

# Little Procedural People

Playing politics with generators

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## ABSTRACT

Do generators have politics? What about generators that generate around people, with people, or even create generative people. This paper proposes four initial sites of inquiry that deserve further attention from this community, or at least those members who find themselves building a person-generator: characters who engage socially with people, generators which make use of data created by or about people, the use of cultural and social signifiers in generators, and simulations or models which represent people.

## CCS CONCEPTS

•Computing methodologies → Procedural animation;

## KEYWORDS

Generativity, prototyping, interaction design, ethics

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The procedural game-content generation community (and our neighbors in generative art, generative text, and computational creativity) are used to generating many kinds of things. We generate buildings and landscapes, trees and flowers, creatures, animations, dances, game levels, music, and poetry. What happens when the things that we generate are **people**?

There are several ways that we use people in our generators:

- We create characters that act or speak like people
- We use real locations or real user content as an input
- We use cultural and social signifiers in our generators
- We model a possibility space of “what people can be”

This paper proposes these as four sites where generativity intersects with political and social responsibility. Building generators can be a fun and expressive practice, but as a community we should build our generators with consideration and awareness when we are generating **around, with, about, or in communication with** people.

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## 1 GENERATIVITY IN SOCIAL ENVIRONMENTS

Of the many communities creating generative artifacts, the chatbot and twitterbot-making community has established conversations about the political and social implications of generativity[3]. A popular expectation in this community (of practitioners, industry, and audience) is that we are attempting to build a human-like –or at least personable– character, so it is not a large jump to imagine that such a character could need all of social considerations a human would have when operating in the same space. Often bots are coded as male or female, professional artist, young teen, or servant [5], priming the interactor to read their generativity through that lens of social expectations.

On Twitter, bots and humans can easily interact on equal terms, using identical social tools (text and image posts, likes, retweets, follows). This equality come with a set of expectations: that which it is unethical for humans to do is also unethical for bots to do, and unethical things that are possible for humans are also possible for bots. Not only must bots consider *what* they generate, but *how* they post it. A bot which broadcasts its productions into a social platform has a different set of ethical considerations than a generator living on a webpage or in a game.

Each bot follows its own rules for what it says and when it responds. The Twitterbot @infinite\_scream will respond to users' direct tweets at it, but can only respond with variations of “aaaah”, making it a safe and reliable conversational partner. Other bots will interject into conversations with reinterpretations of users words (@godtributes) or repost tweets to fill a generative template (@pentametrone), but only of users who have “consented” by following them. From a combination of their *rules of engagement* and their *rules of generativity*, each of these bots has constructed a character which engages socially with the human users of Twitter.

## 2 REAL LOCATIONS, REAL CONTENT, REAL ISSUES

Many generative works scrape real-world data (as godtributes does with tweets). Others use real-world locations through Google maps APIs or augmented-reality overlays on physical space. When this works well, like Pokemon Go, there is a sense of a magical “alternate reality” co-existing with our own. Normal spaces like bus-stops become uplifted and turned into game spaces. But many spaces are owned, or meaningful to the people already in them. Constructing a virtual side to an existing place is not apolitical, as when Pokemon started appearing in the Holocaust Museum.

One project already ran into this, using technology that I built: the “Every Rat in NYC (That People Complained About in 2016)”

page[2]. This page shows a Google map of NYC, with pins representing each street rat reported to the NYC health board. When a pin is inspected, a generated hipster biography was generated for that rat, and a Flickr photo from that geolocation was chosen to represent what the rat was looking at when it was spotted. Some noticed that the system wasn't aware of the differences between boroughs, and would generate a hipster rat for locations that weren't gentrified. It was discussed whether adding signifiers that were meaningful to other boroughs would help, but no-one could think of a way to do that that did not descend into stereotype.

*Intentionally* political games can be played using data about people. The "White Collar Crime Risk Zones" [1] project maps locations most likely to have white-collar financial criminals, using the same scientific methods that contemporary police crime-prediction systems use. They scrape LinkedIn profile pictures of workers at those companies to generate a composite photo of the potential criminal. This project is a political act, as well as a piece of art, but is it difficult to imagine someone in the PCG community making a game out of similar data?

When we scrape data to train machine-learning, generate Markov models, or create generative tweets, whose data are we using? What responsibility do we have when we turn an automated generator loose on data that we think is safe? So far, games don't use much personal data, but this is a result of a lack of current designs, and not an ethical denial of the possibility. At some point, game designers *will* find an interesting design that wants to use user data. How can we plan *now* to do that ethically?

### 3 SIGNIFIERS AND HUMOR IN GENERATORS

When two incongruous topics are juxtaposed, they create humor, as the reader imagines an unlikely situation, a common technique that adds flavor and humor to many generators. Sometimes, generators which construct their jokes this way can create jokes that their creators don't stand behind. Darius Kazemi noticed his bot creating "man in a dress" jokes, and rather than accepting that as an artifact of generativity, he built safeguards instead: "@TwoHeadlines doesn't tell this kind of joke often (maybe once every couple weeks, 1 out of every 200 jokes) but it does happen. I've long wanted a way to programmatically detect these jokes and block them before the bot makes them." [4]

One other very common way that generators create humor is with caricature, finding a space in which many ridiculous combinations already exist, and using a generator to make more combinations (such as bombastic videogame titles or fussy hipster cocktails).

Finding a domain that is spoofable or has good juxtaposition potential is a strong (and common) recipe for a successful generator. Domains for spoofing or juxtaposition require:

- signifiers strong enough to maintain meaning outside of their original context
- signifiers that encourage the viewer to construct a story
- signifiers that "work" in a variety of accidental contexts

Unfortunately, signifiers with these properties are often *also* ones which have meaning to people. One can write a generator that uses videogame titles or liquor names and not feel guilt about divorcing them from their original context or putting them in a new context. If we use signifiers about people, this is suddenly becomes less true,

especially for racial, ethnic, or gender terminology. How much control do I have over the juxtapositions that might occur? Over the way that a reader perceives those juxtapositions? This particular issue is based in my own work generating text descriptions of characters that suggest deep or humorous backstory (without having backstory) for a cafe-management sim (and later, grad students for a lab-management sim) <sup>1</sup>. While some signifiers uses in the rules seem mild ("tall", "tired"), others seemed to carry more story significance ("weeping", "pregnant", "clutching a stuffed rabbit"). Some carried implicit gender or gender expectations ("in a wedding dress", "a football player", "a supermodel"). The system lacks "a bindi", "a turban", or "dreads" in its rules, but at the cost of making some kinds of story invisible. In that generator, I have not found a balance I'm happy with, of signifiers that tell stories, but not stories I don't want (or am comfortable) to tell.

### 4 POSSIBILITY AND IMPOSSIBILITY SPACES

When we write a character generator, we implicitly encode rules for what people can be in our world. As Smith et al note: "the creation of a PCG system is equivalent to building a formal model of design theory. These models will, necessarily, prioritize some modes of thinking and ignore others." [6] In this case, we are designing humans, and therefore encode beliefs about people into our model. do genders exist? What data structures store gender? Do characters have race or nationality, and how is that represented in code?

The Sims famously modeled humans as a hierarchy of ever-changing needs, and very little else. Other games with generative characters take different stands for a combination of political and gameplay reasons. No generator can (or should) model all of humanity, but what we leave in or out of a generator is a decision we should be prepared to defend. In our little generative worlds, can people be fat, female, gay, straight, drug-addicted, happy, Muslim, black, neither male nor female, married, or a parent? And what does it mean to the generator and its world that they are? What does it mean for the user if who they are *is not possible* in game?

### 5 CONCLUSION

We have powerful tools at our disposal as makers of generative systems. While bot-makers have already begun engaging these issues, in the PCG community we are only slowly realizing that this power and responsibility is in our work as well. While I don't have answers yet to the questions that I pose, I hope this will provide a framework to guide how we begin the exploration.

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<sup>1</sup><http://www.galaxykate.com/revision/>, <http://www.galaxykate.com/hipster/>