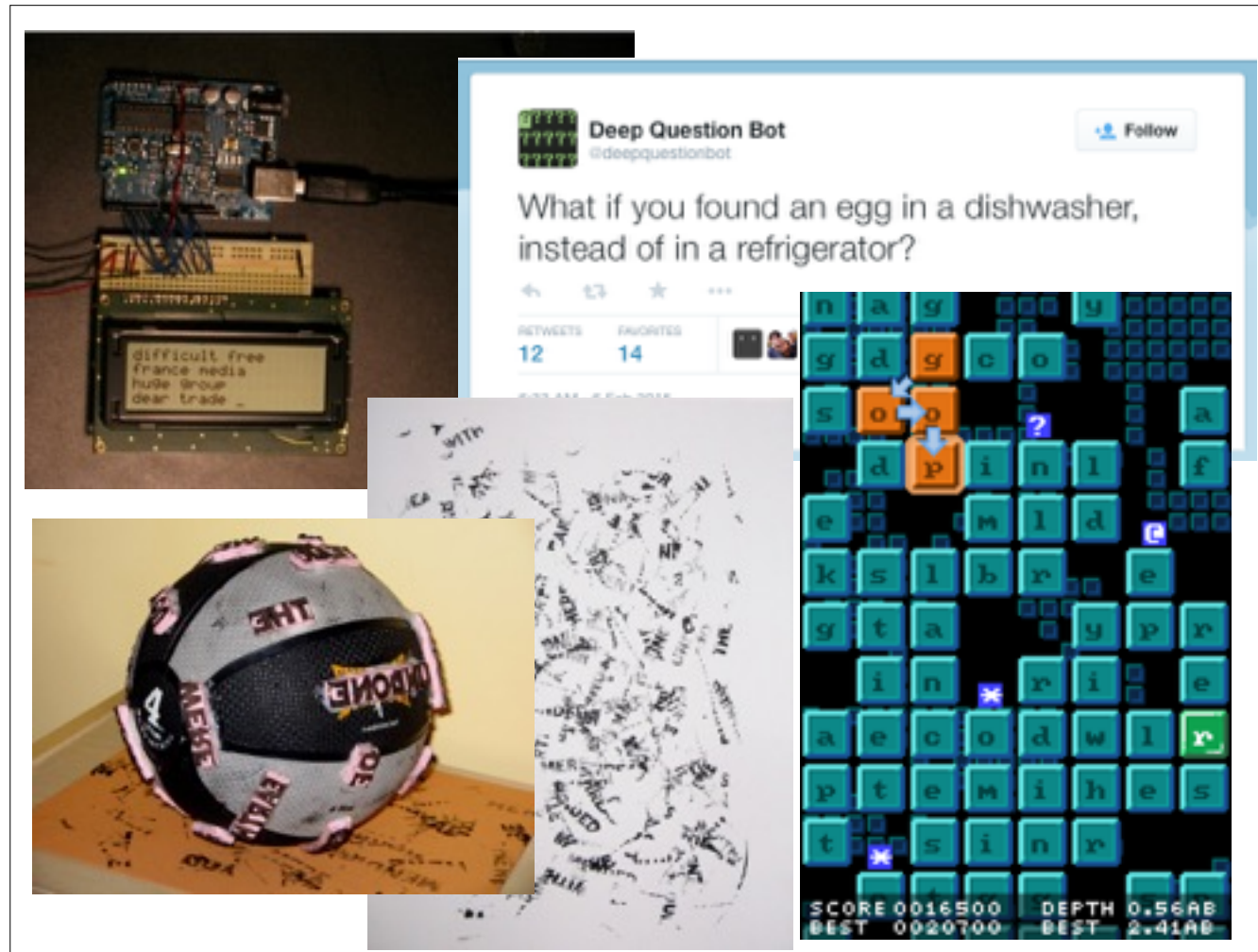# twitter bots and the performative critique of procedural writing

Allison Parrish
SXSW Interactive 2016

so in my ten minutes I'm going to talk about the artistic dimension of twitter bots: how they function as a critique of the way that Twitter itself works.

so, a bit about me. I'm Allison Parrish. I'm a poet, programmer, artist and videogame designer. right now I'm the digital creative writer in residence at Fordham University. I'm also an adjunct at NYU's interactive telecommunications program, where I teach a course on writing computer programs that write poetry. in my art practice, I make unusual devices for literature, unconventional digital writing interfaces, video games about spelling, and... a lot of twitter bots.

Twitter bots
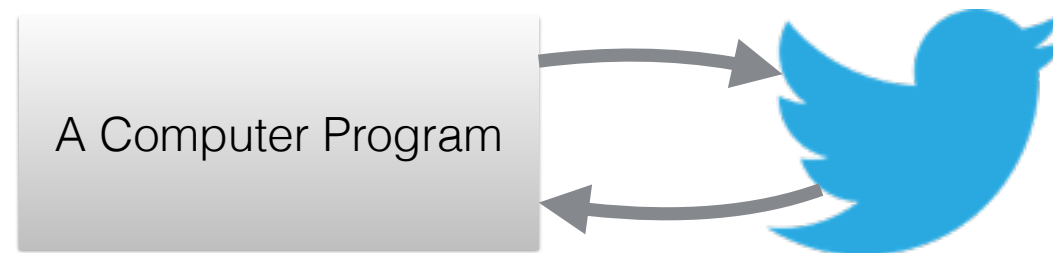
A Computer Program

Wait, so what's a Twitter bot? A twitter bot is a computer program that posts tweets to Twitter. (It's easy for computer programs to do this, thanks to the "Twitter API"—a special interface that Twitter makes available specifically for programmers to write programs that interact with the site.) A Twitter bot can also optionally READ tweets from twitter—for example, it can find tweets that contain a particular keyword and respond to those tweets, etc.

Everything I say in this presentation is about Twitter but I think it's equally applicable to other social media platforms. There aren't a lot of, say, snapchat bots or whatsapp bots. but there should be.

bots are good! :)

the discourse around bots is usually pretty one-dimensional—it's concerned about whether bots are GOOD or BAD.

"[B]ots can act as a type of social prosthesis for
communities of users online"

–Samuel Wooley and Tim Hwang, *Bring on the Bots*
http://civichall.org/civicist/bring-on-the-bots/

one argument that bots are GOOD comes from the idea that bots can be a kind of "social prosthesis"—a way for individuals and communities to extend their communicative capacity using procedural means.

this argument is most commonly made with what I call "journalism bots"—bots that process raw information that would normally be difficult for humans to discover and keep track of. for example, the congressedits bot tweets whenever someone makes changes to Wikipedia from a computer located in the office of a US senator or representative.

A shallow magnitude 4.7 earthquake was reported Monday morning five miles from Westwood, California, according to the U.S. Geological Survey. The temblor occurred at 6:25 a.m. Pacific time at a depth of 5.0 miles.

According to the USGS, the epicenter was six miles from Beverly Hills, California, seven miles from Universal City, California, seven miles from Santa Monica, California and 348 miles from Sacramento, California. In the past ten days, there have been no earthquakes magnitude 3.0 and greater centered nearby.

This information comes from the USGS Earthquake Notification Service and this post was created by an algorithm written by the author.

Read more about Southern California earthquakes.

this is a story written by the LA times quakebot, which keeps an eye on USGS earthquake data, and automatically writes stories for the website whenever an earthquake occurs. another "good" bot.

the NY Times' 4th Down Bot keeps up with NFL football games as they're happening, and makes judgments about whether a team should kick a field goal, punt or "go for it" on each 4th down, based on a statistical analysis of similar scenarios in the past.

so "good" bots dig for information that would otherwise be hidden and bring it to the surface without human intervention.

bots are bad. :(

but people also think bots are BAD. why is that?

Almost 10% Of Twitter Is Spam

3 MINUTE READ

That's according to Networked Insights, which found that brands especially are subject to having their hashtags hijacked for unrelated use.

http://www.fastcompany.com/3044485/almost-10-of-twitter-is-spam
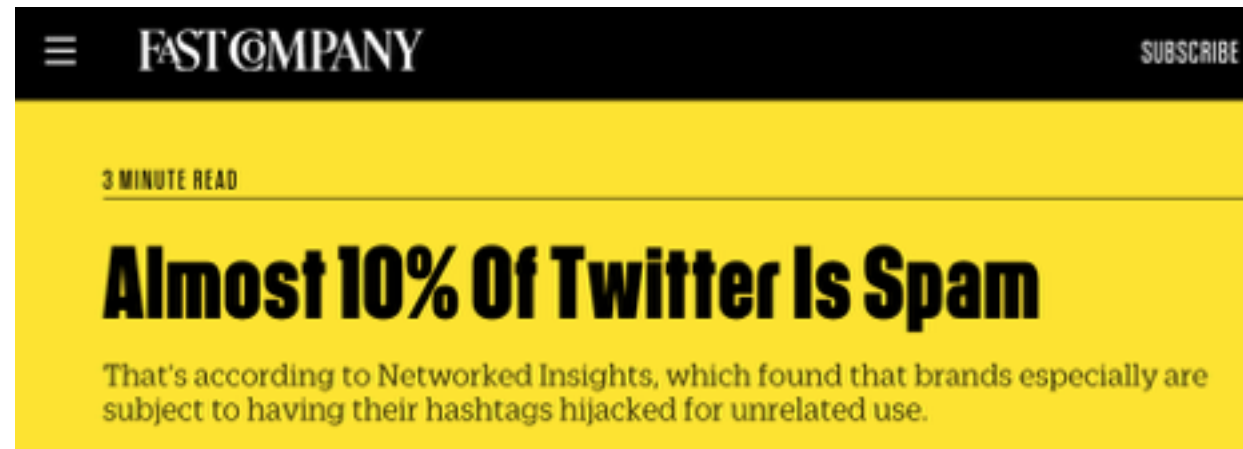
well, "bot" is a word sometimes used for spam accounts (or "spambots"), which are, of course, a scourge on us all. spambots send unsolicited e-mail and text messages that we have to block and filter; on twitter, spam bots pollute the feed in the form of follow notifications and hashtag hijacking. so "bots" are understood to be a source of unwanted noise that we'd be better off without, and Twitter goes out of its way to make it difficult for people to create accounts for the purpose of spamming.

https://commons.wikimedia.org/wiki/File:Botnet.svg

a "botnet" is a group of computers that have been "taken over" by a malicious program that allows the computer to be controlled by someone other than its owners. computers that have been taken over like this can then be used for all kinds of mischief, from gathering personal data to sending untraceable spam e-mails. so there's a sense in which "bots" are seen to be something malicious—taking over someone's property or identity.

We're Ready For Our Robot Poet Overlords

Posted: 04/19/2014 7:30 am EDT | Updated: 04/19/2014 10:59 am EDT

STEVEN LEVY   MAGAZINE   04.24.12   4:46 PM

CAN AN ALGORITHM WRITE A BETTER NEWS STORY THAN A HUMAN REPORTER?

finally—the classic narrative in the media about bots (and automation of any kind) is that they are going to take our jobs. there's a folk theory about the singularity demanding that all human endeavor, even inherently relational and creative endeavors like poetry and journalism, will eventually be taken over by matte-white robots with articulated joints and sleek eero aarnio lines. proponents of this argument don't believe so much that bots are *bad* but that our subjugation to them is inevitable and we'd all better just get used to it.

today I'd like to propose that neither of these narratives is the right way to think about bots. instead, consider that:

bots are skateboarding

https://commons.wikimedia.org/wiki/
File:Picnic_table_skateboarding_Orchard_St_jeh.jpg

bots are skateboarding.

I realize on the surface this sounds a bit weird, but stay with me for a second.

Borden, Iain, et al. "Another pavement, another beach: skateboarding and the performative critique of architecture." (2001): 178-199.

I am not a skateboarder and I don't really know anything about skateboarding, but there's a great paper I read a while ago called "Another Pavement, Another Beach: skateboarding and the performative critique of architecture." It's by Iain Borden, an architectural historian. the basic argument of the paper is that skateboarding is a *creative* and *political* act. the practice of skateboarding reveals that urban spaces have topographies and affordances that go beyond the top-down design processes that brought them into being.
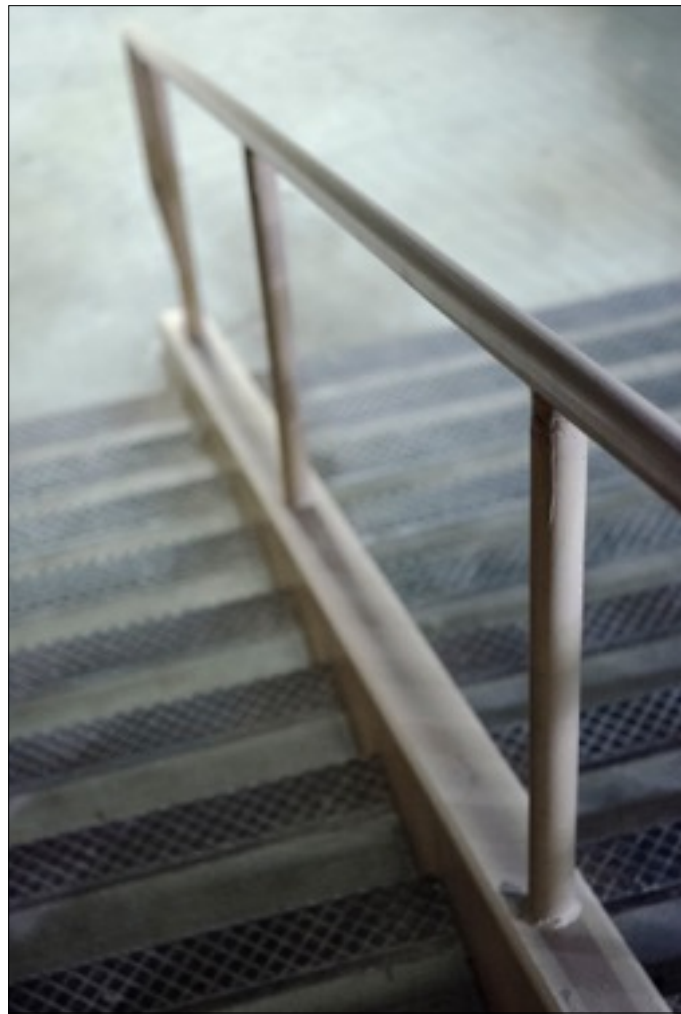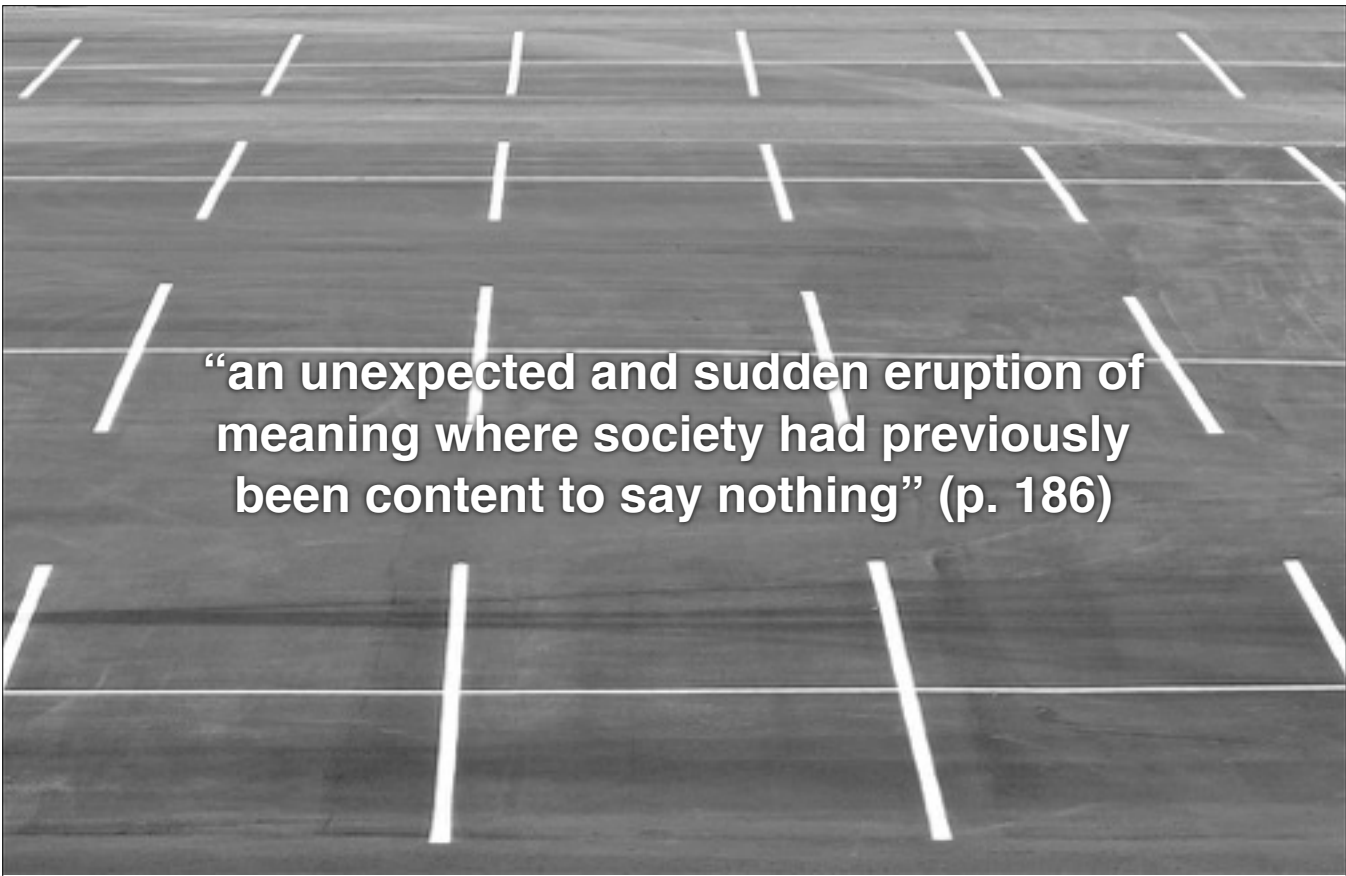
Skateboarders target... functional everyday spaces and objects. [...] For example, a handrail is a highly functional object; both the time and nature of its use are fully programmed. [...] The surprise of the skateboarder's reuse of the handrail—ollie-ing up onto the rail, and sliding down its length sideways...—turns it into an object of risk.... The whole logic of the handrail is turned on its head. (pp. 185-186)

Photo credit:
https://www.flickr.com/photos/zionfiction/16091581202

here's an illustrative quote from the paper. skateboarding is about recontextualizing public urban space as a playground instead of as something merely functional.

"an unexpected and sudden eruption of meaning where society had previously been content to say nothing" (p. 186)

Photo credit:
https://www.flickr.com/photos/deanhochman/11865793525

some spaces have no pre-existing structure, like a parking lot—when there are no cars there, it's essentially just a big open space, a space left empty for precisely the purpose of just being empty and without meaning. skaters appropriate spaces like these and bring meaning to them: quote.

how does twitter want you to use twitter?

so I think about this paper a lot and I've come to the conclusion that it has something to say about more than just skateboarding. it's about ALL kinds of public spaces, including online and virtual spaces. and it's about ALL kinds of unauthorized and semi-authorized uses of those spaces. just as there's a conventional way to use a handrail, there's a conventional way to use twitter—or at least a way that twitter WANTS you to use twitter.

User A
@d1172a7da13143f

oh boy I just bought WidgetCo™-brand Widget Cleansing Solution! and it was great

← Reply ↻ Retweet ★ Favorite ••• More

9:26 AM - 11 Mar 16 · Embed this Tweet

User B
@f763739e7f129d0

@d1172a7da13143f cool I have been looking for a way to clean my widgets! I will consider this product for my next purchase #widgethygiene #WidgetCo

← Reply ↻ Retweet ★ Favorite ••• More

9:29 AM - 11 Mar 16 · Embed this Tweet

Twitter to WidgetCo: User A likes your product, and user B might buy your product! Buy ads that target them.

Twitter to WidgetCo competitors: User B is ready to buy a product in your product category! Buy ads that target them.

Twitter to WidgetCo and competitors: All users like A and B are interested in Widget Hygiene. Buy ads that target this demographic and click here to make **#WidgetHygiene**😁 a trending topic!

etc.

and it looks like this: user A tweets about a brand, user B engages with the tweet—maybe favoriting it or retweeting it or replying to it. Twitter uses tweets like these to form demographic profiles, bundles of statistical features about their users that enable them to sell ads to brands. the idea Twitter user is free source of textual labor, relating individuals to the brands that want to sell things to them.

"The corporate types see their structures as powerful and strong. I see them as something I can enjoy, something I can manipulate to my advantage."

–Jesse Neuhaus, quoted on p. 182

that's the IDEAL twitter user, from twitter's perspective. and there are all kinds of ways that the "topography" of twitter that encourages this use (its user interface, the onboarding process, the way tweets are curated, etc. etc. etc.). but as noted skater jesse neuhaus says: quote.

there are a lot of twitter bots whose sole purpose is this: to turn twitter into something enjoyable, something that can be manipulated. to take the barren landscape of brand hashtags and tweets about the oscars and create an eruption of meaning where twitter had been content to say nothing.

Darius Kazemi, *Am I Rite Bot*
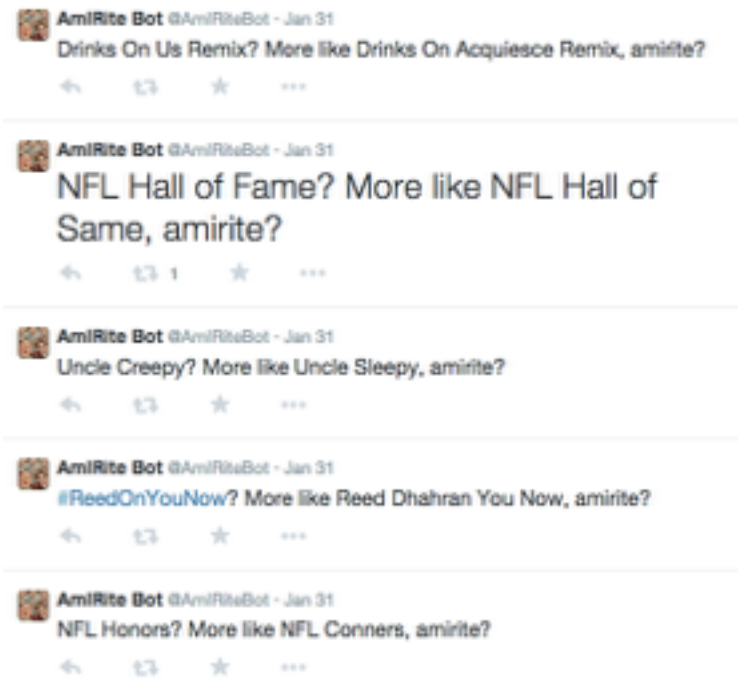
so for example, Darius Kazemi's Am I Rite Bot, which takes Twitter trending topics and turns them into bad rhyming jokes.

Casey Kolderup, *wow rude*
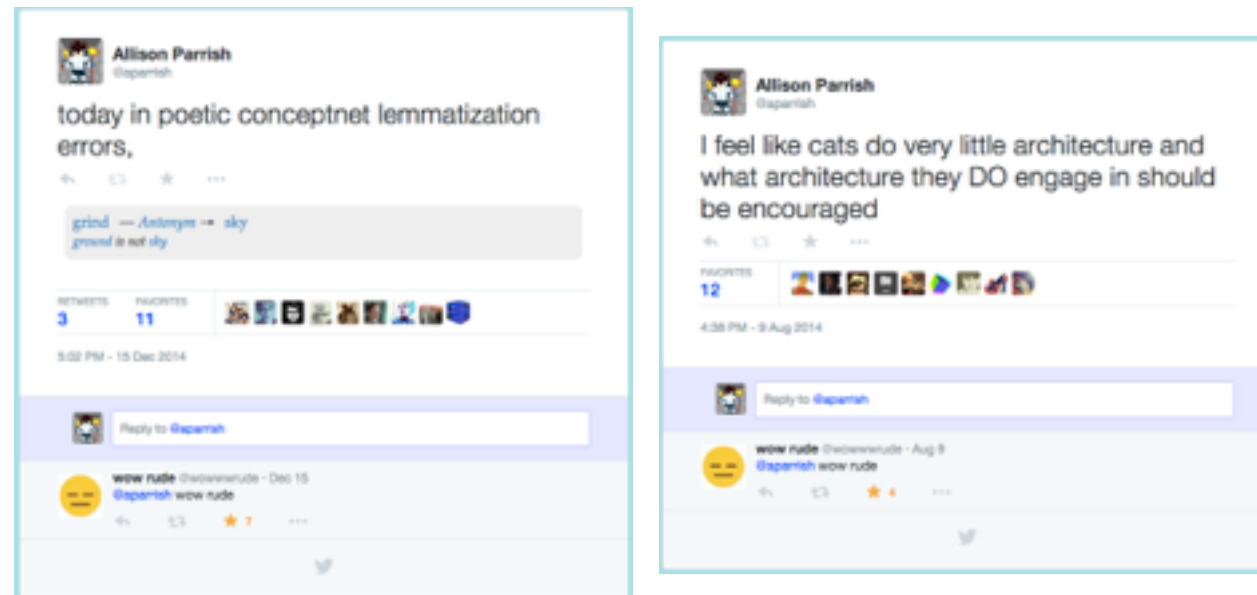
casey kolderup's *wow rude* bot. if you follow wow rude, it will occasionally and at random respond to your tweets with "wow rude." wow rude appropriates the concept of the "reply" for a completely unexpected purpose.
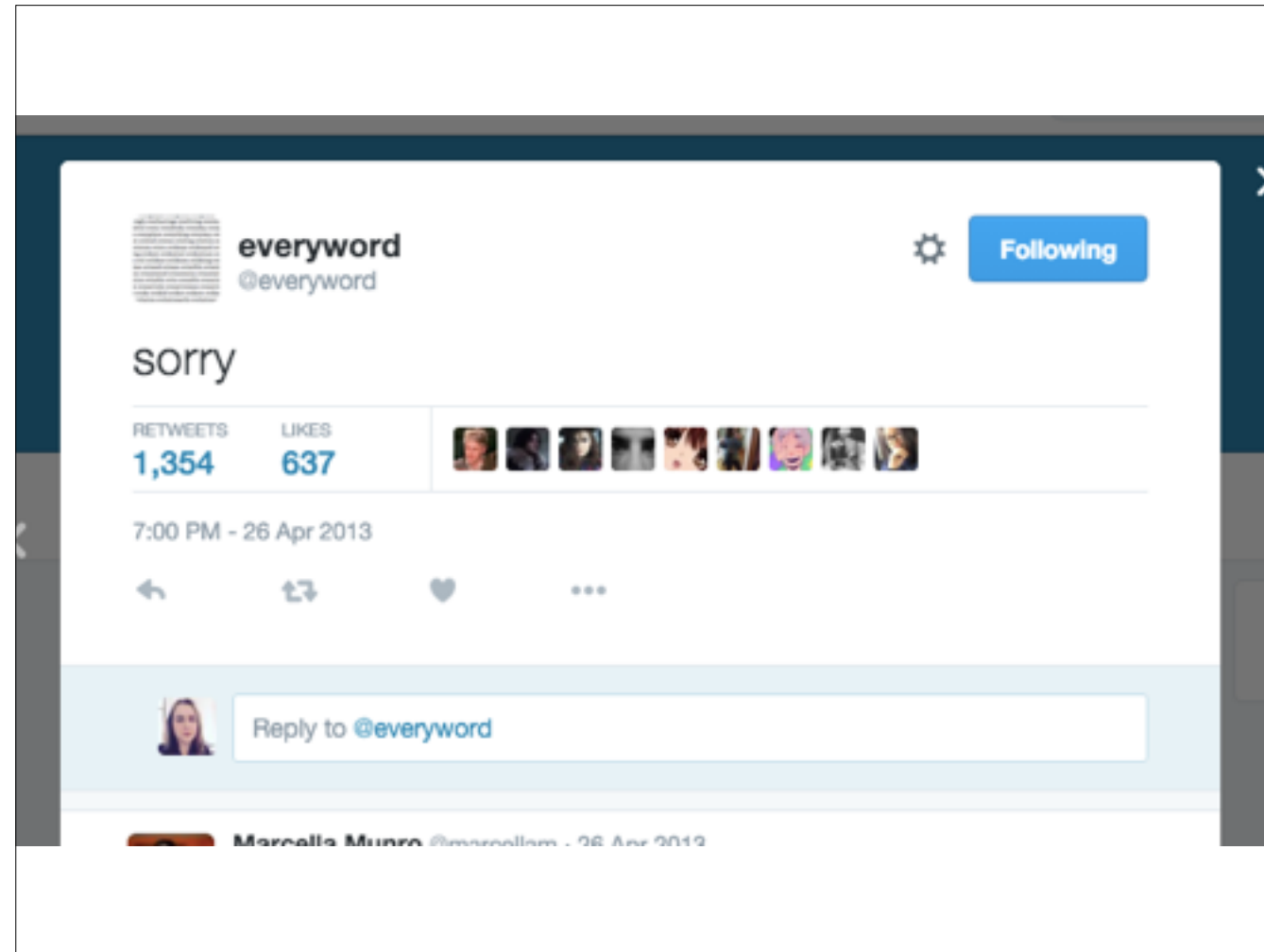
here's a tweet from one of my bots, @everyword, which tweeted every word in the English language in alphabetical order, one tweet at a time every half hour, over the course of seven years. as of today, the word "sorry" has been liked and retweeted thousands of times. this is an example of a kind of engagement that Twitter can't monetize in a straightforward way. so 1300 people retweeted the word "sorry"—who's going to buy ads based on that? parker brothers?

why *automated* tweets?

okay so far so good. but the question arises: skaters aren't robots and yet *they* manage to engage in a critical practice. and it's definitely possible to write tweets by hand that challenge the normal way that twitter is used. (see, for example, horse ebooks.) so why do twitter bots need to be bots in order to accomplish the kind of critique they set out to perform?

so much writing on the internet is computer-generated

- ad targeting

- A/B testing of headlines

- "trending" topics

- algorithmically curated feeds

- autosuggest and autocomplete

this is an open question for me. but here's the thing: we tend to think of computer-generated writing as some kind of kooky thing for nerds, but almost all of the writing we do is "generated" in some way by procedure. and by "computer-generated writing" here I mean any algorithmic process that changes the arrangement of words, including [points].

for this reason, computer-generated text requires a computer-generated response.

bots: a utopian algorithmic
response to the commercial
operationalization of
communication

so, bots are [slide]. bots say: here's what computers could be doing with twitter if they weren't selling ads. here are interactions that could be happening on twitter if twitter were structured differently. twitter bots exist to shine a light how things already work, but also to test the edge cases, and to propose alternatives. [bots are a confirmation that not all language can be operationalized with an algorithm.]

Ivy Baumgarten, *And Now Imagine*

And Now Imagine @AndNowImagine · 20h
Imagine what most coffee-drinkers are like
before their morning brew. Now imagine
stabbing someone with this knife lol

And Now Imagine @AndNowImagine · 21h
Imagine reading a book of all the lies youve
told. Now imagine being a bud tender

And Now Imagine @AndNowImagine · 21h
Imagine getting into a food fight with your
boyfriend. Now imagine being a Villa fan,
jesus

And Now Imagine @AndNowImagine · 22h
Imagine me cooking for four men. Now
imagine everyone on /int/ just looks like their
country stereotypes

so for example, Ivy Baumgarten's bot, *And Now Imagine*, proposes an alternative to harvesting data to sell ads: the bot harvests tweets beginning with "imagine" and juxtaposes them at random to create absurd scenarios. this bot isn't just weird tweets: it's a *system* that extracts information from Twitter and uses it for poetic (not commercial) reasons. it turns the system of twitter against itself.

Nora Reed, *Thinkpiece Bot*

likewise, Nora Reed's Thinkpiece Bot reimagines Twitter not as a place for spreading the word about reactionary editorials, but as a place for mocking them.

Katie Rose Pipkin, *Tiny Star Fields*

finally, Katie Rose Pipkin's Tiny Star Fields reimagines Twitter as a place not for turning personal information into ad revenue but instead as a gallery for serendipitous, procedurally-generated artwork.

> Rather than allowing architecture and the city to dictate what they are, and who urban dwellers are, the skateboarder poses the unanswerable questions "what are you?" and "who am I?"
> –p. 196

> [S]kateboarding suggests that pleasure rather than work, use values rather than exchange values, activity rather than passivity are potential components of the future, as yet unknown, city.
> –p. 179

here are a few more quotes about skateboarding from borden.

replace "skateboarding" and "skateboarder" with "botmaking" and "botmakers" in these quotes, and "city" with Twitter—that's basically my artist's statement.

one last thought. because bots tend to circumvent and sometimes undermine the mechanisms that make twitter money, it's not surprising that twitter has a love/hate relationship with bots.

https://commons.wikimedia.org/wiki/Category:No_skateboarding#/media/
File:Parking_sign_4074.jpg

if skateboarders work to undermine the authority of architecture and urban design, it's not a surprise that cities hate skateboarders and do everything they can to restrict their access to spaces, up to and including criminalization.

Skate Stopper For Walls with 1/2" Radius Edge
Item #: 161-1074
$287.00
Qty 1   Add to Cart

Plastic Coated Skate Deterrent for Thermoplastic Coated Benches
Item #: 161-1031
$150.00
Qty 1   Add to Cart

Skate Deterrent for Walls with 1" Radius Edge
Item #: 161-1002
$287.00
Qty 1   Add to Cart

Skate Deterrent for Aluminum and Fiberglass Benches with 1/8" Radius Edge
Item #: 161-1027
$150.00
Qty 1   Add to Cart

Skate Stopping Clip for 90 Degree Walls with 1/2" Radius Edge
Item #: 161-1010
$287.00
Qty 1   Add to Cart

Skate Stopper For Walls with 1/8" Radius Edge
Item #: 161-1060
$287.00
Qty 1   Add to Cart

Skate Stopping Clip for 3/4" Chamfered Edge
Item #: 161-1003
$287.00
Qty 1   Add to Cart

Architectural Skate Stopper - 20 Piece Kit
Item #: 161-1015
$413.00
Qty 1   Add to Cart

there's a number of businesses that sell little doodads that you can screw into your city's fixtures and architecture to make it difficult to skateboard on them—here's a catalog page from one such business.

andypiper 🔒
Twitter Staff   16d

Yes. We are aware of the desire to have API support for polls. I don't have anything to share today about it but please be assured that this is a known request.

To avoid continued "+1 / please give us this API" comments flooding people with notifications, I am *reluctantly* going to close off this thread. We are very aware of a desire to get data from such an API and when we have news to share it will be via the forums, our @twitterapi handle, and our documentation.

when I look at skate deterrents like that, I can't help but think of the ways in which social media sites like Twitter have, over the course of the past few years, gradually restricted access to their APIs and added product features that aren't accessible from their APIs at all. ever since Twitter added the Polls feature several months ago, developers have been asking for API access to the feature. as of 16 days ago, this remains twitter's response to that request. twitter getting in skateboarders' way. the future of bots is about pushing against these restrictions.

thank you!

http://www.decontextualize.com/

@aparrish on Twitter

that's all I have, thank you!