THERE MAY ALREADY BE CROWS ON MARS

And Other Breaking News

Mike Cook (@mtrc)
Queen Mary University of London
possibilityspace.org

Let’s See Some Bots!

everyword @everyword · May 21, 2014
woven
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everyword @everyword · May 21, 2014
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everyword @everyword · May 21, 2014
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everyword @everyword · May 21, 2014
wounder
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@everyword

@big_ben_clock

@stealthmountain

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Tiffany Schmidt @TiffanySchmidt · Jan 13, 2014

Photo: saveoriginalthinking: (via Sneak Peak: Send Me a Sign by Tiffany Schmidt Bonus Story) tmblr.co/Zdrjrs14CkFZe

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Stealth Mountain @StealthMountain · Jan 13, 2014

@TiffanySchmidt I think you mean "sneak peek"

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rich shepard @rednekrockstar · Jan 11, 2014

Replying to @StealthMountain

@StealthMountain I beg to differ, standing on secret hilltop no one can see but me lol #damnyouautocorrect

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jay @mattmartinj · Jan 23, 2012

Replying to @StealthMountain

@StealthMountain why thank you sir that was very kind of you. Just kidding [redacted] loser

1 1

Let's *Make* Some Bots!

A Good Bot

A Good Bot

Small and Snappy

A Good Bot

Small and Snappy

Wiggle Room

A Good Bot

Small and Snappy

Wiggle Room

Established Structure

A Good Bot

Small and Snappy

Wiggle Room

Established Structure

Lots of Data/Examples

New Scientist
@newscientist

New species of giant salamander is the world's largest amphibian bit.ly/30pymQl

Laws are needed when technological change ends up squeezing workers

The 4 ingredients to create consciousness could explain our own minds

The best roguelike games are a perfect balance of order and randomness

Does alien life have to look like us? Or even be intelligent?

Fierce battle looks likely as land-dwelling mudskipper fish face off

How aspirin became a wonder drug against heart disease and cancer

The school climate strikes this Friday need the support of adults

xkcd comic creator Randall Munroe on the thrill of physics

Loch Ness Monster unmasked: it's a load of eels in a giant eel costume

A stargazer's guide to the equinox and how Earth moves around the sun

Deliberate drowning of Brazil's rainforest is worsening climate change

Richard Dawkins: How we can outgrow God and religion

Saturn's moon Enceladus is having a snowball fight with other moons

Mathematicians find a completely new way to write the number 3

45,000 New Scientist headlines!

Neural Nets (textgenrnn)

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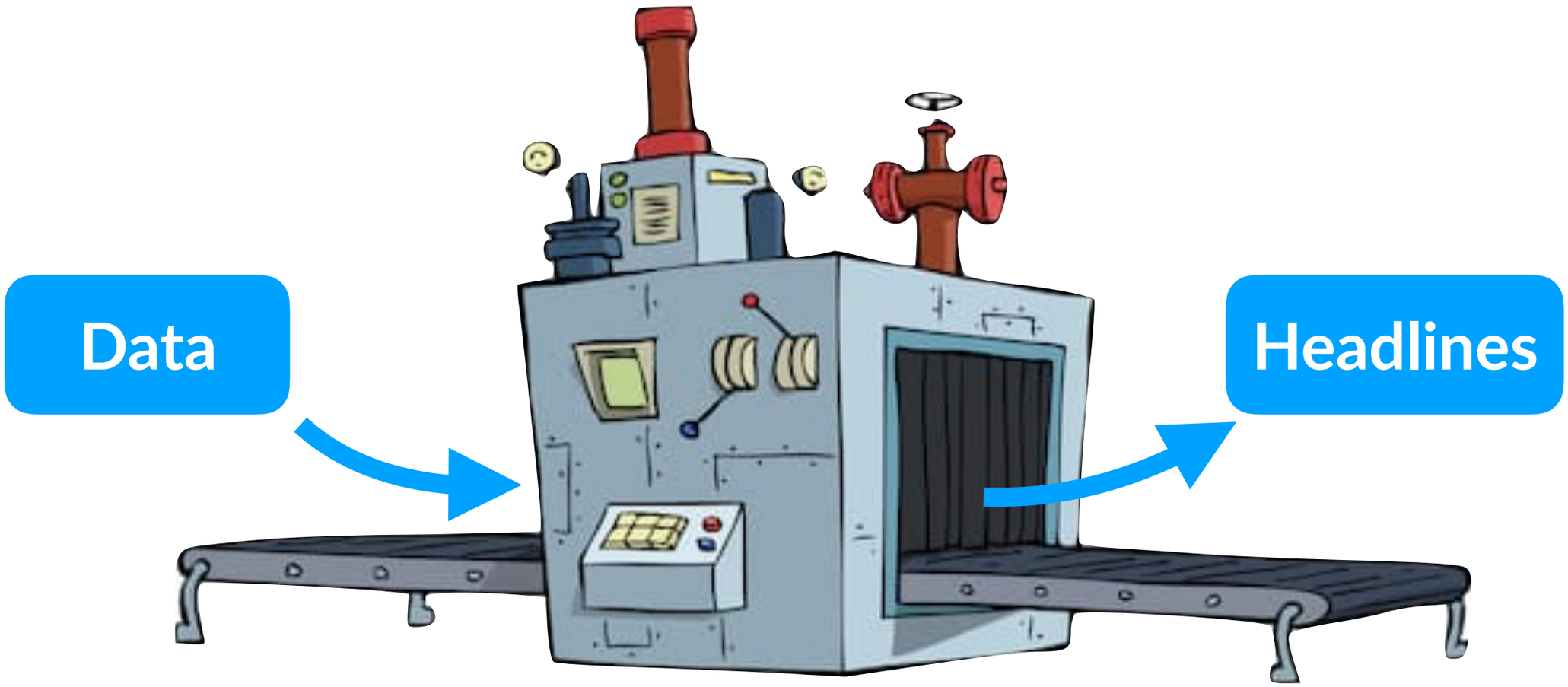

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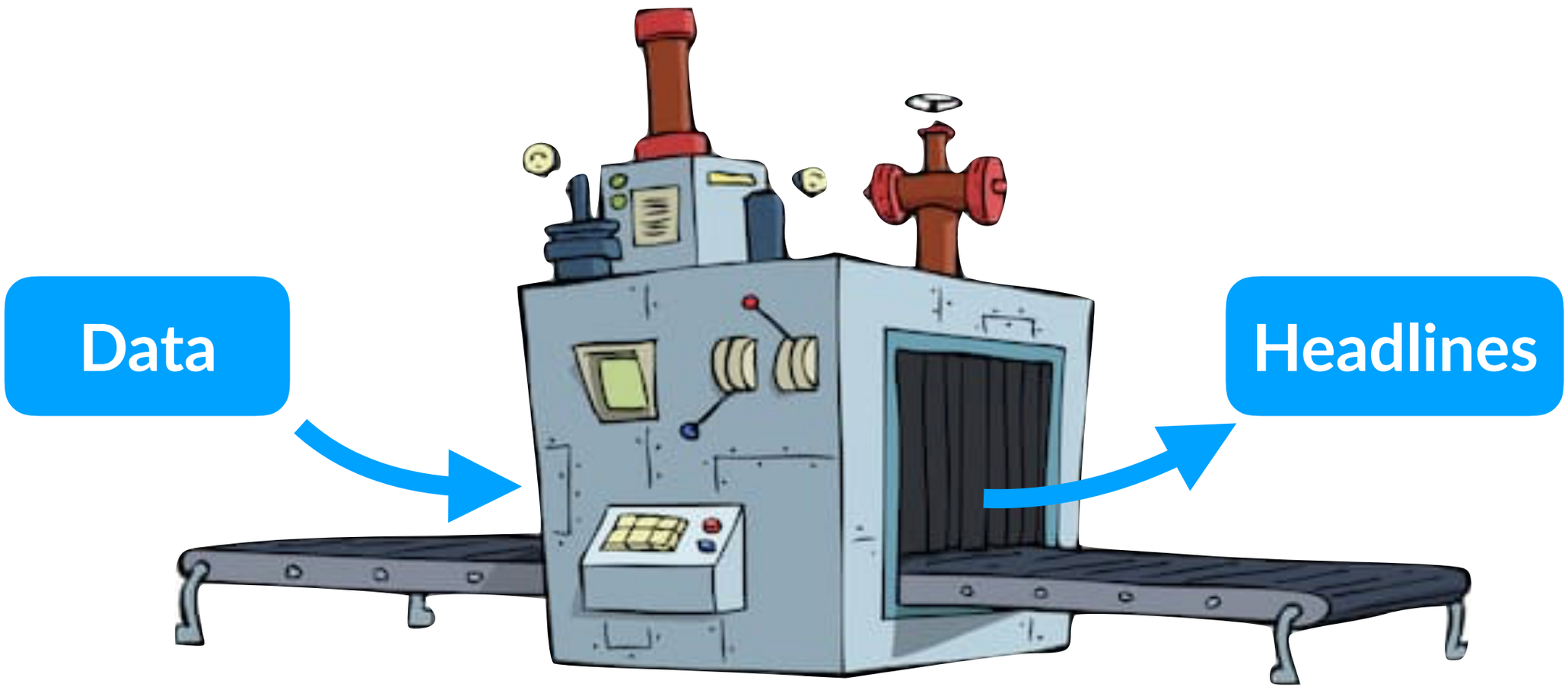

Idea: train a neural network on our corpus of headlines, and ask it to generate new ones

SYSTEM PROMPT (HUMAN-WRITTEN)

In a shocking finding, scientist discovered a herd of unicorns living in a remote, previously unexplored valley, in the Andes Mountains. Even more surprising to the researchers was the fact that the unicorns spoke perfect English.

MODEL COMPLETION (MACHINE-WRITTEN, 10 TRIES)

The scientist named the population, after their distinctive horn, Ovid's Unicorn. These four-horned, silver-white unicorns were previously unknown to science.

Now, after almost two centuries, the mystery of what sparked this odd phenomenon is finally solved.

Results

See more:
@NewerScientist1

Artificial intelligence could speed up the world

Cool special: A spiders and the secret of consciousness

Solar Pole will change science

Inside the most powerful thing

Learn the end of the brain implant

Humans may have spreading continues

Time taken: 5 mins (prep), 1 hour (training), ??? (extra)

ee more:
verScientist1

Artifi *world*

Cool spe *iousness*

H *s*

Time tal ? (extra)

Neural Nets (textgenrnn)

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Pros

- Able to generate really good headlines (uh, maybe with more data and time)
- Easy to get going - pour the data and wait!

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- Able to generate really good headlines (uh, maybe with more data and time)
- Easy to get going - pour the data and wait!

Cons

- We don’t have much control over what gets generated.
- It’s hard to appreciate the process.
- Hard to angle towards humour or a ‘message’.

Markov Chains

Idea: create new headlines using probabilities based on the old headlines (“neural networks lite”)

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Climate

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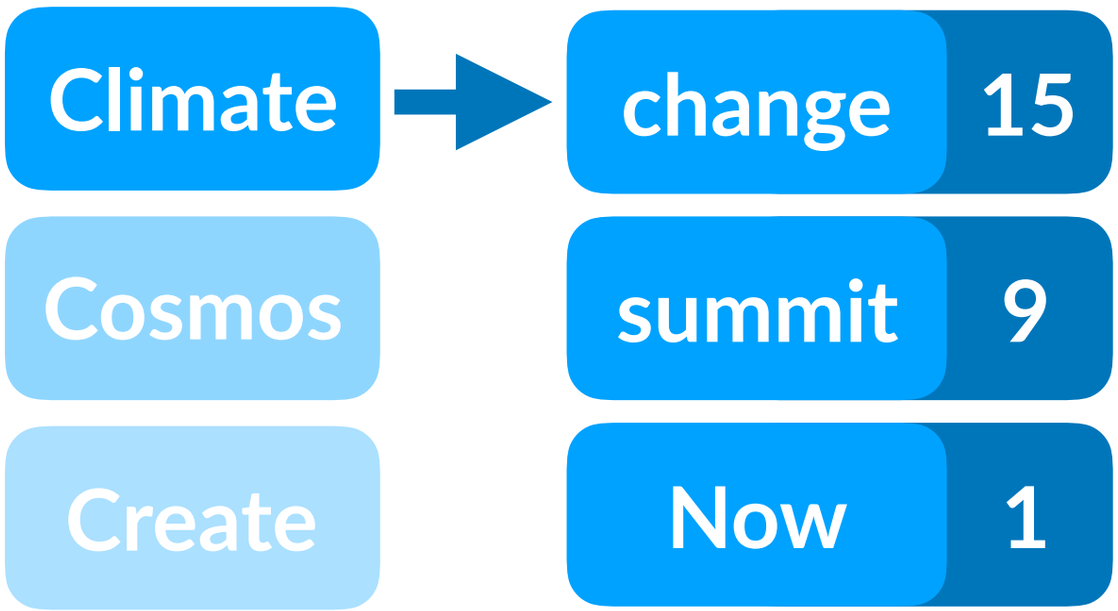

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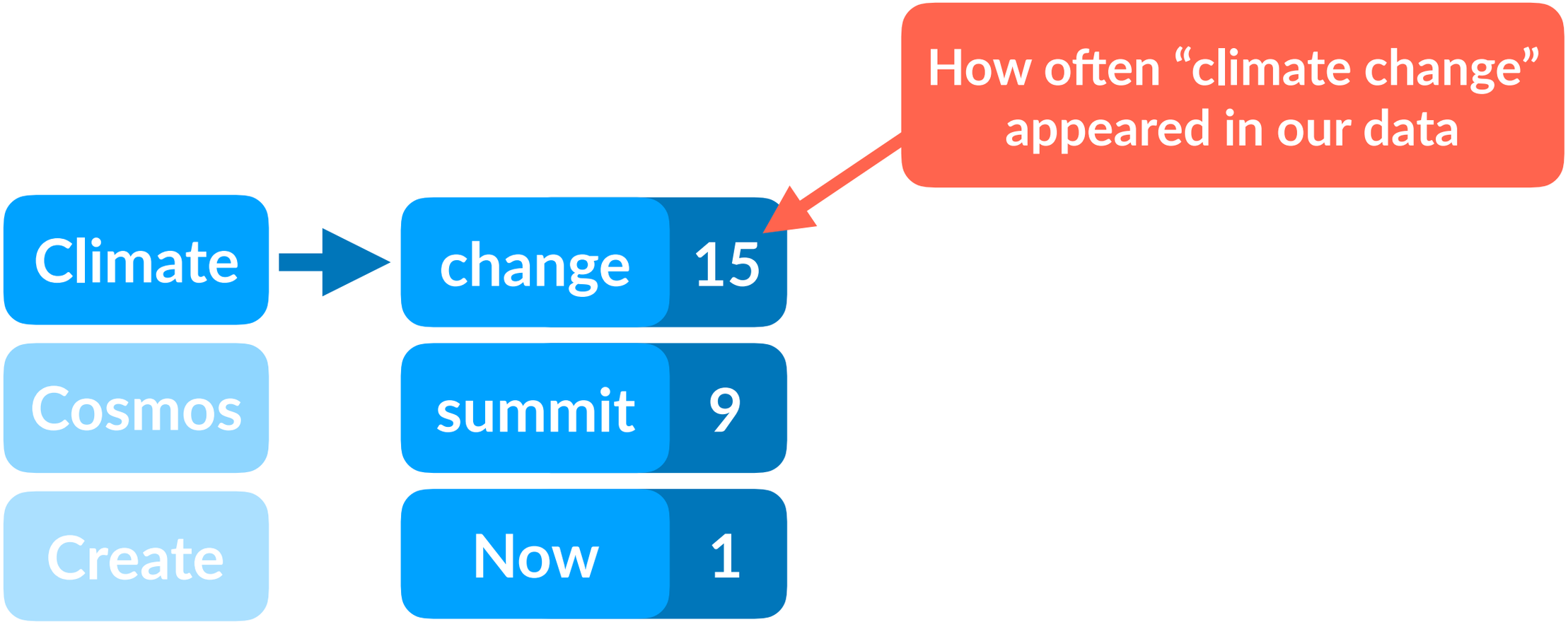

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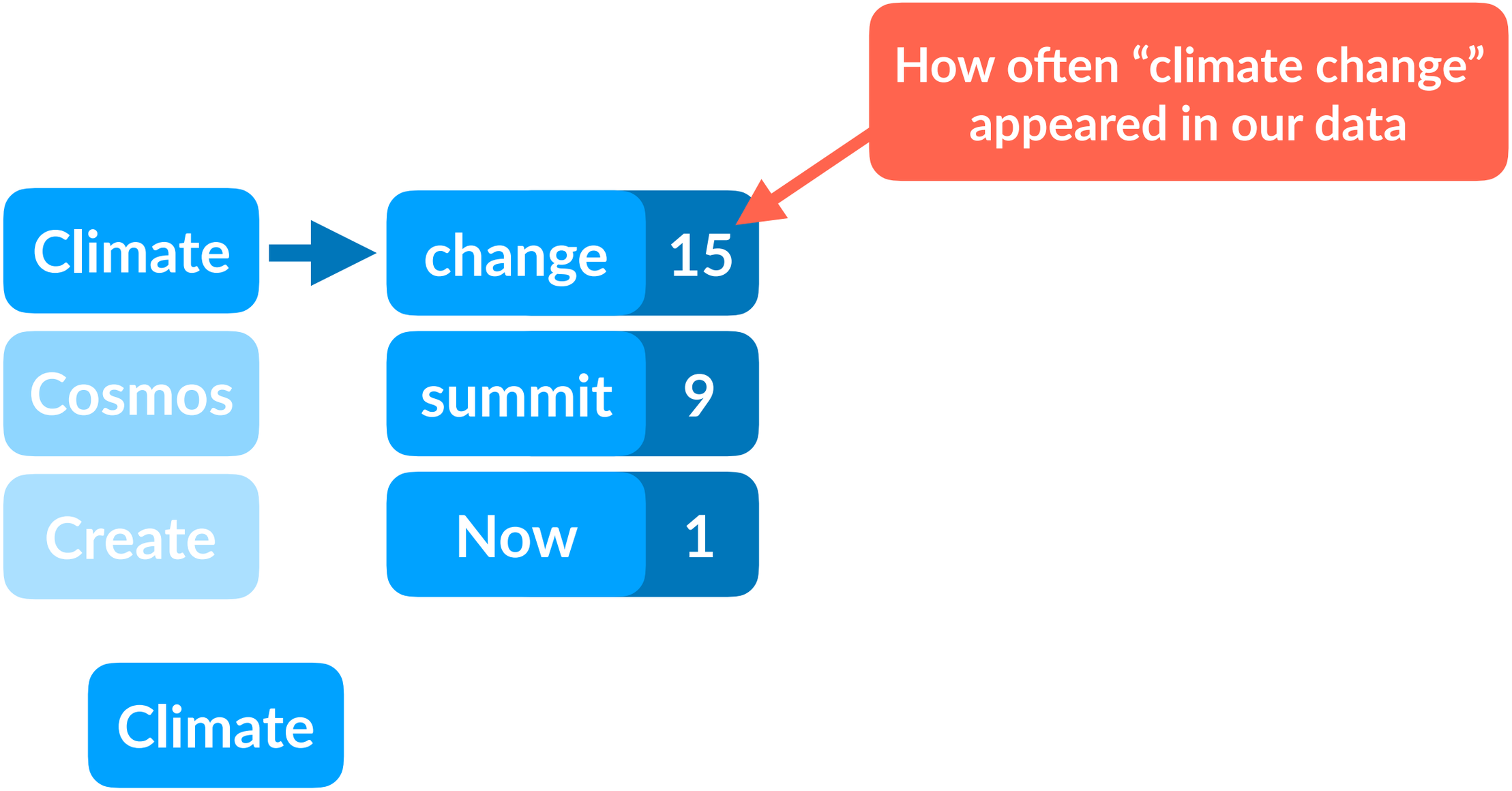

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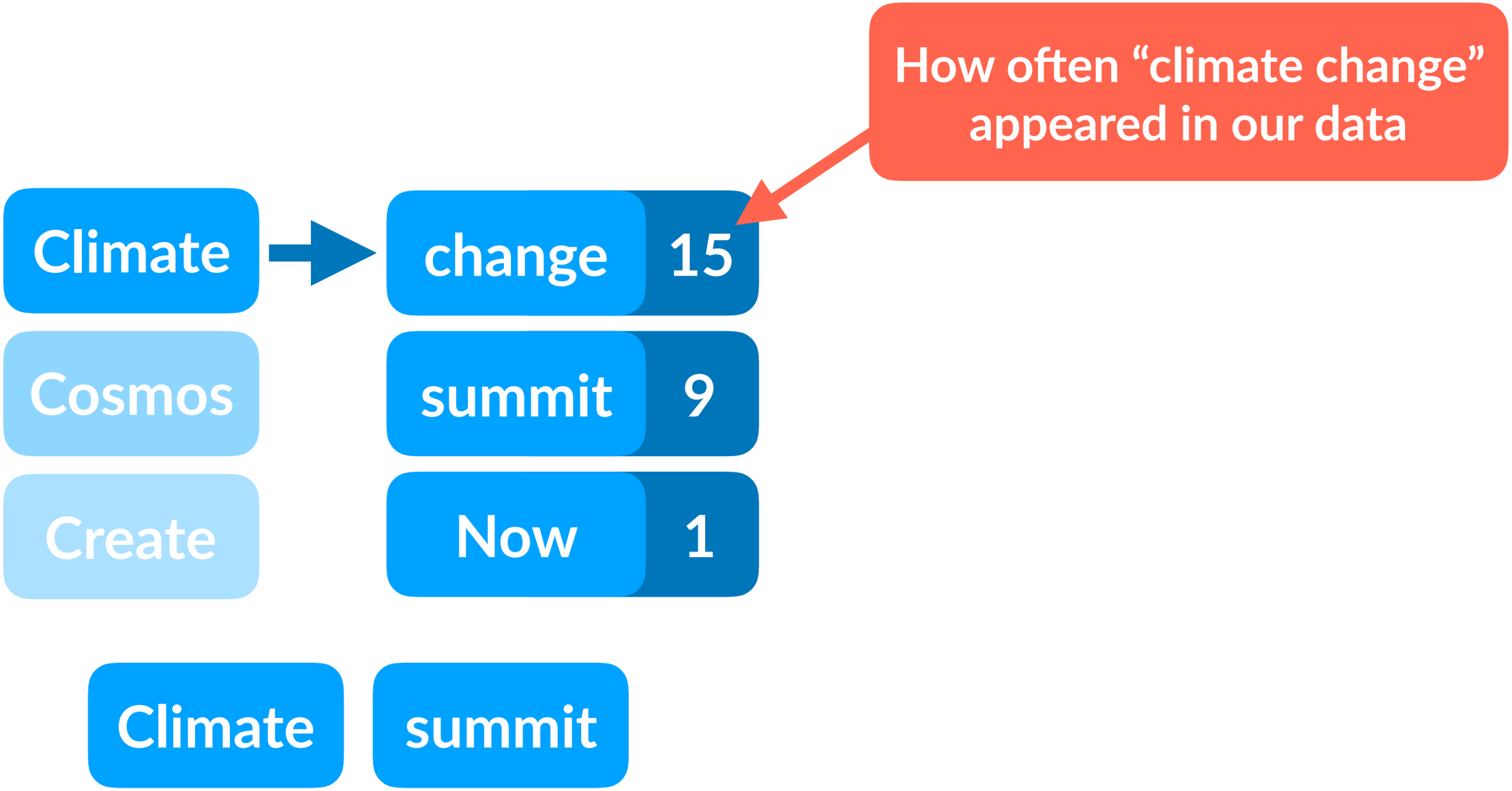

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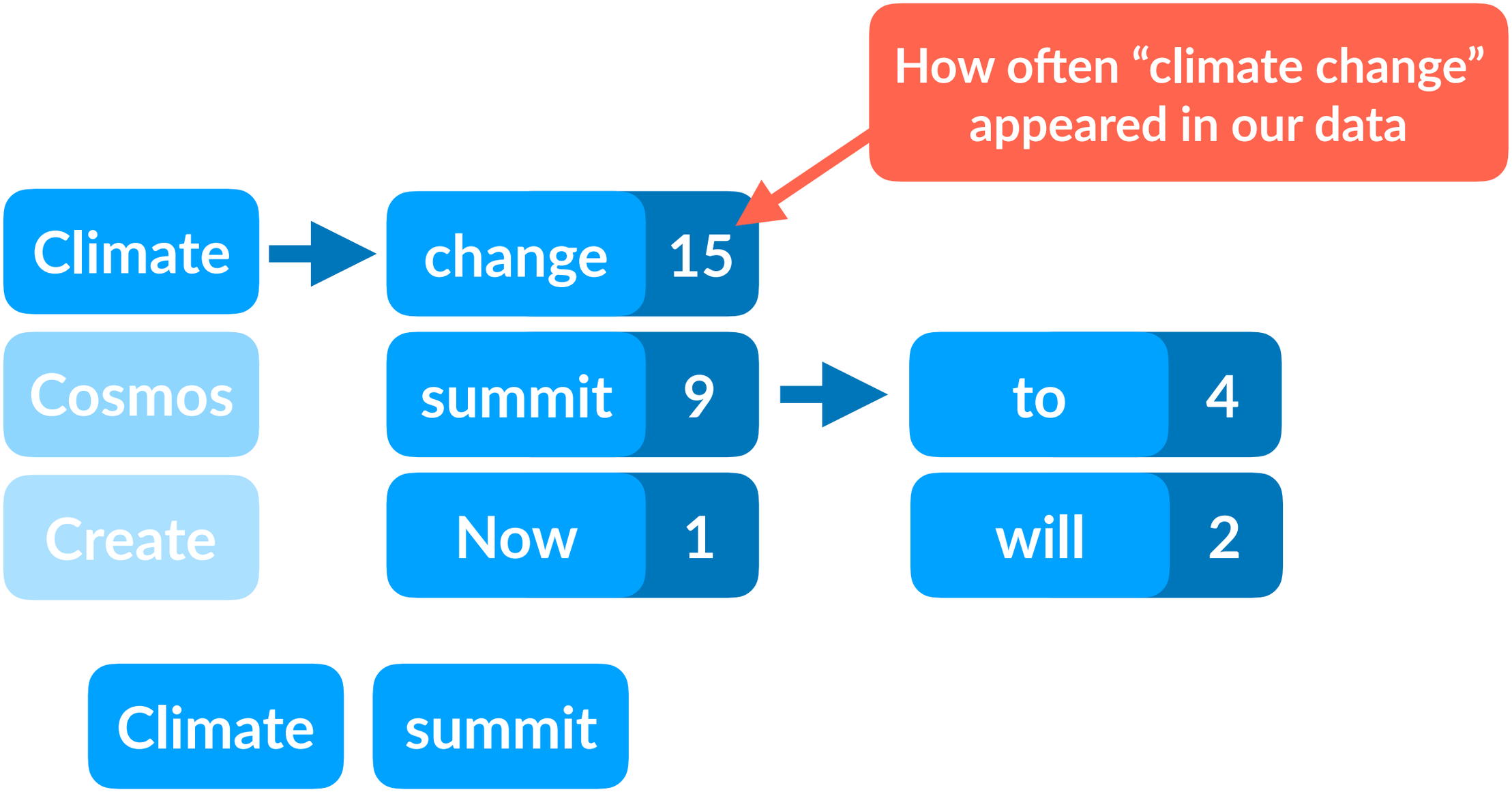

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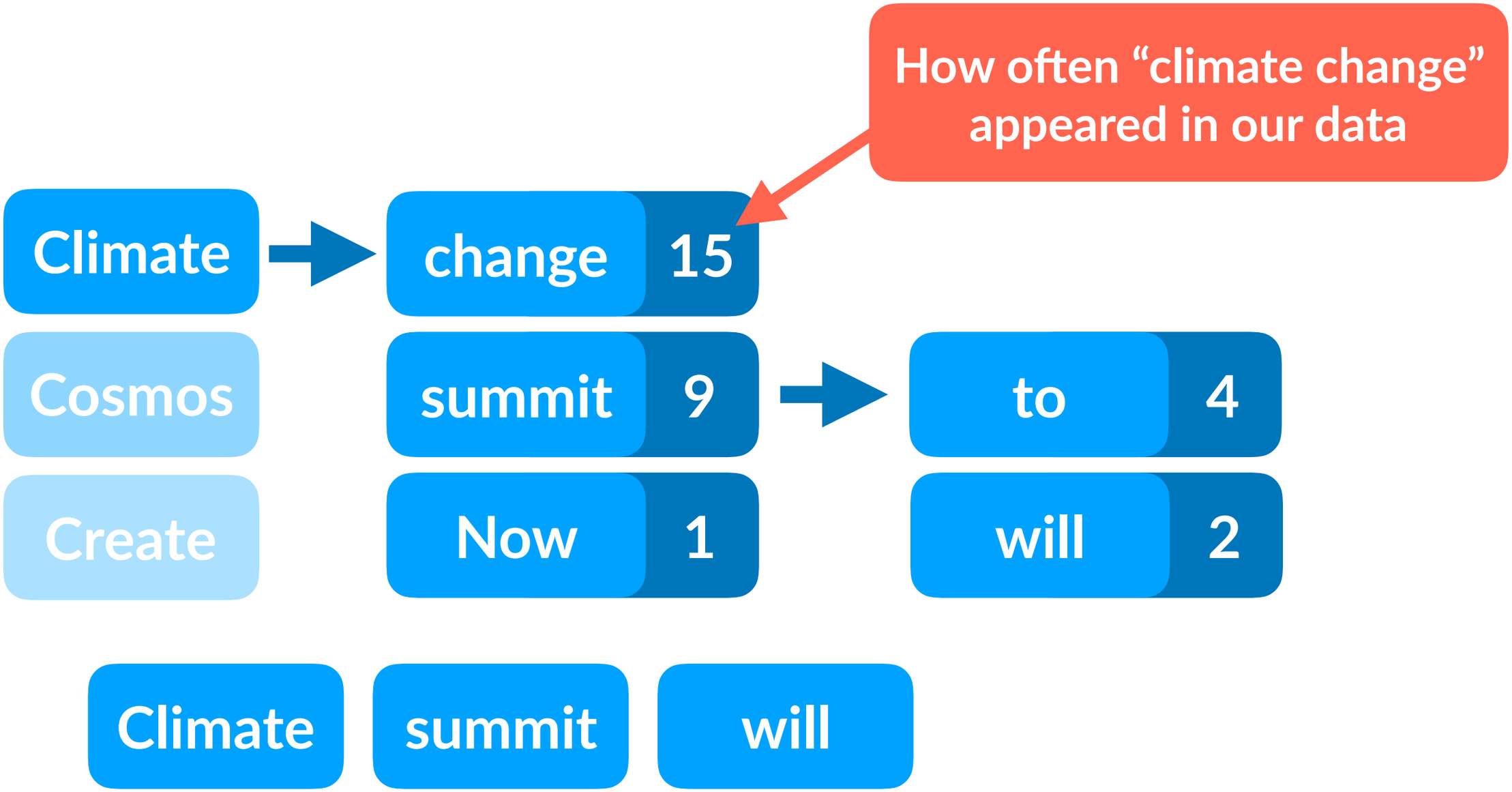

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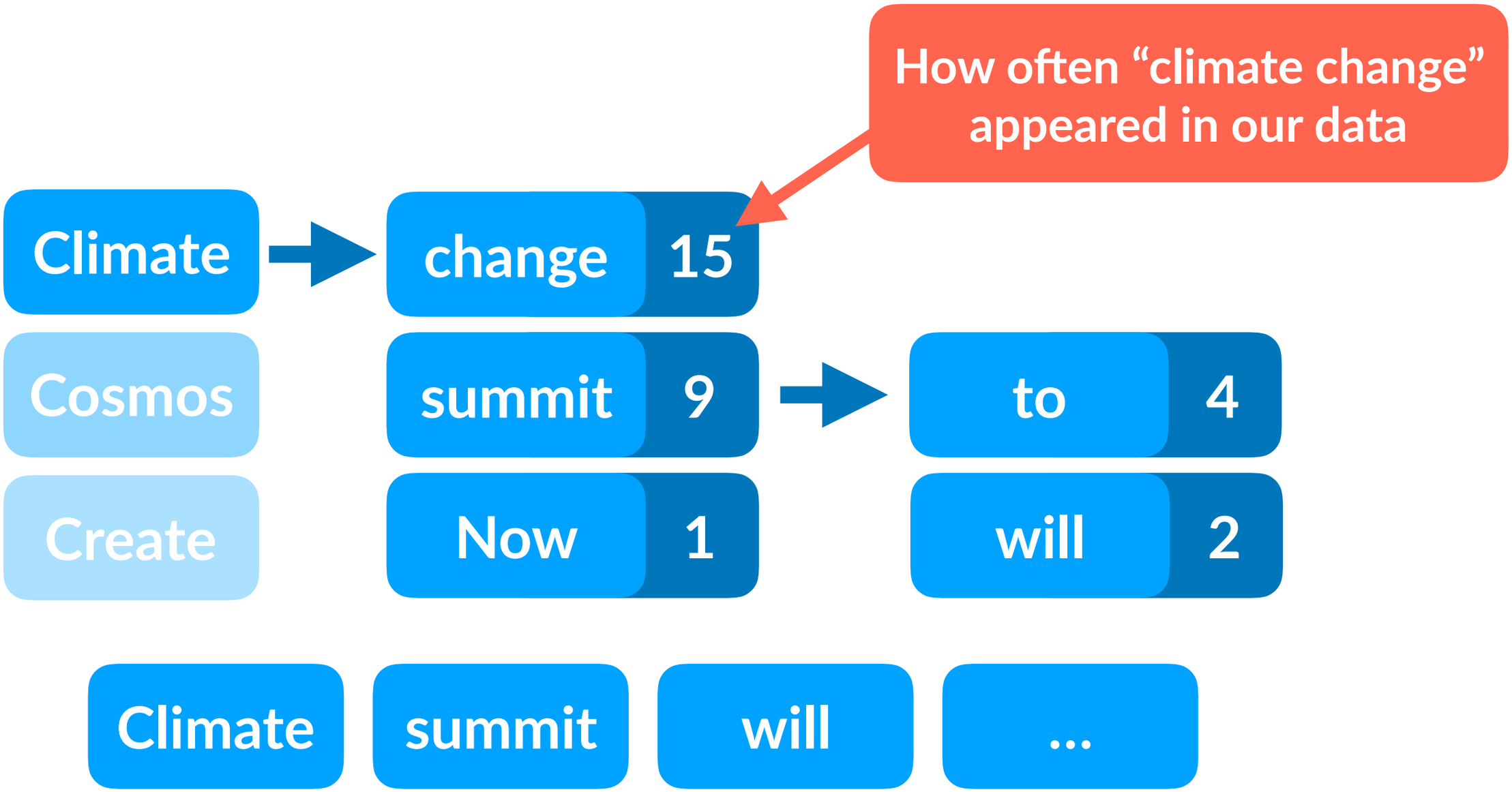

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Results

See more:
@NewerScientist2

Algorithms that change lives should be eating 'backwards' gas

New world order is defying the science of religion and biology

Science's most controversial technology is back on track?

Norway is first alternative to animal tests for cosmetics

Cloud gaming may be 200 million years BC

Time taken: 1 hour (coding)

e more:
erScientist2

Algorithms th *ckwards' gas*

New world or *and biology*

Science's m *on track?*

Norway is *osmetics*

Clou *BC*

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Pros

- Simple and quick to code, but relatively good quality nonetheless.
- Easier to explain, easier to appreciate!

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Pros

- Simple and quick to code, but relatively good quality nonetheless.
- Easier to explain, easier to appreciate!

Cons

- Hard to predict whether it'll generate gold or... nonsense.
- We still can't control much of the tone or direction of the bot.

Part-Of-Speech Analysis

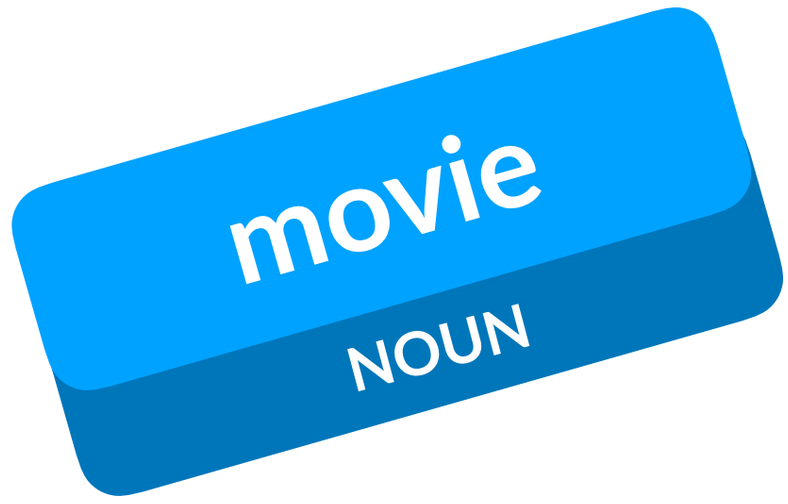
Artificial sun made with movie

magic could create clean hydrogen

Idea: use the headlines to create custom wordlists, and identify or create templates to fill

Part-Of-Speech Analysis

Artificial sun made with



magic could create clean hydrogen

Idea: use the headlines to create custom wordlists, and identify or create templates to fill

Part-Of-Speech Analysis

movie NOUN	frog NOUN	celebrity NOUN
supermassive ADJECTIVE	evolving VERB	cosmos NOUN

Idea: use the headlines to create custom wordlists, and identify or create templates to fill

Part-Of-Speech Analysis

Artificial sun made with

frog

magic could create clean hydrogen

Idea: use the headlines to create custom wordlists, and identify or create templates to fill

Results

See more:
@NewerScientist3

There may already be crows on Mars

Folic acid supplements rejuvenate older tsunamis

The enigmatic cat we can hear - but have never seen

Internet gorilla can track you down to within 690 metres

Nuclear kangaroos - the ultimate insurance?

Mini robot space mayor to climb inside astronauts

Time taken: 30 minutes (code), 2-3 hours (editing, tweaking)

ee more:
verScientist3

Folic a *namis*

The enig *ver seen*

Internet g *90 metres*

Nuc *nce?*

Mini ro *onauts*

Time taken *g, tweaking)*

Part-Of-Speech Analysis

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Pros

- Lots of control, letting us mix data like ingredients, and focus it into structures.
- Very easy to explain and unpack to others.

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Pros

- Lots of control, letting us mix data like ingredients, and focus it into structures.
- Very easy to explain and unpack to others.

Cons

- Labour-intensive: a lot of work involved in authoring, can run out of content.
- Highly curated which can reduce novelty (not always - but it takes experience and luck)

There’s no “right answer” in AI

Designing a bot is full of artistic choices!

Good bots are often very simple

Illustration: Viktoria Gavrilenko

Try out this digital artform yourself!

Make A Simple Bot, Today!

`cheapbotsdonequick.com`

Lots of Resources:

`github.com/prosecconetwork`

Today's Newer Scientist Bots:

`@NewerScientist1`
`@NewerScientist2`
`@NewerScientist3`

Follow me for bad tweets: `@mtrc`