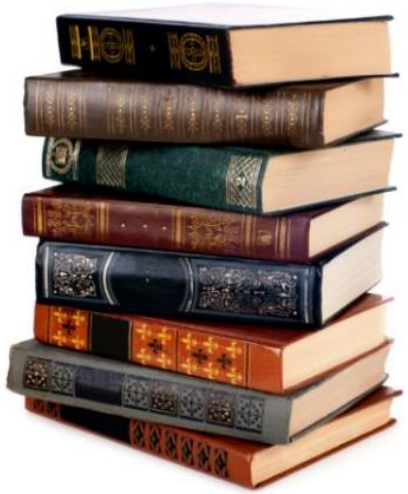
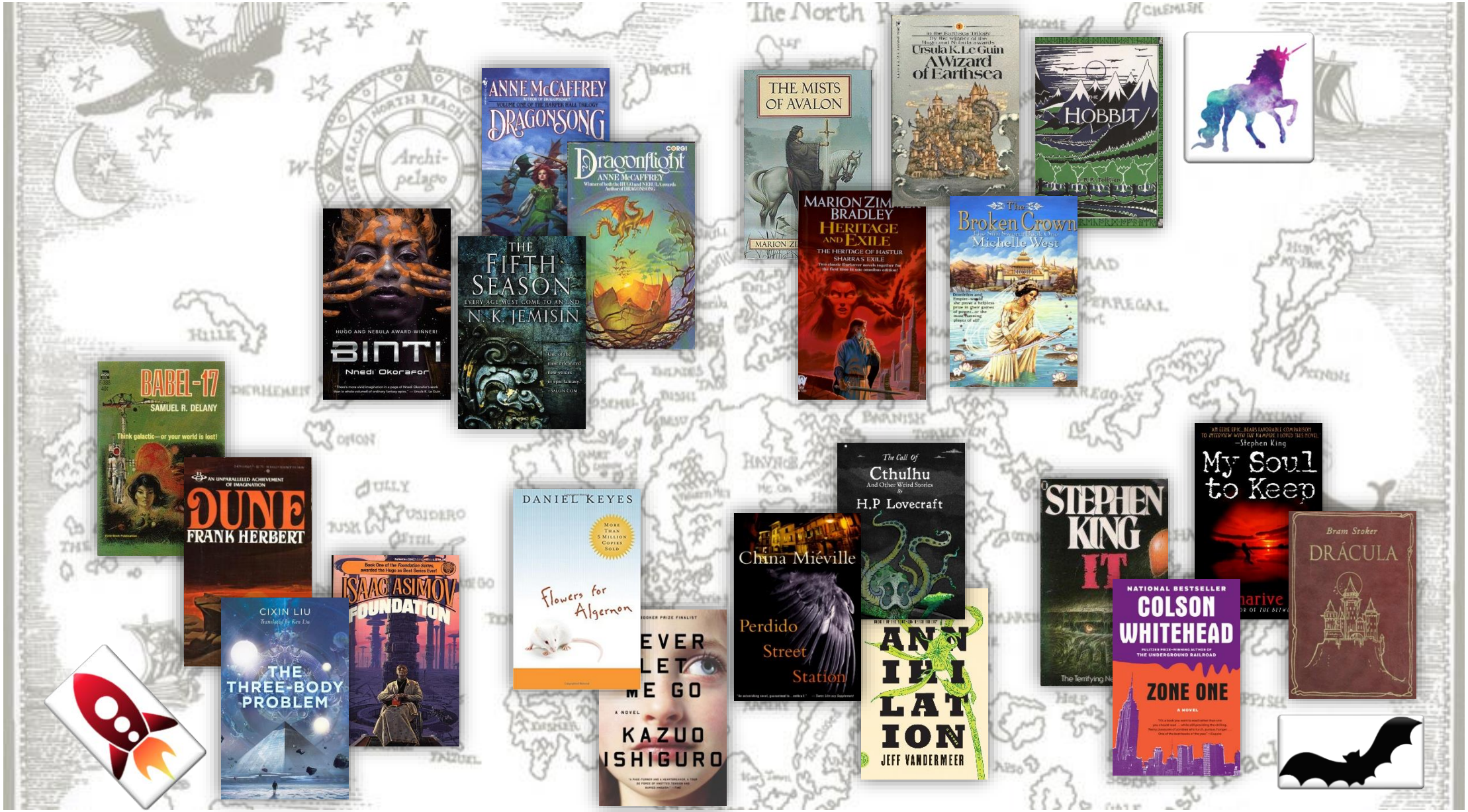
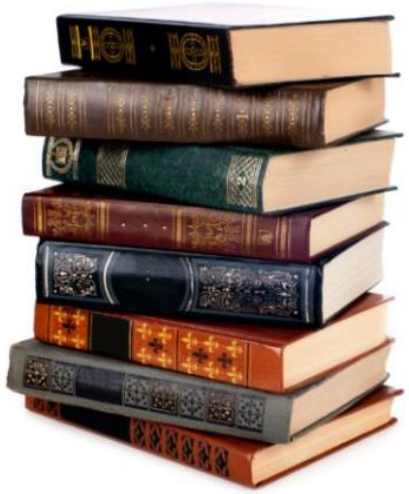
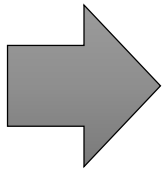
Authorless Topic Models:
Biasing Models *Away* from Known Structure

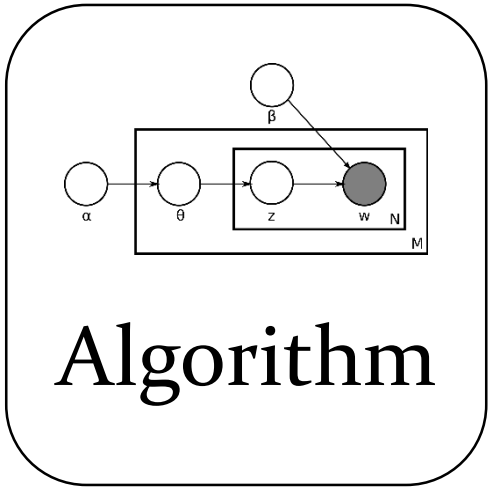


Laure Thompson and David Mimno
Cornell University


ANNE McCAFFREY
DRAGONSONG
Dragonflight
ANNE McCAFFREY
THE MISTS OF AVALON
Ursula K. Le Guin
A Wizard of Earthsea
THE HOBBIT
BINTI
Nnedi Okorafor
THE FIFTH SEASON
N. K. JEMISIN
MARION ZIMMER BRADLEY
HERITAGE AND EXILE
THE HERITAGE OF HASTUR
SHARRA'S EXILE
The Broken Crown
Michelle West
BABEL-17
SAMUEL R. DELANY
DUNE
FRANK HERBERT
ISAAC ASIMOV
FOUNDATION
CIXIN LIU
THE THREE-BODY PROBLEM
DANIEL KEYES
Flowers for Algernon
KAZUO ISHIGURO
China Miéville
Perdido Street Station
The Call Of Cthulhu
And Other Weird Stories
H.P Lovecraft
ANNIHILATION
JEFF VANDERMEER
STEPHEN KING
IT
My Soul to Keep
Stephen King
Bram Stoker
DRÁCULA
NATIONAL BESTSELLER
COLSON WHITEHEAD
ZONE ONE



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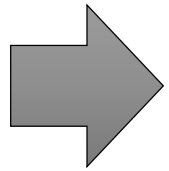

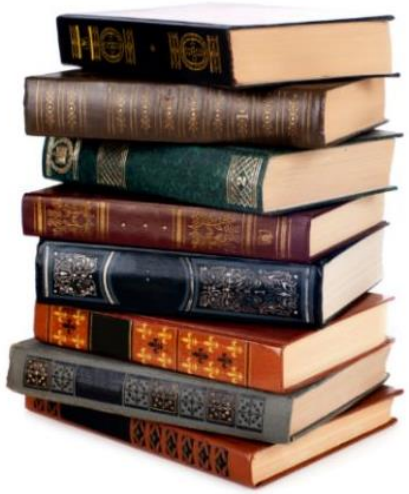

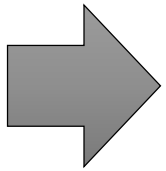

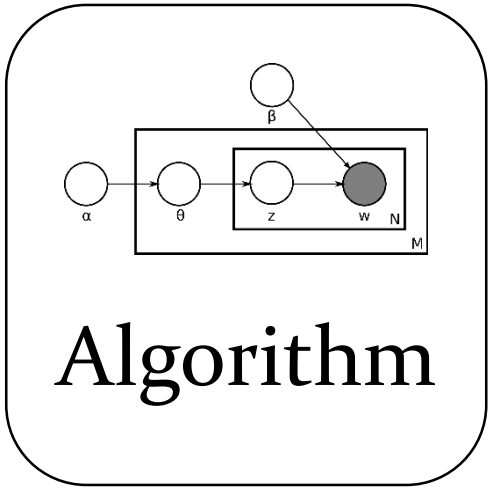
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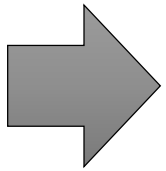

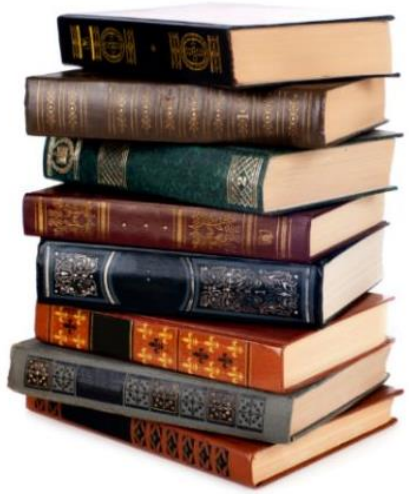

Topic Models & Literature

Gont, the island famous for wizards...
Ged, the young wizard of the isles...

In his day Ged, called the Sparrowhawk, became both dragonlord and Archmage. His story is told in many songs, but this is the haunting tale of a proud, lonely boy in the time before his fame.

It is a tale of wizards, dragons and shadows played out in Earthsea, a world of numberless islands and vast oceans where mages, looking for adventure, wandered, working magic...

The Earthsea Trilogy

This trio of novels, a recognized classic of high fantasy, has been compared with Tolkien's **Lord of the Rings** and C. S. Lewis's Narnia stories. The present volume, **A Wizard of Earthsea,** is the first in the series and is followed by **The Tombs of Atuan** and **The Farthest Shore.**

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A Wizard of Earthsea

Ursula K. Le Guin

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1

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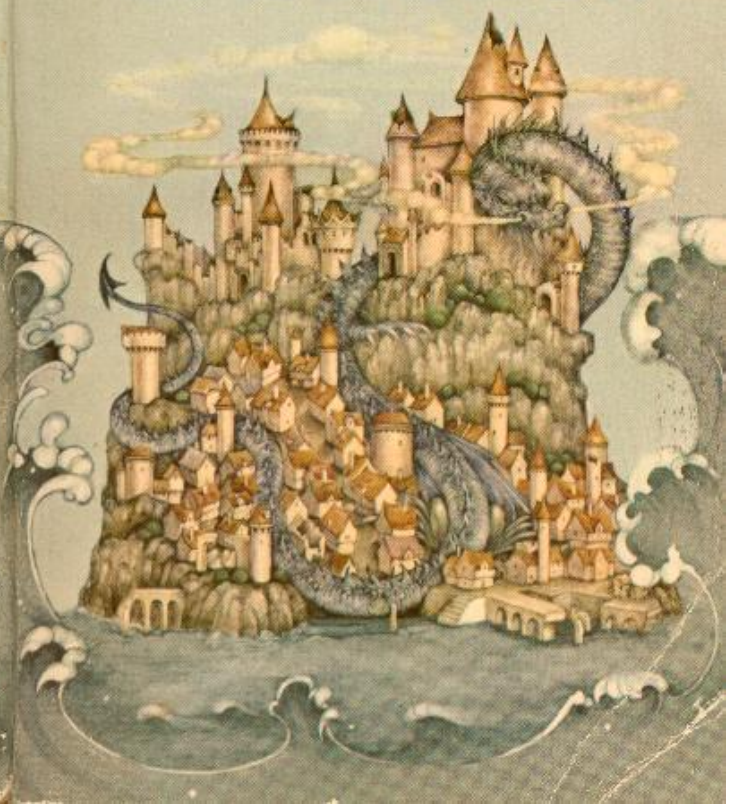
Ursula K. Le Guin

A Wizard of Earthsea



ridge to the stone and snow of the heights.

The name he bore as a child, Duny, was given him by his mother, and that and his life were all she could give him, for she died before he was a year old. His father, the bronze-smith of the village, was a grim unspeaking man, and since Duny's six brothers were older than he by many years and went one by one from home to farm the land or sail the sea or work as smith in other towns of the Northward Vale, there was no one to bring the child up in tenderness. He grew wild, a thriving weed, a tall, quick boy, loud and proud and full of temper. With the few other children of the village he herded goats on the steep meadows above the river-springs; and when he was strong enough to push and pull the long bellows-sleeves, his father made him work as smith's boy, at a high cost in blows and whippings. There was not much work to be got out of Duny. He was always off and away; roaming deep in the forest, swimming in the pools of the River Ar that like all Gontish rivers runs very quick and cold, or climbing by cliff and scarp to the heights above the forest, from which he could see the sea, that broad northern ocean where, past Perregal, no islands are.

A sister of his dead mother lived in the village. She had done what was needful for him as a baby, but she had business of her own and once he could look after himself at all she paid no more heed to him. But one day when the boy was seven years old, untaught and knowing nothing of the arts and powers that are in the world, he heard his aunt crying out words to a goat which had jumped up onto the thatch of a hut and would not come down: but it came jumping when she cried a certain rhyme to it. Next day herding the longhaired goats on the meadows of High Fall, Duny shouted to them the words he had heard, not knowing their use or meaning or what kind of words they were:

1 Warriors in the Mist

The island of Gont, a single mountain that lifts its peak a mile above the storm-racked Northeast Sea, is a land famous for wizards. From the towns in its high valleys and the ports on its dark narrow bays many a Gontishman has gone forth to serve the Lords of the Archipelago in their cities as wizard or mage, or, looking for adventure, to wander working magic from isle to isle of all Earthsea. Of these some say the greatest, and surely the greatest voyager, was the man called Sparrowhawk, who in his day became both dragonlord and Archmage. His life is told of in the *Deed of Ged* and in many songs, but this is a tale of the time before his fame, before the songs were made.

He was born in a lonely village called Ten Alders, high on the mountain at the head of the Northward Vale. Below the village the pastures and plowlands of the Vale slope downward level below level towards the sea, and other towns lie on the bends of the River Ar; above the village only forest rises ridge behind

Noth hierth malk man
hiolk han merth hanl

He yelled the rhyme aloud, and the goats came to him. They came very quickly, all of them together, not making any sound. They looked at him out of the dark slot in their yellow eyes.

Duny laughed and shouted it out again, the rhyme that gave him power over the goats. They came closer, crowding and pushing round him. All at once he felt afraid of their thick, ridged horns and their strange eyes and their strange silence. He tried to get free of them and to run away. The goats ran with him keeping in a knot around him, and so they came charging down into the village at last, all the goats going huddled together as if a rope were pulled tight round them, and the boy in the midst of them weeping and bellowing. Villagers ran from their houses to swear at the goats and laugh at the boy. Among them came the boy's aunt, who did not laugh. She said a word to the goats, and the beasts began to bleat and browse and wander, freed from the spell.

"Come with me," she said to Duny.

She took him into her hut where she lived alone. She let no child enter there usually, and the children feared the place. It was low and dusky, windowless, fragrant with herbs that hung drying from the cross-pole of the roof, mint and moly and thyme, yarrow and rushwash and paramal, kingsfoil, clovenfoot, tansy and bay. There his aunt sat crosslegged by the firepit, and looking sidelong at the boy through the tangles of her black hair she asked him what he had said to the goats, and if he knew what the rhyme was. When she found that he knew nothing, and yet had spellbound the goats to come to him and follow him, then she saw that he must have in him the makings of power.

As her sister's son he had been nothing to her, but now she looked at him with a new eye. She praised

The island of Gont, a single mountain that lifts its peak a mile above the storm-racked Northeast Sea, is a land famous for wizards. From the towns in its high valleys and the ports on its dark narrow bays many a Gontishman has gone forth to serve the Lords of the Archipelago in their cities as wizard or mage, or, looking for adventure, to wander working magic from isle to isle of all Earthsea.

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Sea/Ocean

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Sea/Ocean

Magic

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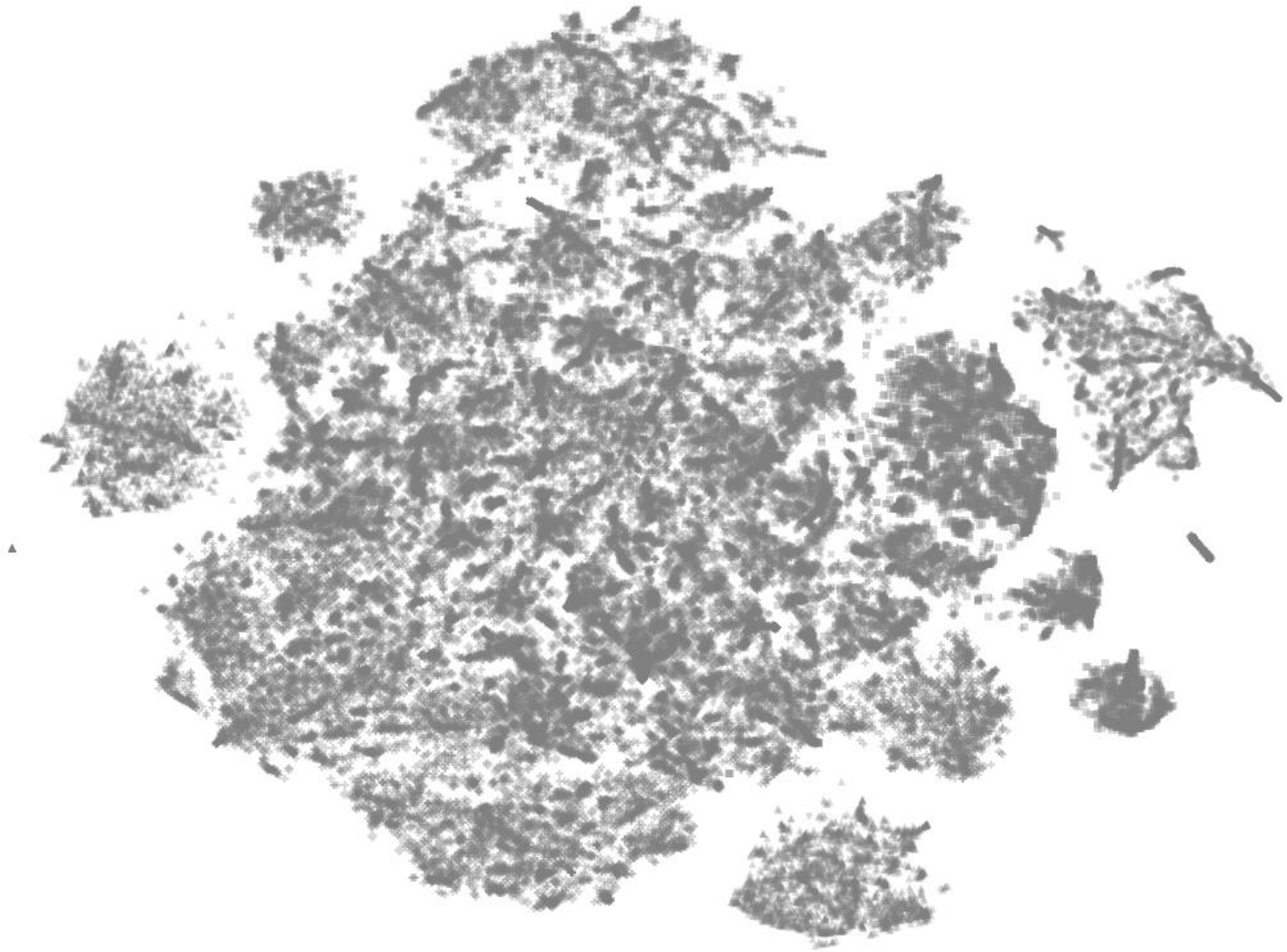
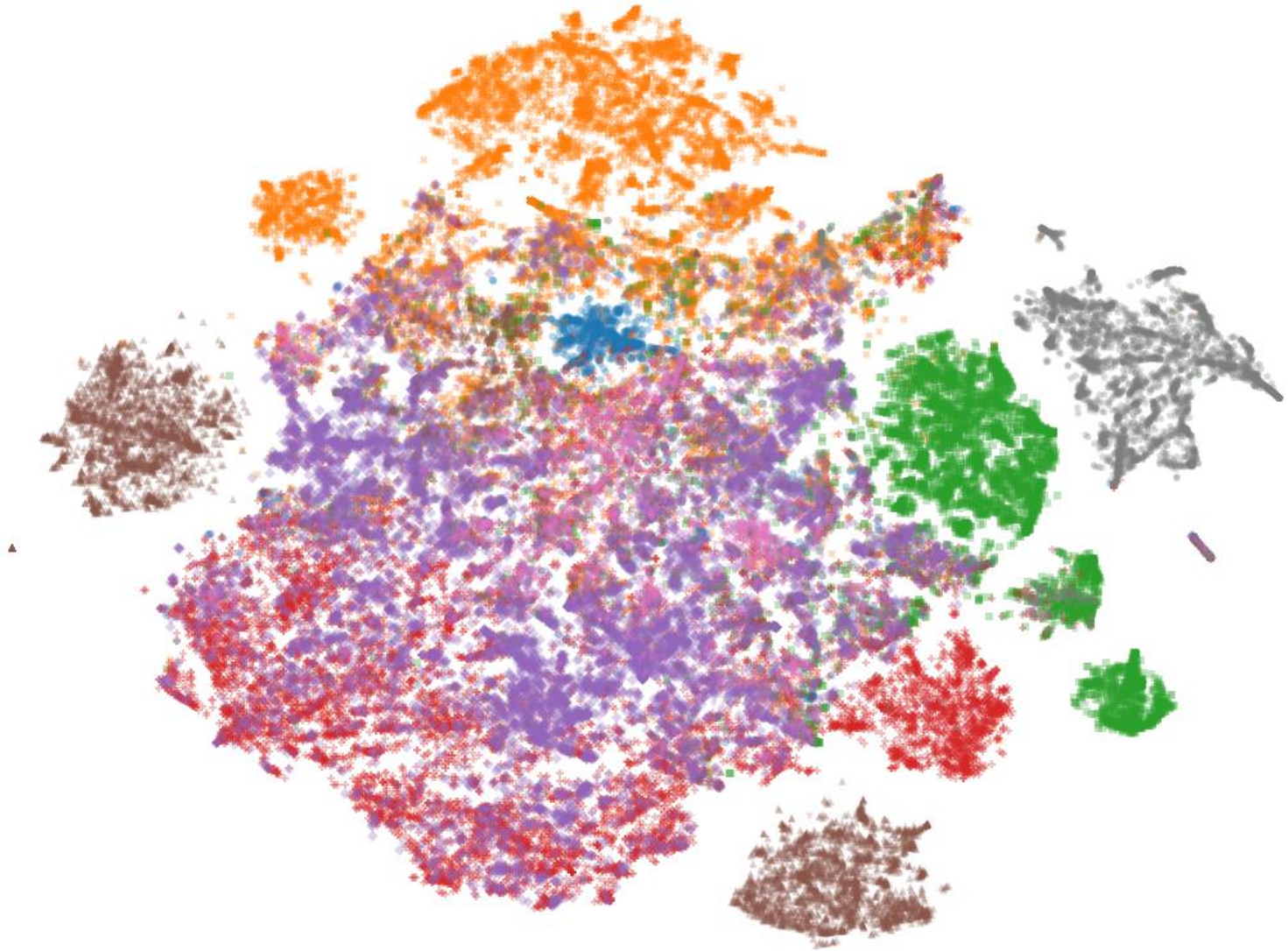
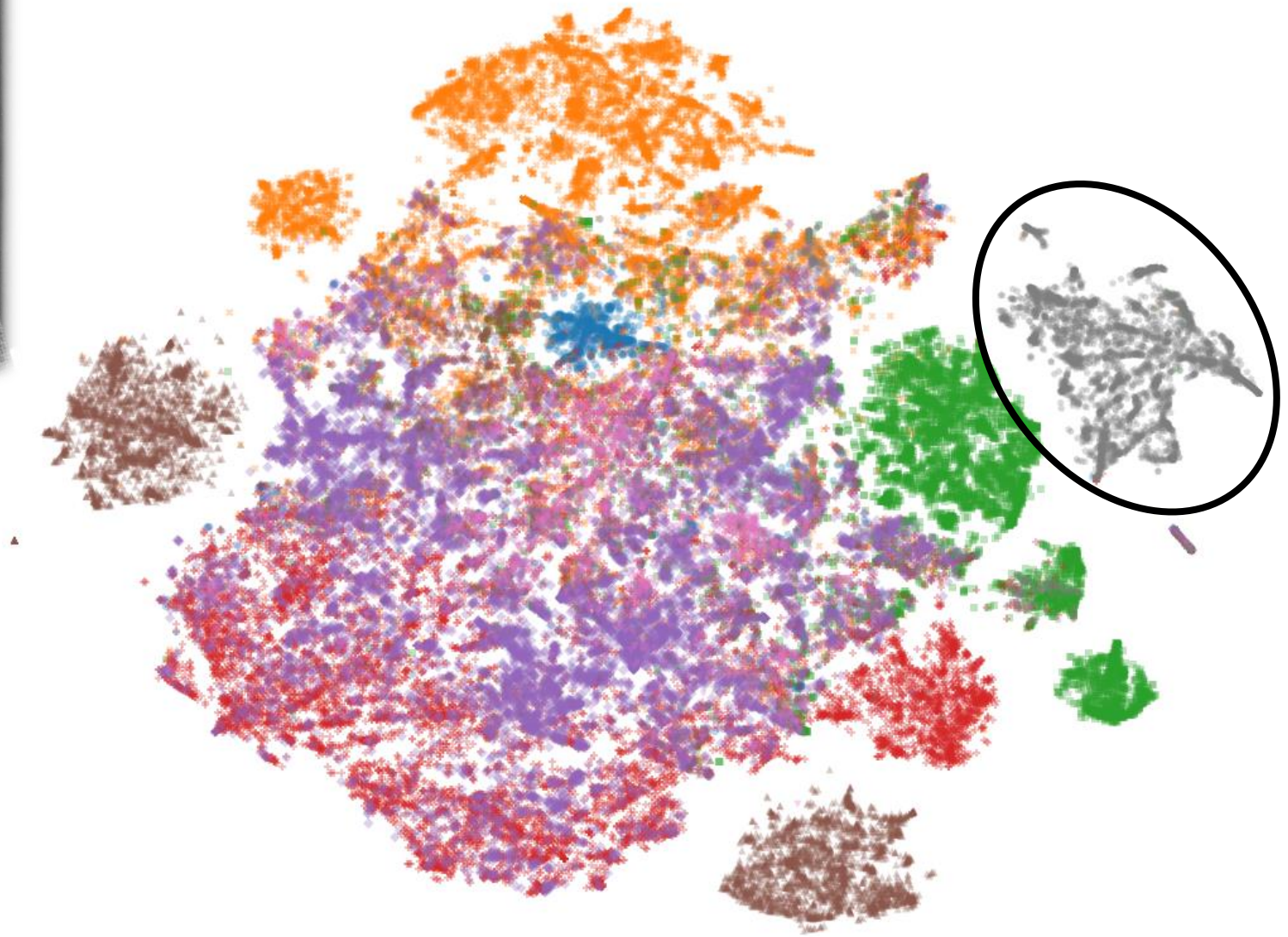
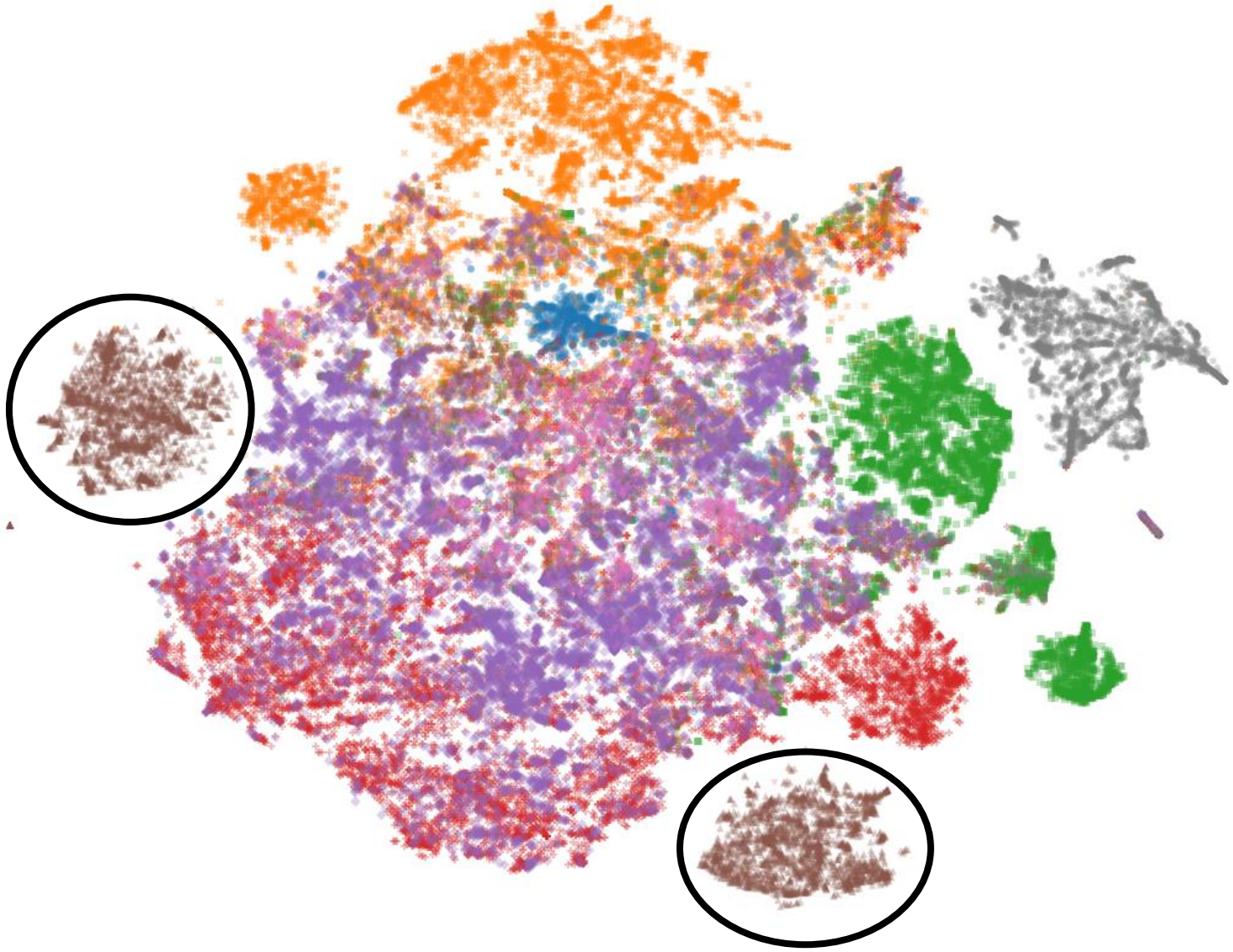
Sea/Ocean: sea water boat island beach ship ocean …

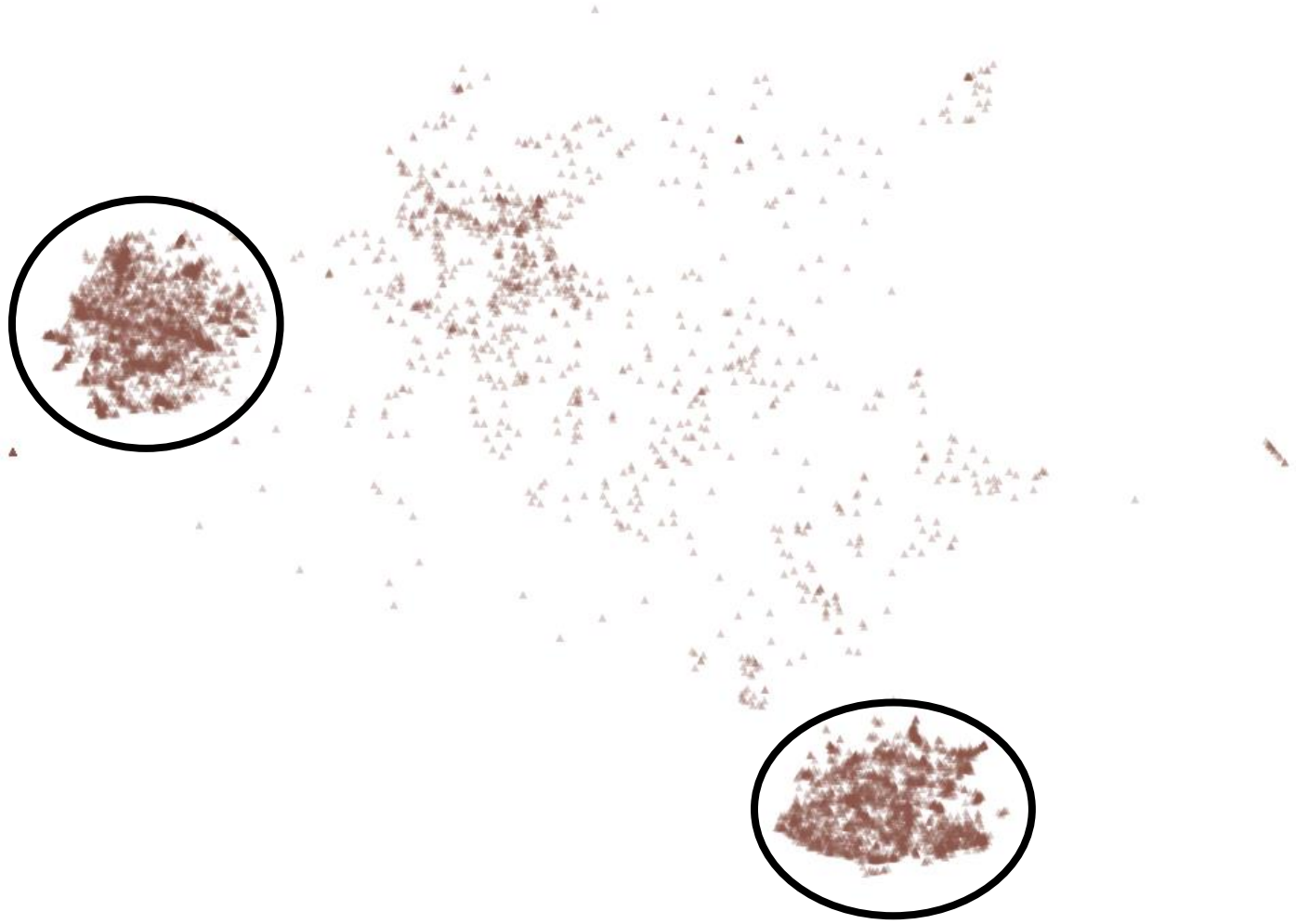
Magic: magic spell witch power demon wizard magician …











What do author-correlated topics look like?

I’ll know it when I see it…

school professor work university years research science students student college study class year history scientific theory young…

I'll know it when I see it...

school professor work university years research science students student college study class year history scientific theory young...

f'lar lessa weyr robinton hold dragon f'nor lord dragons benden rider bronze harper thread mnementh brekke ramoth

…but it’s not always so easy

robot robots andrew human cully susan calvin brain being powell donovan law moldaug sir drake positronic bogert

…but it's not always so easy

robot robots andrew human cully susan calvin brain being powell donovan law moldaug sir drake positronic bogert

old night yes cried town last men rocket god years hands house upon stood wind boy shut

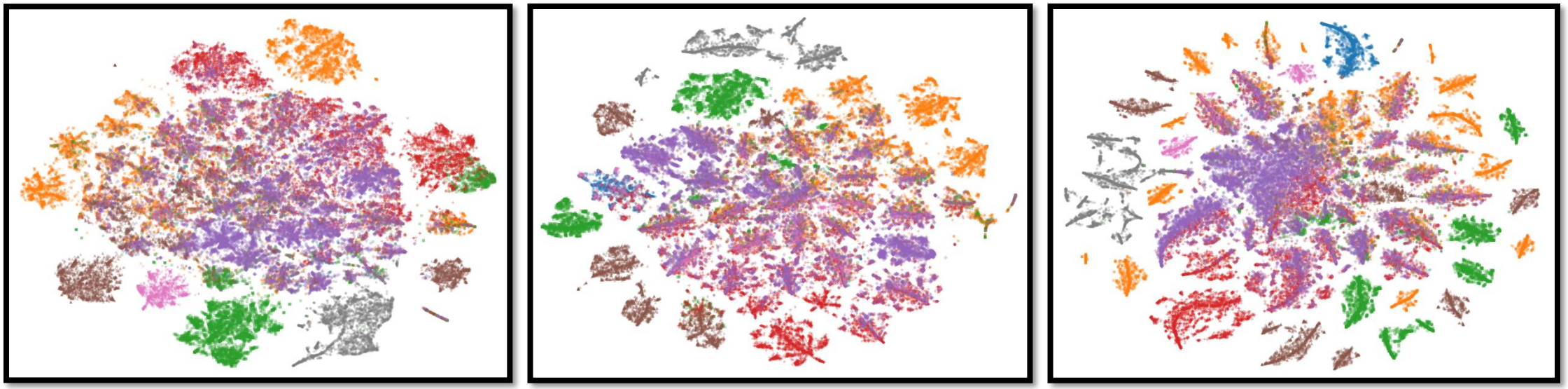
...but it's not always so easy

robot robots andrew human cully susan calvin brain being powell donovan law moldaug sir drake positronic bogert

old night yes cried town last men rocket god years hands house upon stood wind boy shut

sand pirx mars desert roger dust rock bass dunes crater martian jeffries kirov dune sweeney eileen rocks canyon lava camp

Adding More Topics Doesn't Help!



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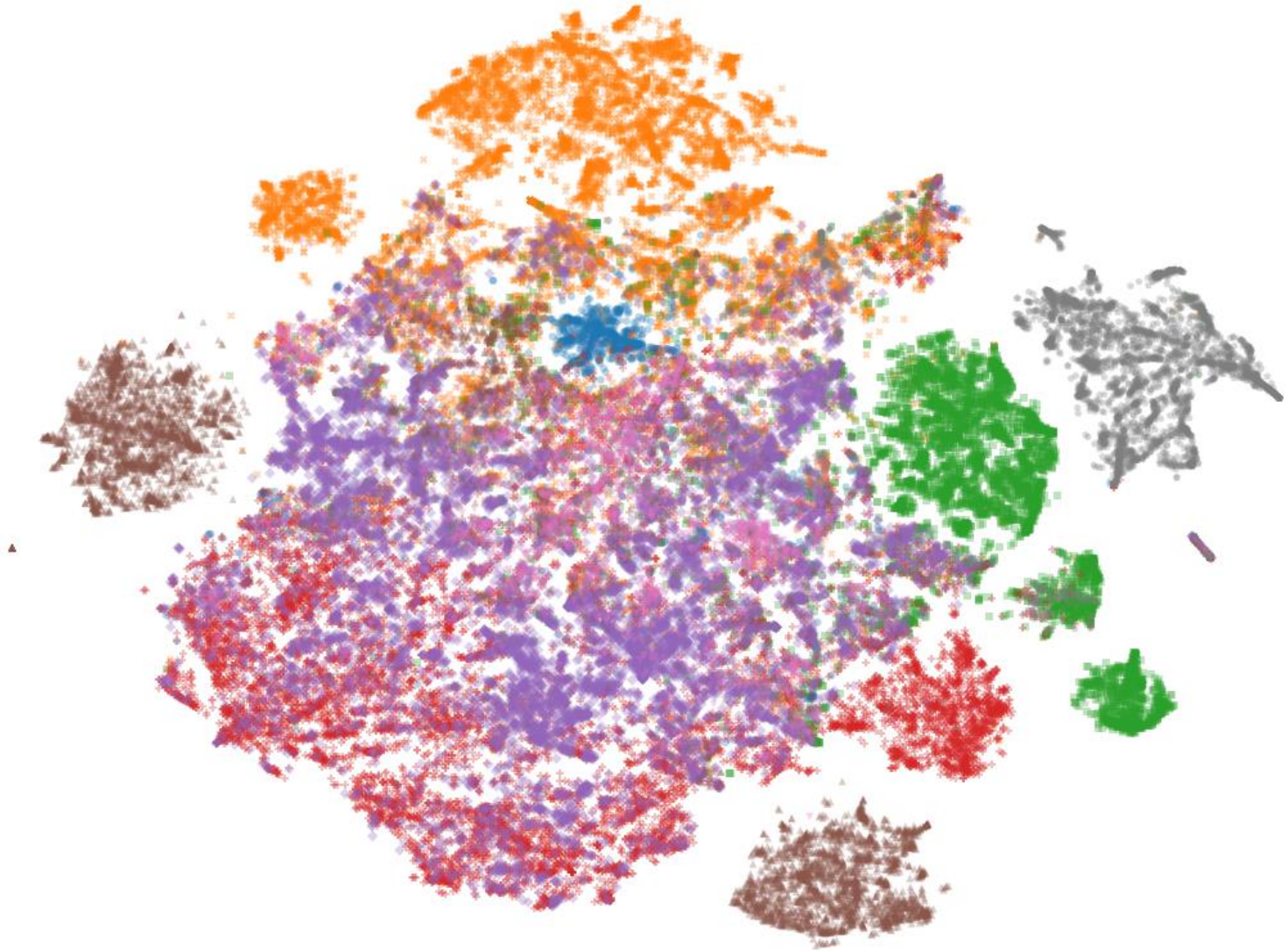

Preprocessing

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~~Preprocessing~~
Purposeful Data Modification

Author-Word Correlation: “robot”

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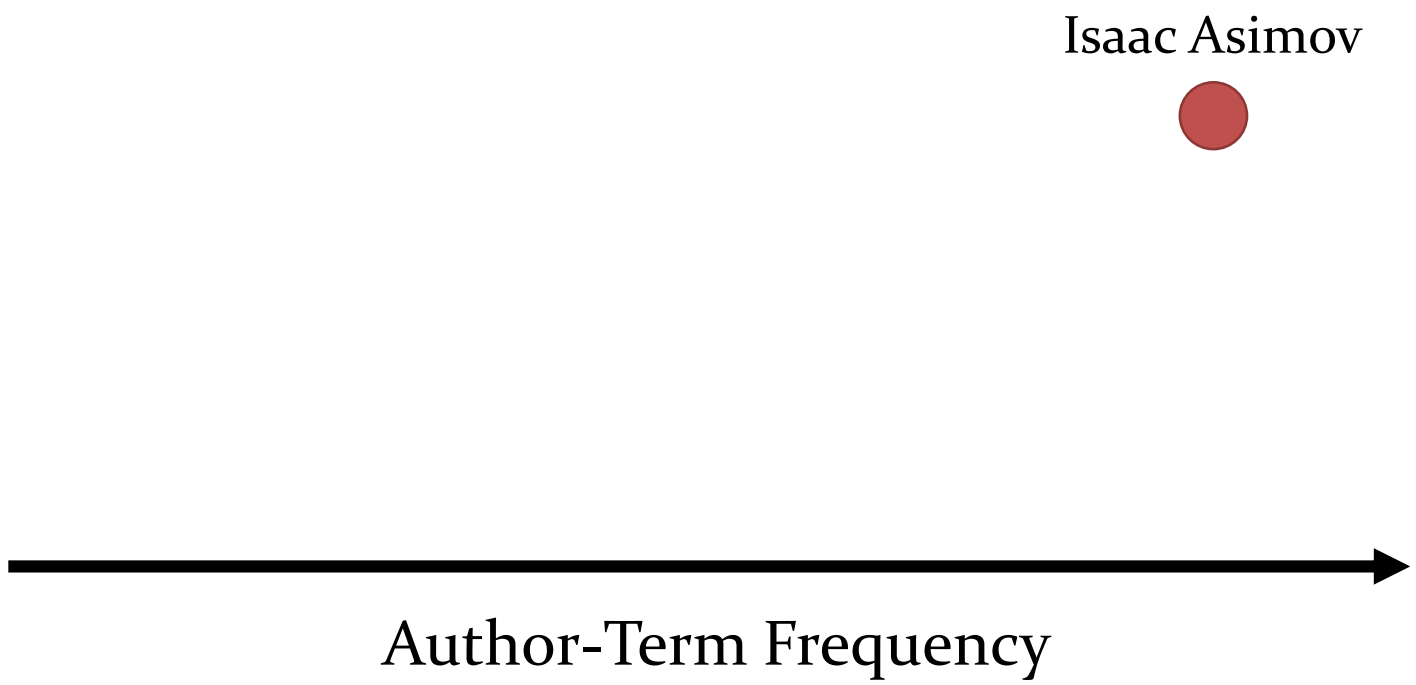

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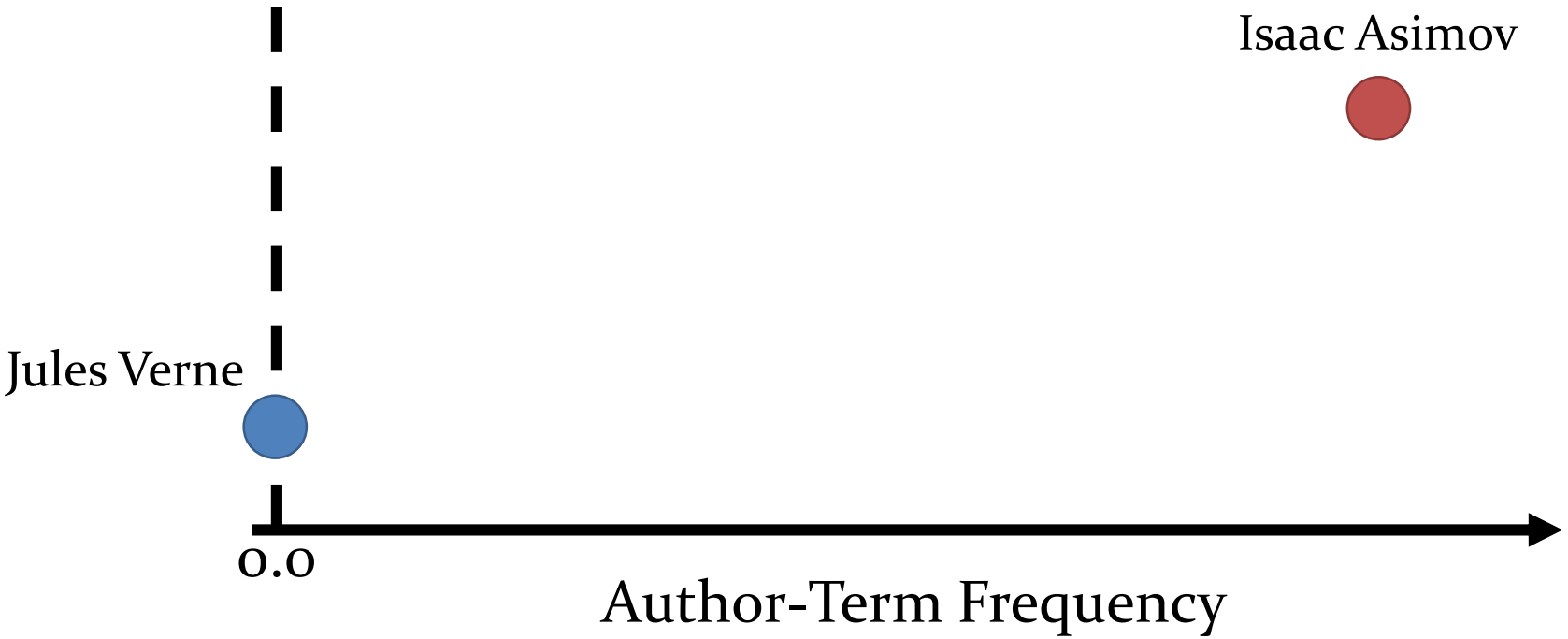

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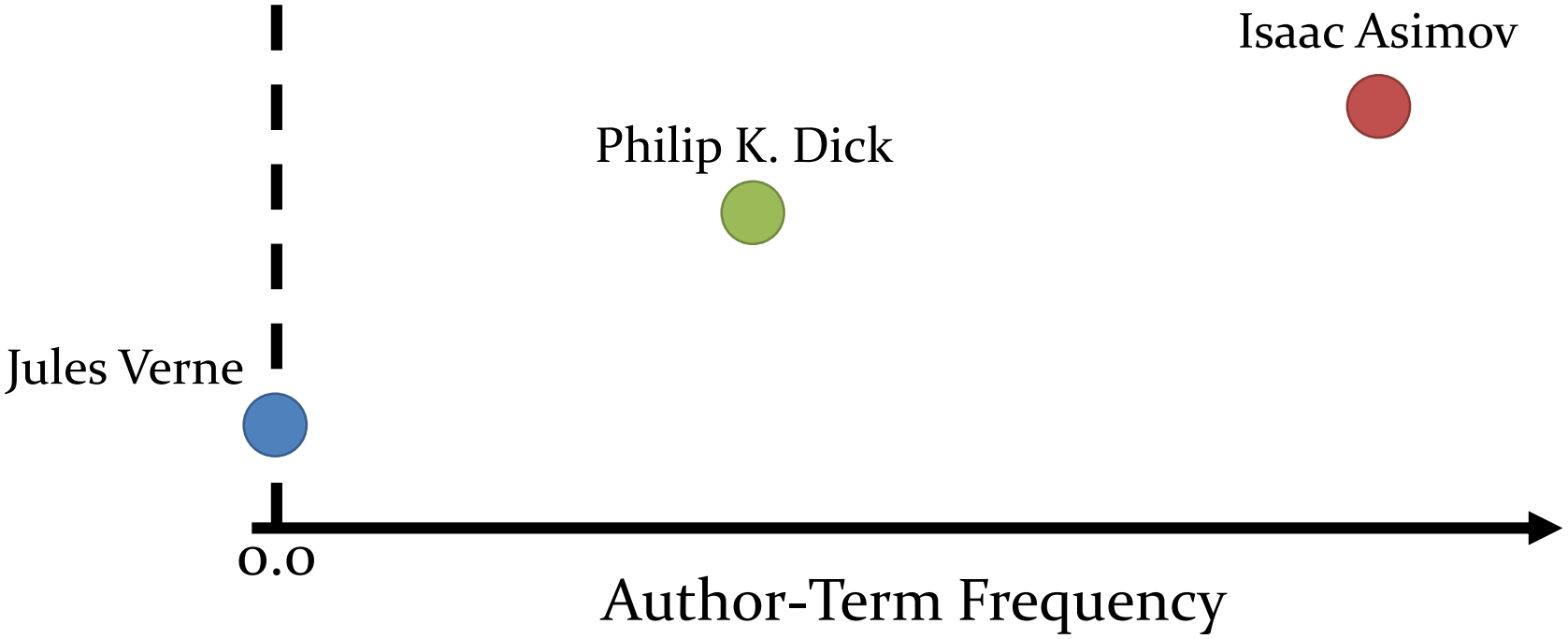

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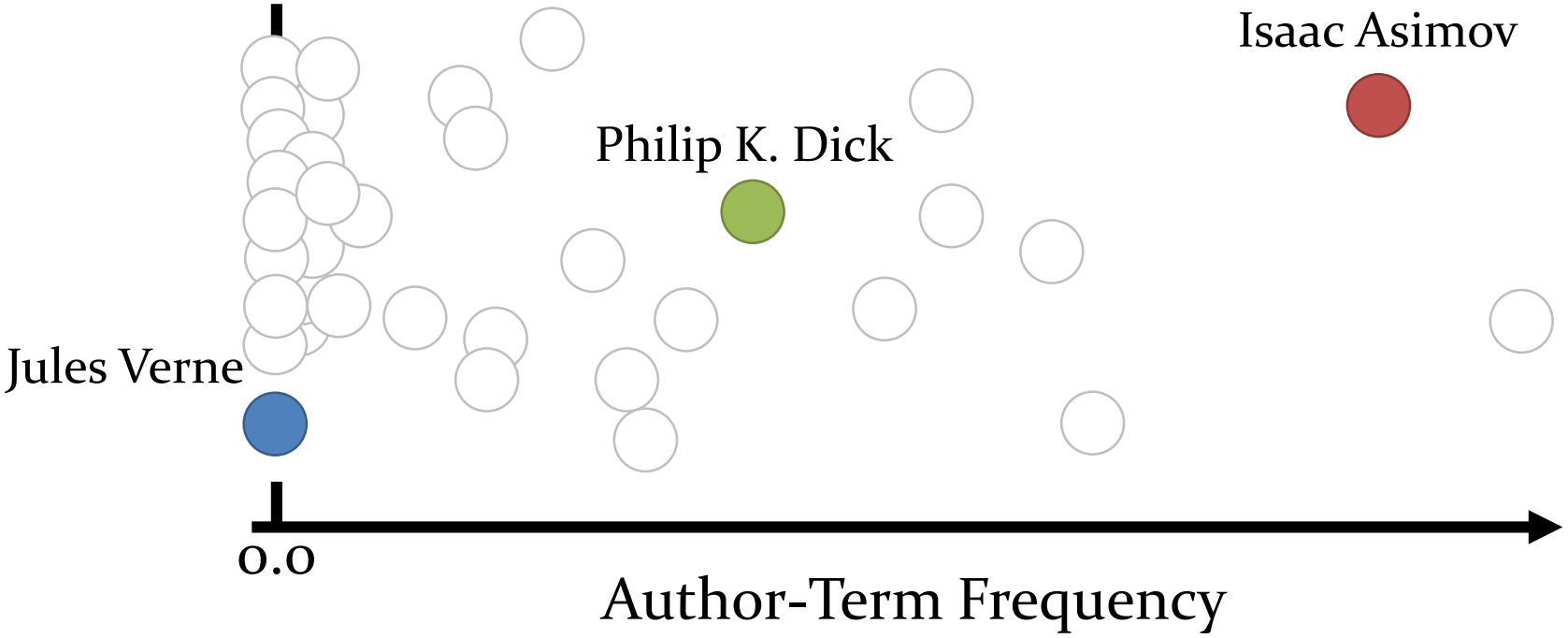

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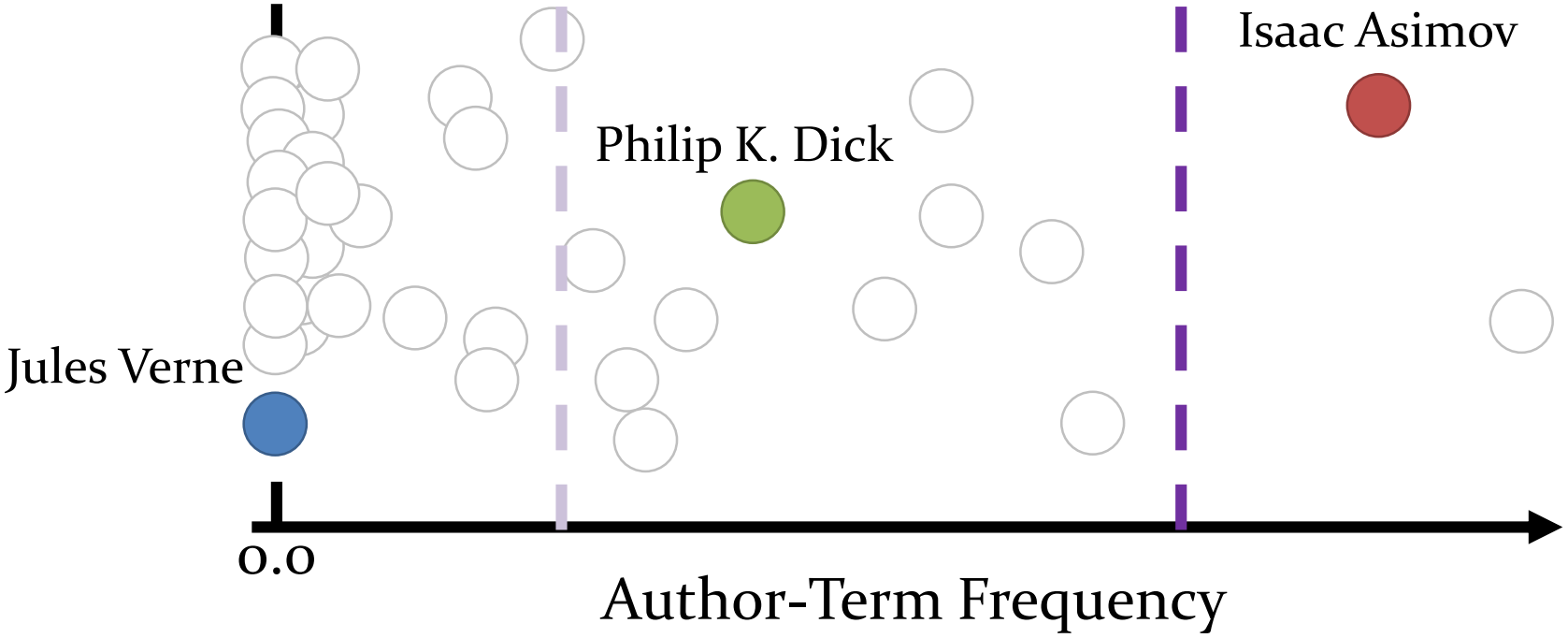
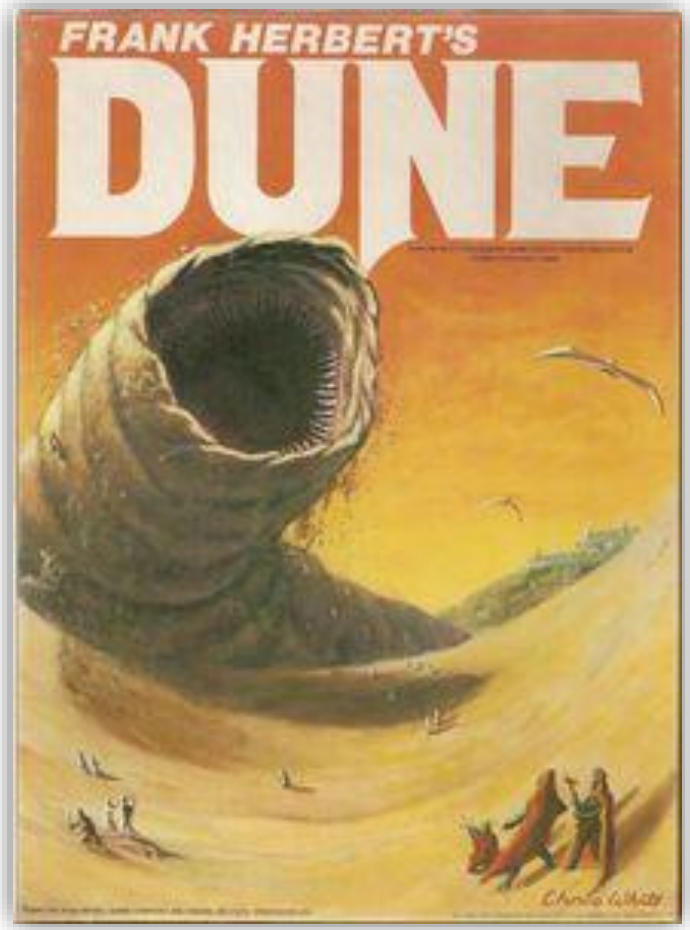
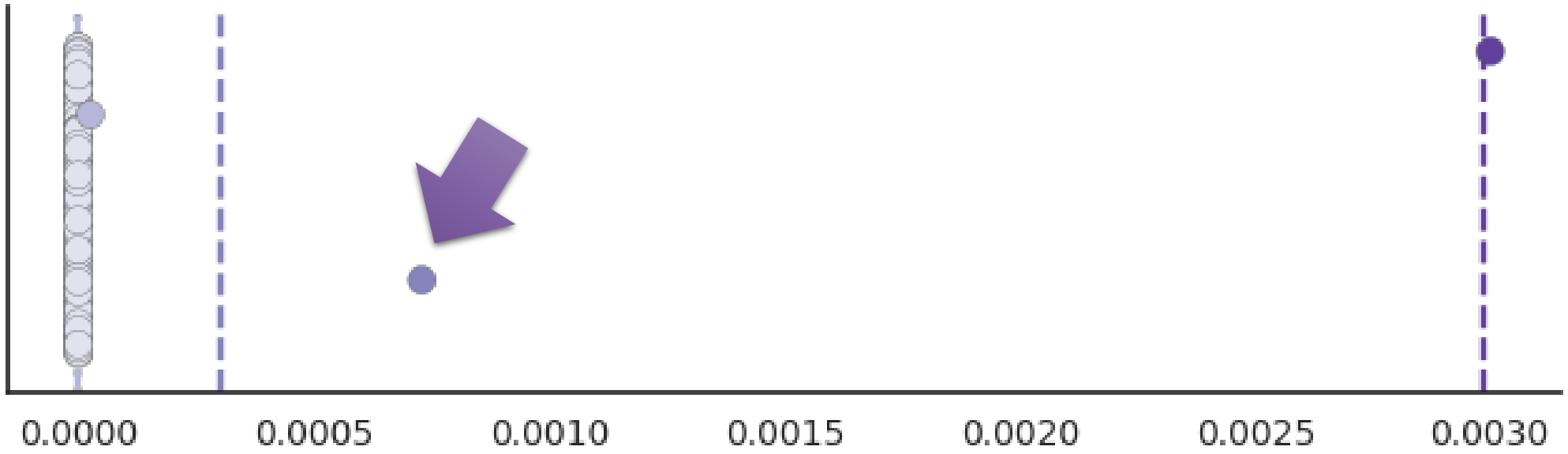
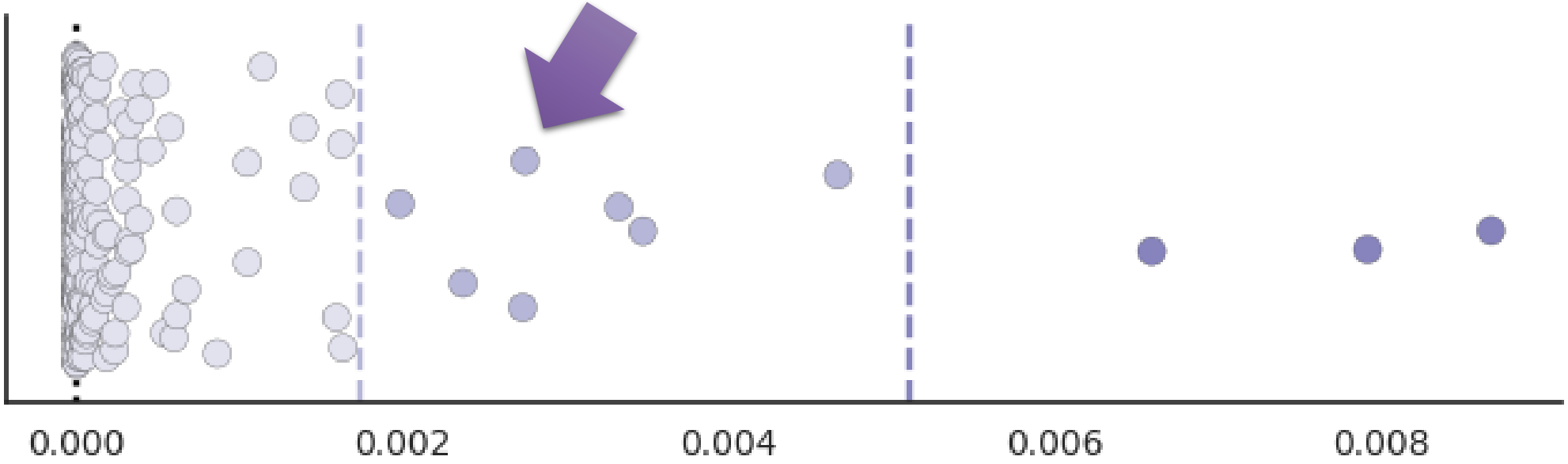



FRANK HERBERT'S
DUNE

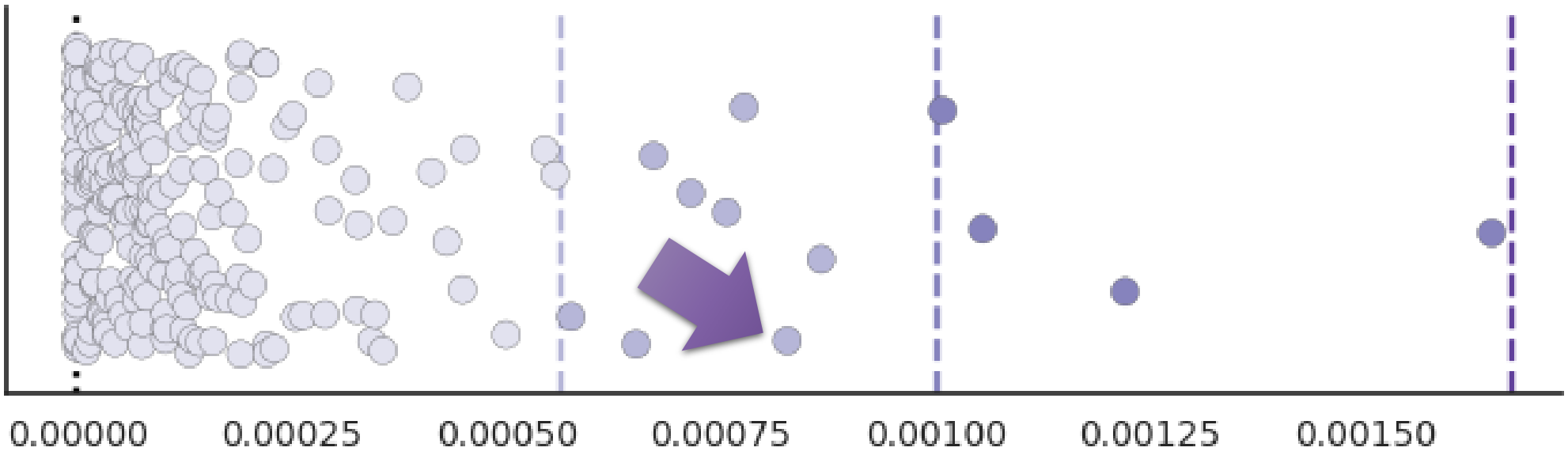
Frank Herbert: “atreides”



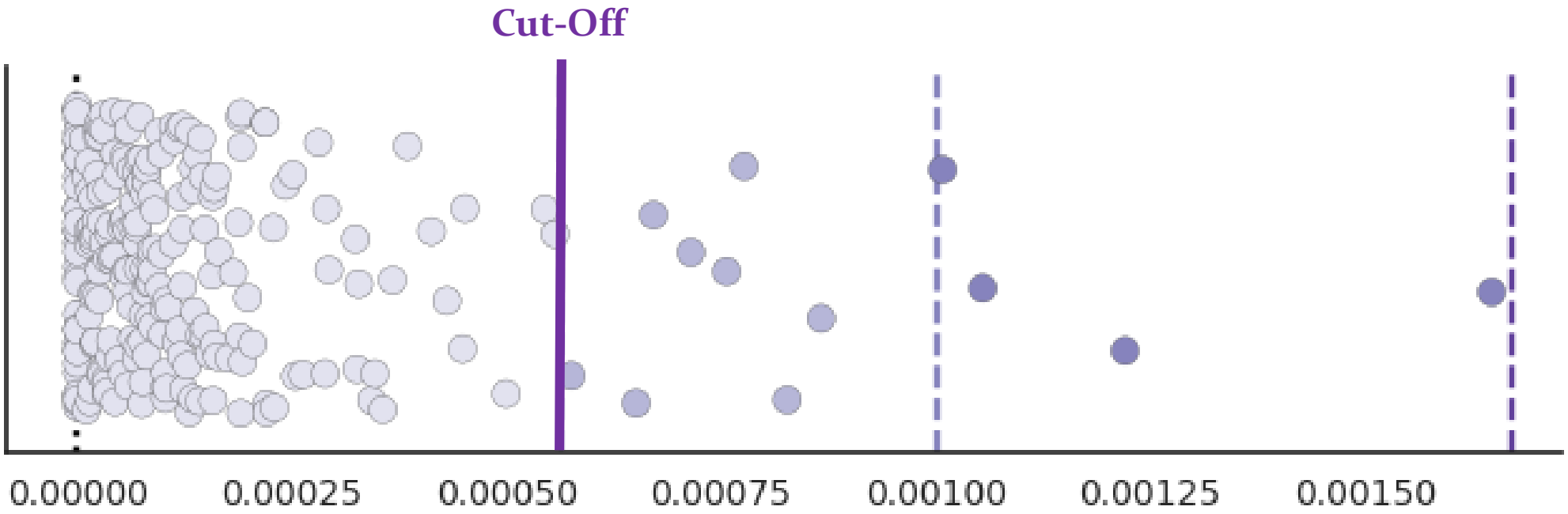
Frank Herbert: “paul”



Frank Herbert: “desert”



Author-Specific Stop Lists?



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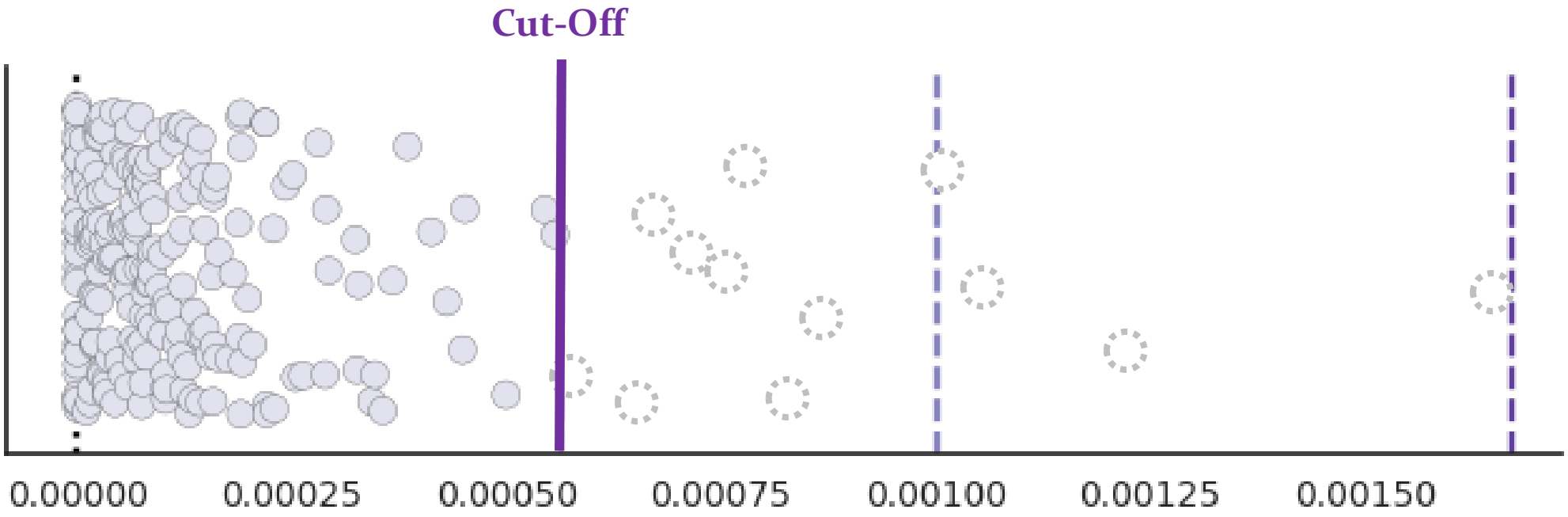
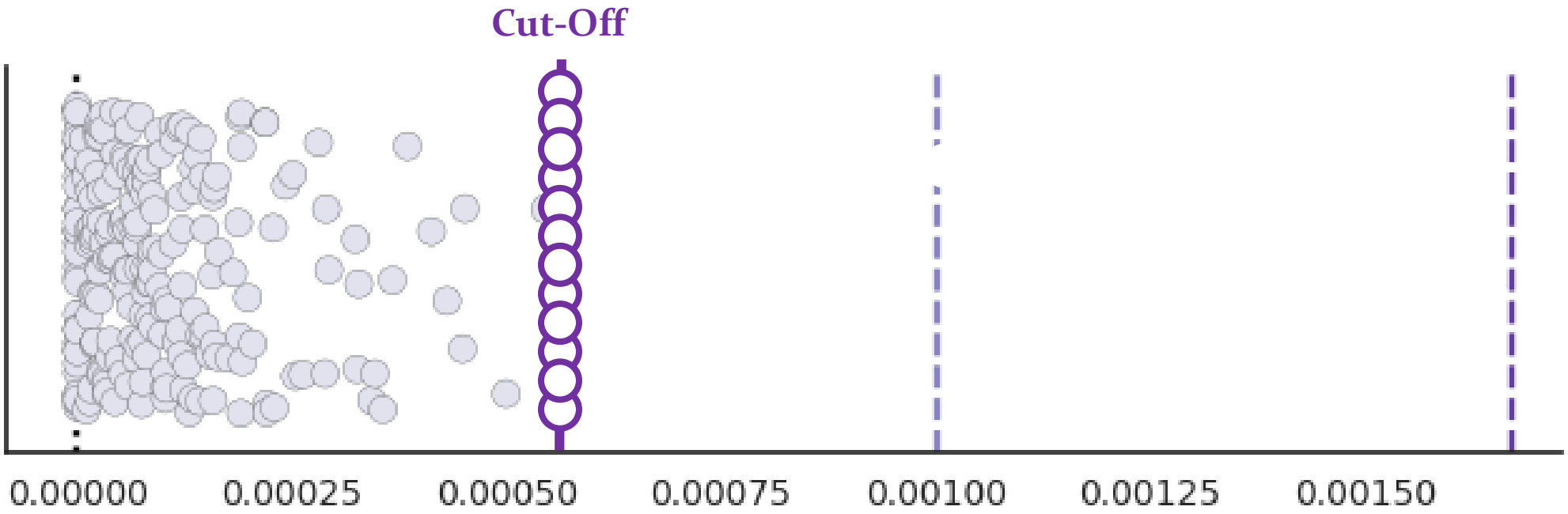


Author-Specific Subsampling



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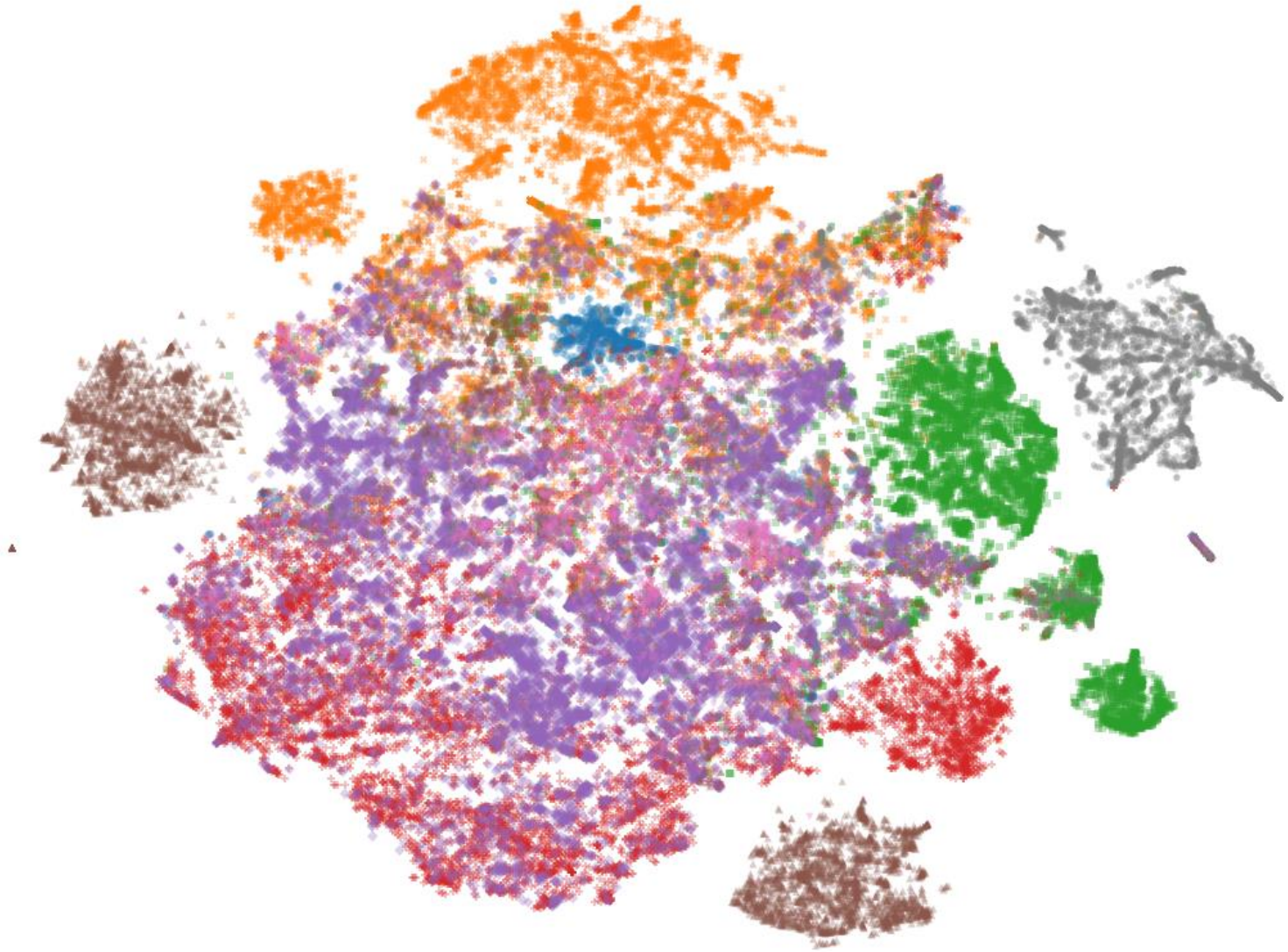

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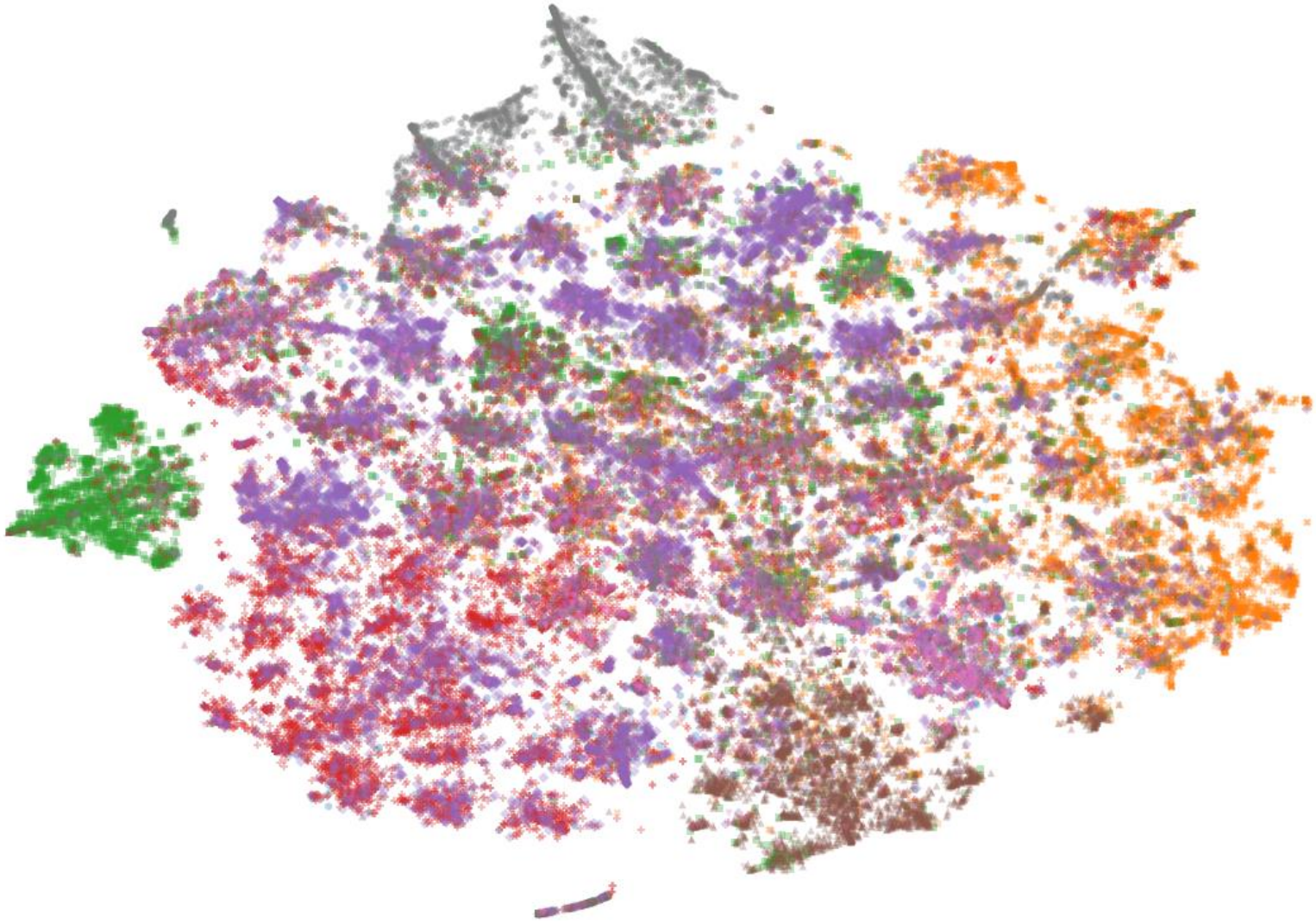


It Works... Mostly

school professor work university years research science students

professor university college student students research school science

jack emma malenfant trip janet michael ing wireman leonard

f'lar lessa weyr robinton hold dragon f'nor lord dragons benden rider

lord hold between master queen star enough turns high good

sand pirx mars desert roger dust rock bass dunes crater martian

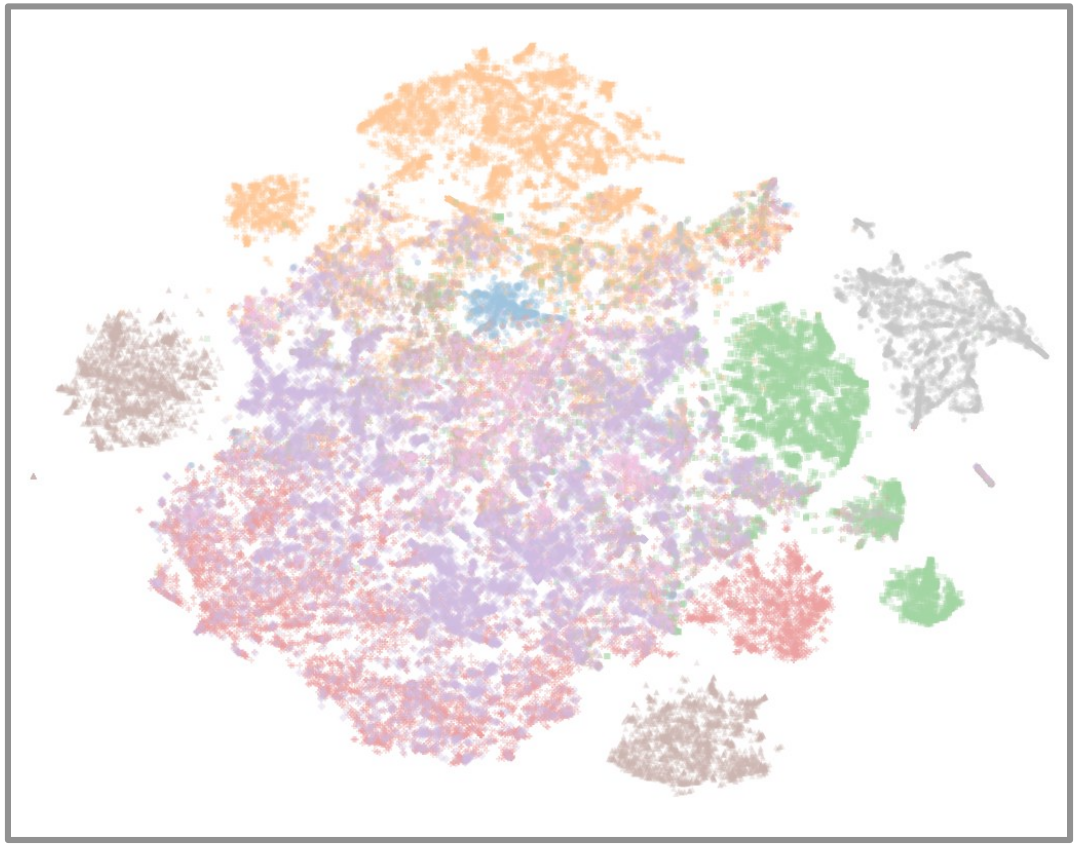
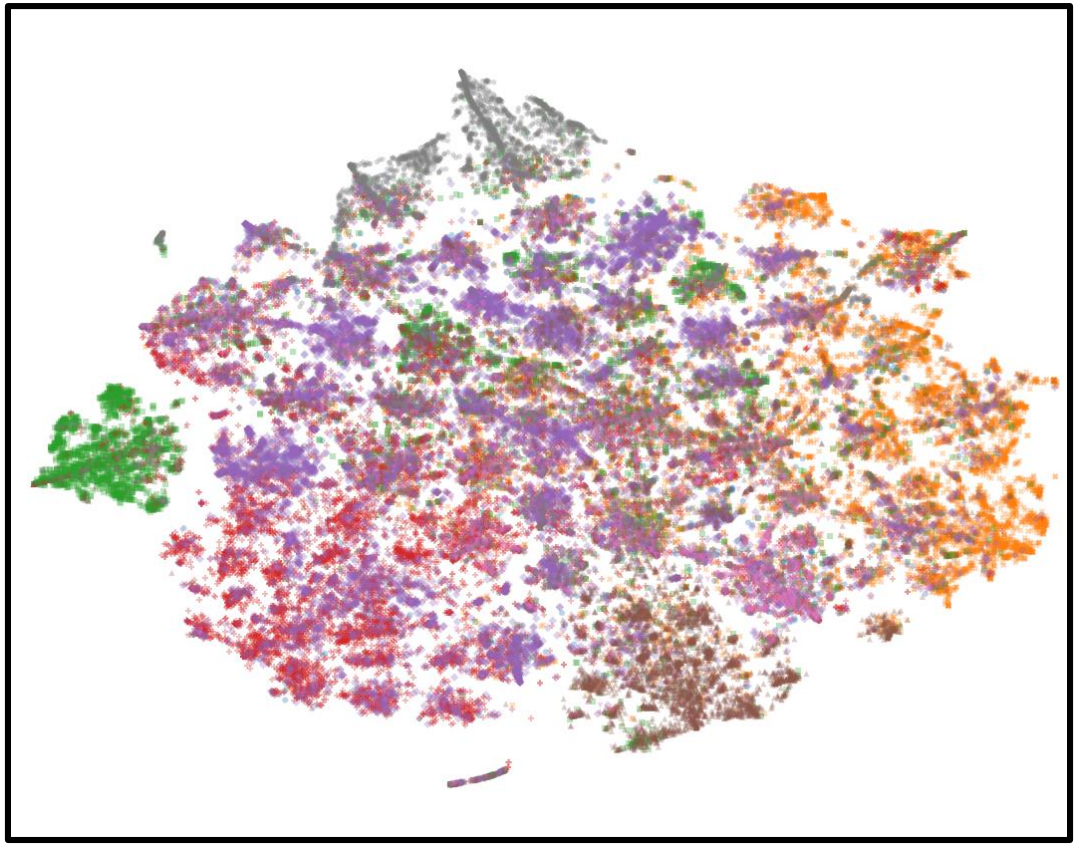
sand desert rock mountains mountain dust land surface plain

New Topic Formation

magic ghost demon evil witch
demons power spell magician ghosts

machine robot machines robots
human mechanical brain men built

charles william james robert john
poet mary henry richard london

Purposeful Data Modification Makes Models Better!

github.com/laurejt/authorless-tms