How to Make a Twitter Bot in 1 Hour or Less

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What is a Twitter Bot?

• Automated Twitter account,
• Spam,
• Propaganda,
• Software application that posts content to Twitter, automatically either on a schedule or responding to specific conditions,
• Genre of Electronic Literature
"every figure of speech... and practically every linguistic structure... every work of literature, every writer’s body of work, every literary movement, national literature...every data stream... Social interactions, conversations, calls and responses, platform-defined interactions (retweets, favorites, and so on) are all ready to be codified into algorithms and explored via bot."

(Leonardo Flores "I ❤ Bots")
Bots are procedural

A bot’s content is automatically generated without human intervention, using a set of predetermined rules and procedures.

Allison Parrish “Bots: A Definition and Some Historical Threads.”
Bots are uncreative (unoriginal)

Writing that concerns itself with categorizing, remixing, and re-enacting pre-existing textual artifacts. Uncreative writing is produced not through “inspiration,” but by approaching an existing text and re-reading it, drawing out something new and unexpected in the process.

Allison Parrish “Bots: A Definition and Some Historical Threads.”
Bots are data driven

Bots today operate on much more data and use much more sophisticated statistical techniques than were available to 20th-century writers that used procedural techniques.

Contemporary botmakers regularly make use of large corpora, and in particular the corpus of Twitter itself.

Allison Parrish “Bots: A Definition and Some Historical Threads.”
Bots are graffiti

The characteristic of bots that distinguishes them most readily from other kinds of poetry and art is that they are interventions in a public space.

Allison Parrish “Bots: A Definition and Some Historical Threads.”
Tully Hansen's "Taxonomy of Twitter Bots"
Why Twitter bots?

• Trolls
• Too short to say anything meaningful
• Deformation of language
• Current political climate
Authorial responsibility
@HaikuD2 by **John Burger**

Jamie and I reached •
   A new level of friendship •
   We had the same dream....  
   —@Misty__nightt #haiku

Also big surprise •
   The episode begins with •
   A rainy setting 
   —@ThaFabz #haiku

The Way People Are •
   Is So Different From The Way •
   Other People Are 
   —@whatthough #haiku
@pentametron by Ranjit Bhatnagar
Yahoo shareholders still expect a massive October 2 tax bill

ConAgra Tells Schoolgirls to Beat the Boys

Ravens: Kanye West "Is Serious" About Running for President, But Didn ...  

Chris Brown scores $54M in funding; re-structures company

Donna Shalala -- I'm Not Going Down Without a Fight in Australia
@infinitedesserts by @getdizzzy
@tiny_star_fields by katie rose
@StudiesBot by Mark Sample

I have singlehandedly founded the following new scholarly fields.

- On a laptop in a coffeshop
- samplereality.com

- Digital Success Studies
- Ethnoconversation Studies
- Human Turtle Studies
- Medieval Colony Studies
@everyword by A. Parrish
@NRA_Tally by Mark Sample

NRA Tally
@NRA_Tally
Keeping score of the NRA's greatest hits.
Fairfax, Virginia

Tweet to NRA Tally

3 Followers you know

TWEETS FOLLOWERS
1,790 66

Tweets

26 preschoolers gunned down in New York with a 9mm SIG Sauer semiautomatic. The NRA stops the CDC from researching gun violence.

4 shoppers killed in Wisconsin with a FIE .380-caliber Star semiautomatic. The NRA steps up lobbying efforts.

6 tourists shot dead in San Ysidro with a 9mm Smith & Wesson 915 semiautomatic. The NRA says shooting ranges are fun for children.
@Dropthelbot by 
Patrick Hogan and 
Jorge Rivas
Do they make sense?

- Part of the point of bots is to make sense (not just linguistic sense) out of what they generate
- Remediate dynamics of *cut-up* and experimental art
- Resistance might come from *impersonating* – Twitter bots unlike most other artworks co-exist with us in a public space
Let’s make a bot!

In less than one hour...
A bot “lives” on a server but “works” on Twitter

Cheap Bots, Done Quick!

This site will help you make a Twitterbot! They're easy to make and free to run.
To use it, create a Twitter account for your bot to run under and then sign in below. The bots are written in Tracery, a tool for writing generative grammars developed by Kate Compton. This site is run by George Buckenham - he can be contacted at twentysome@gmail.com.
Our tools:

- Text editor
- Corpora [https://github.com/dariusk/corpora/tree/master/data](https://github.com/dariusk/corpora/tree/master/data)
- Cheap Bots Done Quick – [http://cheapbotsdonequick.com](http://cheapbotsdonequick.com)
- Twitter account dedicated to bot
First we build the bot

Then we make it tweet

Cheap Bots, Done Quick!
1. Tracery http://www.brightspiral.com/tracery/

- Interface that creates and structures the JSON file
- Tracery has embedded the generative engine that recombines the values included in each “symbol”

- "origin" is reserved for the bot’s structure
- #___# indicates randomized content from symbols
- The rest is constant, including spaces
JSON file (JavaScript Object Notation)

- human-readable text
- data objects consisting of attribute–value pairs
- highly structured (commas, quotation marks, brackets)
JSON file (JavaScript Object Notation)

- human-readable text
- data objects consisting of attribute–value pairs
- highly structured (commas, quotation marks, brackets)

```
{
  "name": ["Bertram"],
  "soldier": ["#name# the #occupation#"],
  "origin": ["#name# the #occupation#"]
}
```
The same content

```json
{
    "name": [
        "Bertram",
        "Arabella",
        "Cecil"
    ],
    "occupation": [
        "baker",
        "wizard",
        "soldier"
    ],
    "origin": [
        "#name# the #occupation#"
    ]
}
```
Different combinations

- Arabella the wizard
- Cecil the baker
- Bertram the baker
- Bertram the wizard
- Arabella the baker
Experiment adding words and building more complex sentences

Tracery is not a work space, once you have a working idea, copy the .json output and continue in your text editor

Use the corpora available

https://github.com/dariusk/corpora/tree/master/data
Match pizza toppings and kinds of beers

A topping pizza goes great with #beer#.
A few useful modifiers

Put these at the end of symbols with a dot separating them:

• 's' for plural,
• 'ed' for past tense,
• 'capitalize' and 'capitalizeAll',
• '.a' to add a/an in front

'animal.s.capitalize' will make an animal plural and capitalize it
‘pizzatoppings.a’ will put a/an in front of it
More advanced options can be found here:
http://www.crystalcodepalace.com/traceryTut.html
2. A working idea (proof of concept) on Tracery

- On Tracery toggle the tab to see the JSON output
- Copy and paste it to your text editor (it’ll be easier to spot errors there and add more values/data)
- This is the “body” of your bot and it’s ready to move to the server
3. Dedicated Twitter account

• You’ll need an email. I recommend using one specific for your bot like mynewbot@gmail.com

• You’ll need to sign up to Twitter with that account, pick a handle and a name for your bot.

• Verification might be needed too
4. Log in to Cheap Bots Done Quick

- Once logged in to your new bot account go to cheapbotsdonequick.com and click on sign in with Twitter
5. “Move” your bot there

• Once logged in, copy paste your JSON output in the window

• If something isn’t working, you’ll get an error message at the bottom indicating the line # (this is easier to fix on your text editor)

• If everything is working you only need to set the frequency for your bot to tweet, and click on TWEET. Don’t forget to save the changes.
Responses

• New features in Cheap Bots Done Quick allow you to set up responses when someone tweets at your bot

• It uses the same grammar
Happy Tweeting!