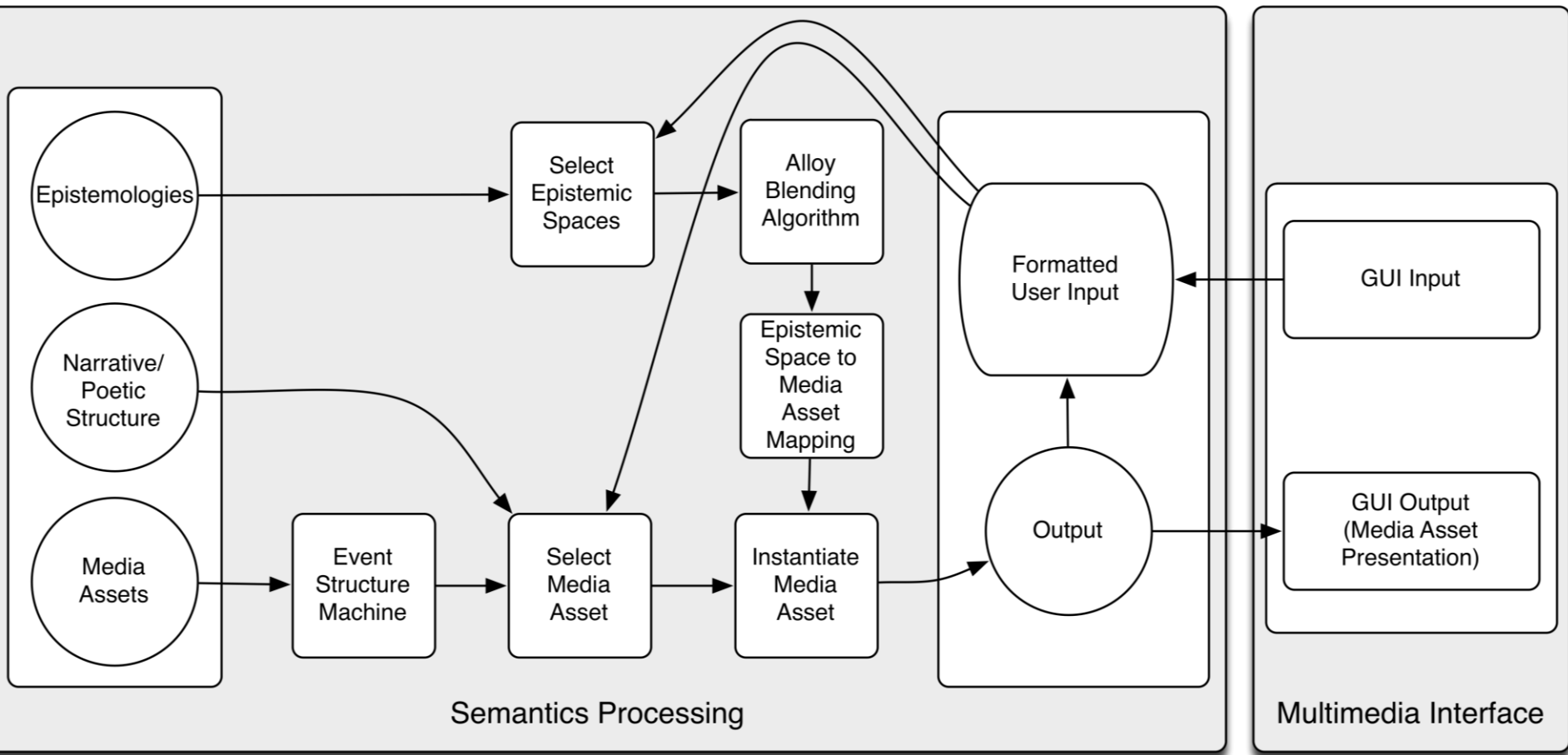
"feminine men."

"intelligence and wit."

When people talk about me, I want them to...

"focus on my personality rather

Imagination, Computation, and Expression Laboratory (ICE Lab) Examples

- Guiding: The *Living Liberia Fabric* (built using my GRIOT Platform for interactive narrative)

- Evaluating: *Mimesis* (built using the AIR Toolkit and GeNIE Platform)

Living Liberia Fabric

An Interactive Narrative Peace Memorial
in Affiliation with the Liberian Truth and
Reconciliation Commission

Living Liberia Fabric

An interactive digital cloth telling tales of post-conflict Liberia.

It uses AI to tell stories from **multiple identity perspectives**.

Living Liberia Fabric

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Living Liberia Fabric

Imagination, Computation and Expression Laboratory

Advanced Identity Representation (AIR) Project

New models and a software toolkit to enable expressive and dynamic social networking profiles, avatars, and characters.

Advanced Identity Representation (AIR) Project

New models and a software toolkit to enable expressive and dynamic social networking profiles, avatars, and characters.

These are built based on cognitive science models of categorization.

AIR Integrated Social Networking and Interactive Narrative/Game Applications

The AIR Toolkit

AIR Models for Use Across Identity Applications

AIR Toolkit Uses

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- a social networking interface for **changing a user's self representation for different social groups**

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- gaming and social networking **support for swapping between multiple identities**
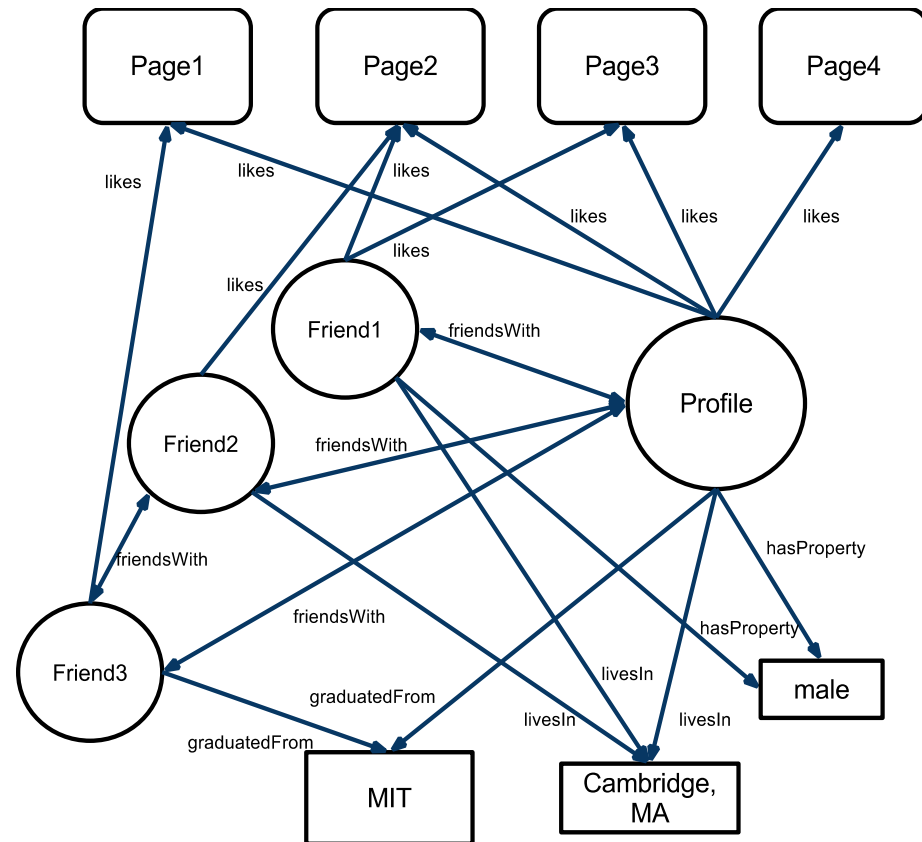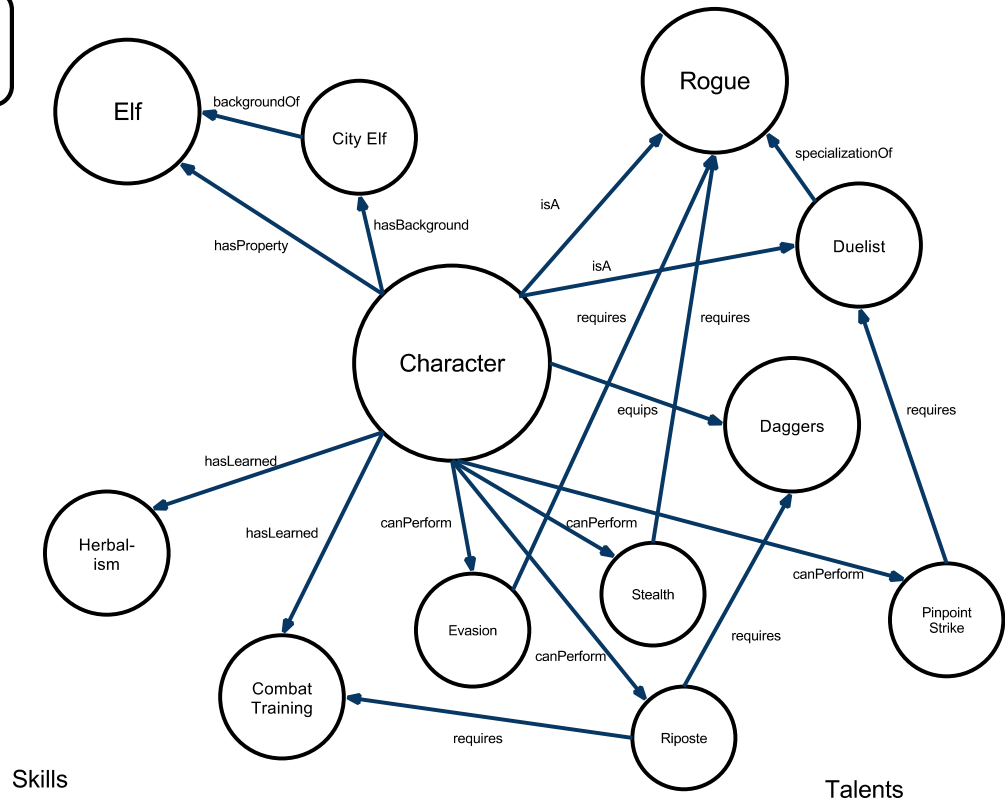
AIR Toolkit Uses

- a social networking interface for **changing a user's self representation for different social groups**

- **modeling the phenomena such as "stereotyping" or "passing"** as a member of a different social group

- gaming and social networking **support for swapping between multiple identities**

- modeling **construction of "aspirational" identities**

Shared Technical Underpinnings Across Digital Media

Social Networking

Page1, Page2, Page3, Page4 — likes

Friend1 — friendsWith — Profile
Friend2 — friendsWith
Friend3 — friendsWith
graduatedFrom — MIT
livesIn — Cambridge, MA
hasProperty — male

Computer Games

Elf — backgroundOf — City Elf
Character — hasProperty — Elf
Character — hasBackground — City Elf
Character — isA — Rogue
Character — isA — Duelist
Rogue — specializationOf — Duelist
Character — requires — Daggers
Character — equips — Daggers
Character — hasLearned — Herbalism
Character — hasLearned — Combat Training
Character — canPerform — Evasion
Character — canPerform — Stealth
Character — canPerform — Riposte
Riposte — requires — Combat Training
Riposte — requires — Stealth
Duelist — requires — Pinpoint Strike
Pinpoint Strike — canPerform

Skills

Talents

AIR Profile Visualizer

Nodame Cantabile

Google Reader

Avril Lavigne

Ender's Game

Hot Topic

Eternal Sonata

Pi

Element Skateboards

Classical Music

Your Facebook profile can be thought of as a reflection of your online identity with your likes representing yourself to others. Our application aims to categorize "likes" by the frequency they appear together on you and your friend's pages.

You will be first prompted to allow the application to download your "likes" in addition to your friends' "likes." Once finished downloading, the application will display categories from the information, prompting the you to name the categories shown. After naming the categories, the application will show you your profile and how it fits into your named categories.

Get Started

#	Question	Clarifications	Key observations
1	How well does this group of Likes represent the likes of any individual person?	This was clarified by asking if the participant could imagine someone who liked all of these things. This was a 7-point ordinal scale question.	Median score of 6 indicating that the categories can serve as strong representations of people. The lack of 7's, however, indicates the representations are not perfect.
2	Please fill in the following blanks with descriptive titles of subgroups you would make if you were to divide this set of Likes.	The interviewer explained that we were looking for higher-level descriptions than just the type of media, but instead something about the people who might like each subgroup or at least genres that might apply across media. As we discuss later, this was not always effective.	41 of the 74 responses clearly described implicit categories in the data. This indicates that participant's often drew from their implicit social categories to understand the data presented.
3	If I showed you this collection of Likes without telling you how it was generated, what would you see as the unifying factor? (It's okay if it's the same or different than what we actually used.)	We encouraged participants to work backward from the list of Pages to try to understand what might have been the unifying factor for the group of people. We also explained that if it was clear that the unifying factor was what we actually used, they didn't have to try to come up with a different answer.	Most of the responses described some sort of implicit category either based around shared interests or descriptions of the people. One third of the responses were either the same as the factor used in the creation of the group or a slight variation in scope from that factor.
4	Are there any Likes you are surprised about? Please choose up to two and describe what about them you find surprising.	No clarifications needed.	The most common types of surprising Pages were surprising because the object was assumed to have few Likes across the network, the Page didn't fit the group of people, or the Page didn't fit with the other Pages in the category.
5	If you were hiring an actor to play someone in this group of people, how useful would this list be in describing what sort	This was given in the form of a 7-point ordinal scale.	High responses to this question indicate that the categories can often be useful for describing a group of people to someone without knowledge of the group.

Identity Phenomenon	Mechanism	Use in Social Networking	Use in Gaming
Identity Torque	User's view of representation is different than view seen by others	Users can choose to see themselves as others see them	NPCs reacting to a public representation of the player character without full knowledge of player's representation
Double Consciousness	Visual representation of simultaneous multiple selves	Users can control the degree to which alternate identities are revealed to audiences of user's choosing	The game displays/hides alternate identities activated by dialogue triggers or salient interactions with other players.
Passing	Altering a representation to more closely resemble a member of a particular category.	Users can anonymous explore alternate identities and group affinities; an opportunity to experience other selves.	Player character design might facilitate the display sets of visual or behavioral markers, to be activated and deactivated according to player desires to "pass" in a group or scenario.

Mimesis: Gameplay to Explore a Social Phenomenon

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# *Mimesis:* Gameplay to Explore a Social Phenomenon

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  - Particular responses depends on the octopus's mood
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- Players explore the experience of microaggression via narrative dialogue

Connecting to Real Identities Through Social Media

AIR Toolkit

The player's profile and Facebook network are analyzed for musical 'likes.'
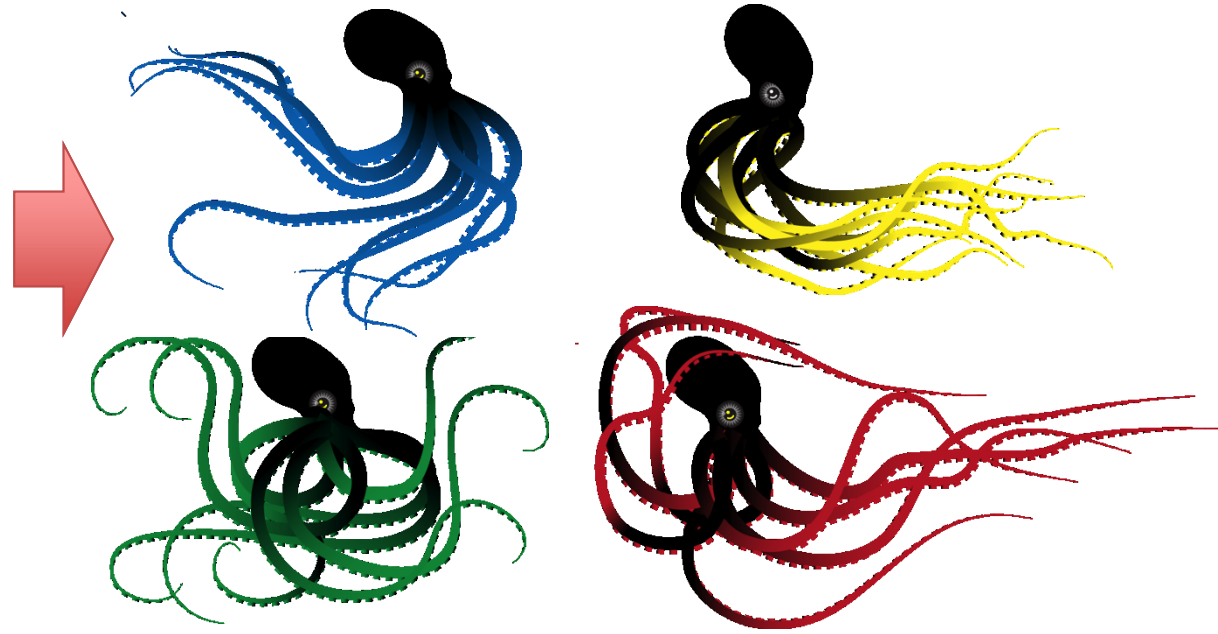
Mimesis generates a **customizable** mimic octopus avatar whose color reflects the associated 'moods' using an open source music classification API.

Table 1
Examples of Racial Microaggressions

Theme	Microaggression	Message
Alien in own land When Asian Americans and Latino Americans are assumed to be foreign-born	"Where are you from?" "Where were you born?" "You speak good English." A person asking an Asian American to teach them words in their native language	You are not American. You are a foreigner.
Ascription of intelligence Assigning intelligence to a person of color on the basis of their race	"You are a credit to your race." "You are so articulate." Asking an Asian person to help with a math or science problem	People of color are generally not as intelligent as Whites. It is unusual for someone of your race to be intelligent. All Asians are intelligent and good in math/sciences.
Color blindness Statements that indicate that a White person does not want to acknowledge race	"When I look at you, I don't see color." "America is a melting pot." "There is only one race, the human race."	Denying a person of color's racial/ethnic experiences. Assimilate/acculturate to the dominant culture. Denying the individual as a racial/cultural being.
Criminality/assumption of criminal status A person of color is presumed to be dangerous, criminal, or deviant on the basis of their race	A White man or woman clutching their purse or checking their wallet as a Black or Latino approaches or passes A store owner following a customer of color around the store A White person waits to ride the next elevator when a person of color is on it	You are a criminal. You are going to steal/ You are poor/ You do not belong. You are dangerous.

Mimesis Demo

Lessons Learned:
Matching Methods to Values

Seek strong matches between shared goals and mixed methods, for example:

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Lessons Learned:
Matching Methods to Values

Seek strong matches between shared goals and mixed methods, for example:

- Computer-Supported Learning + Activism =

    making conceptual change happen

- Engineering + Arts =

    engineering for subjective experiences

- Cognition + Creativity =

    understanding systematic aspects of meaning making

…and furthermore

New methods for guiding and evaluating can emerge from innovative hybrid goals!

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New methods for guiding and evaluating can emerge from innovative hybrid goals!

(So create and share these during discussion!)

thank you