

Kaona: Deep Searching and Curating Aviation Safety Reporting Systems

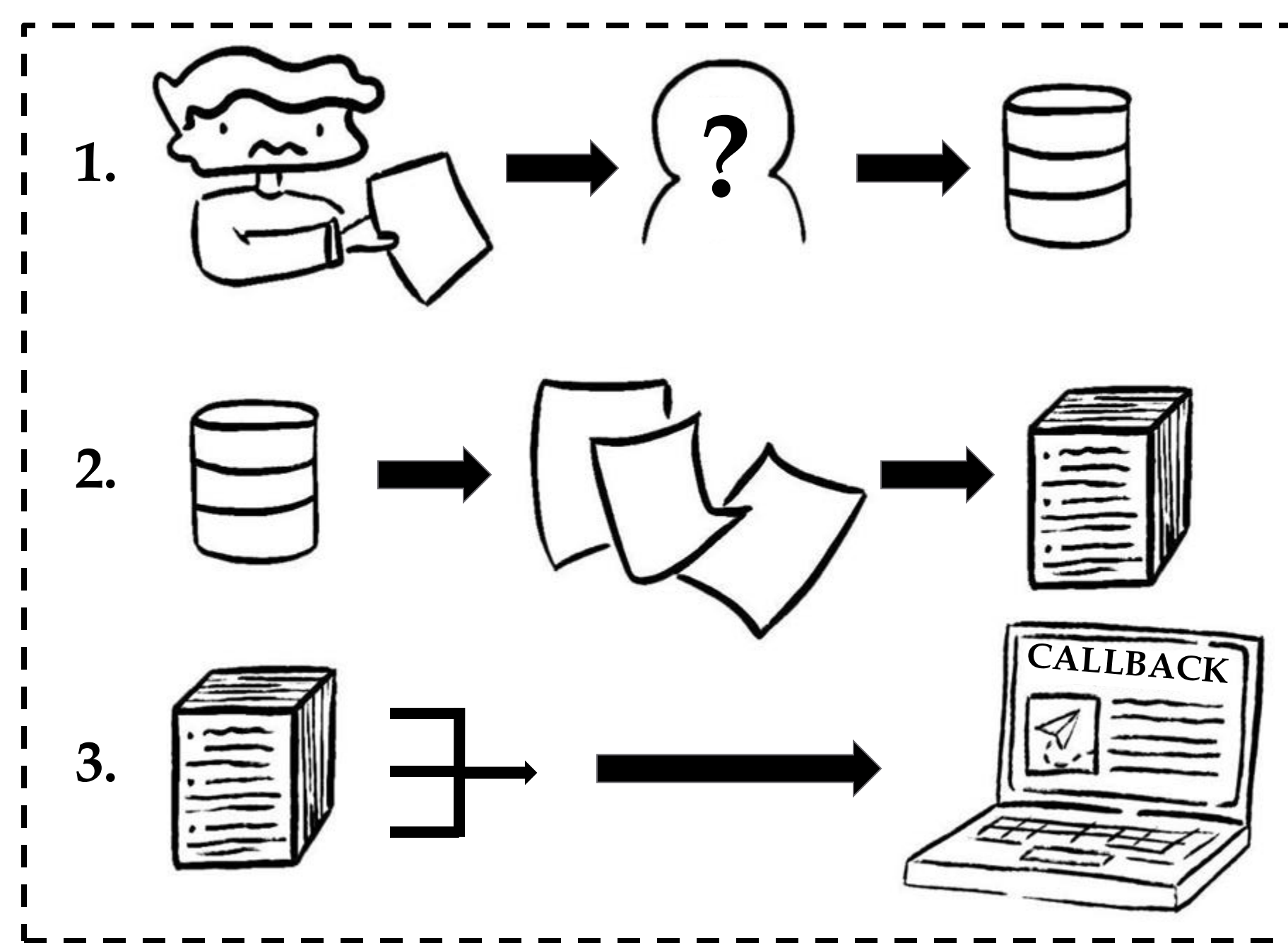
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What is NASA's Aviation Safety Reporting System?



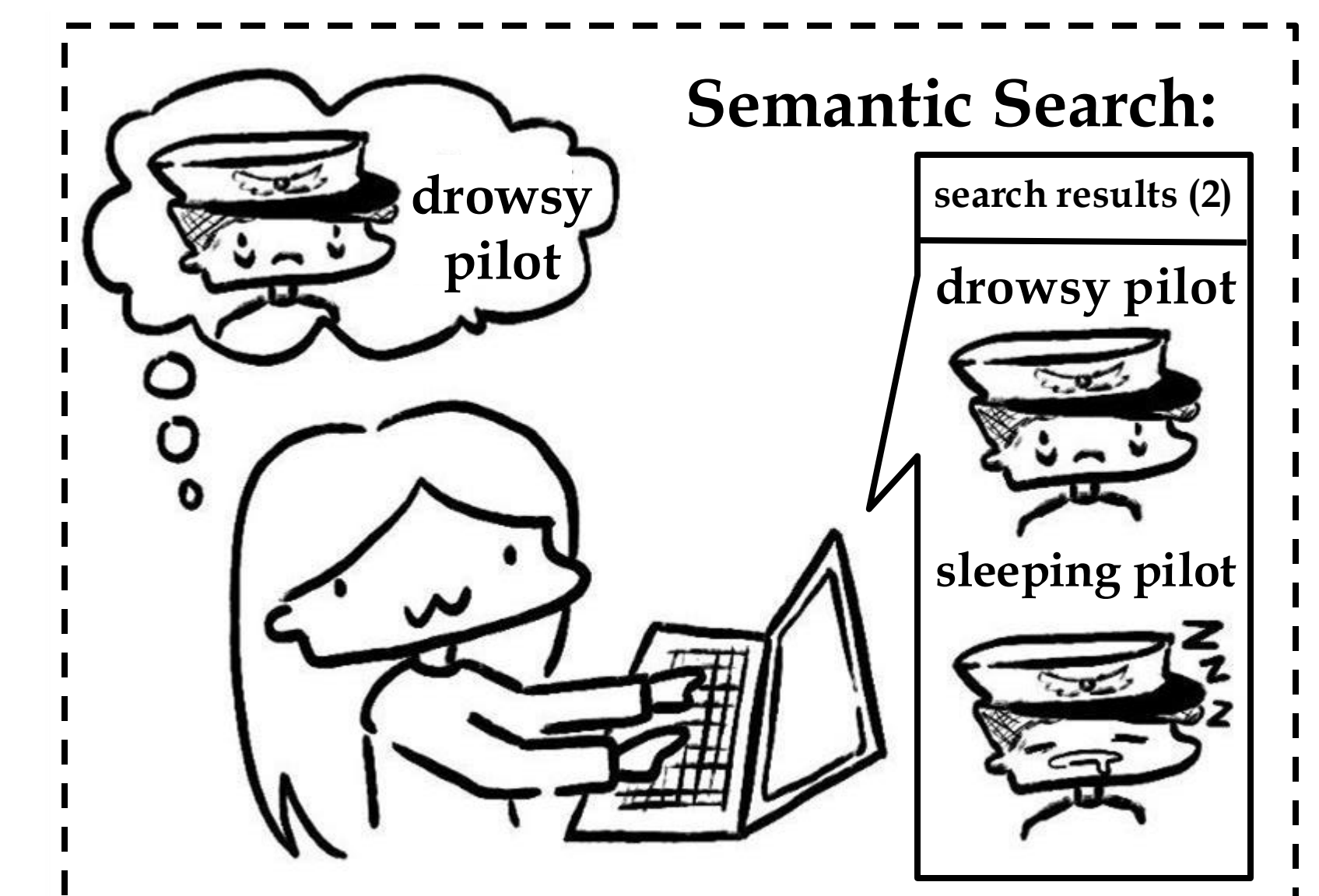
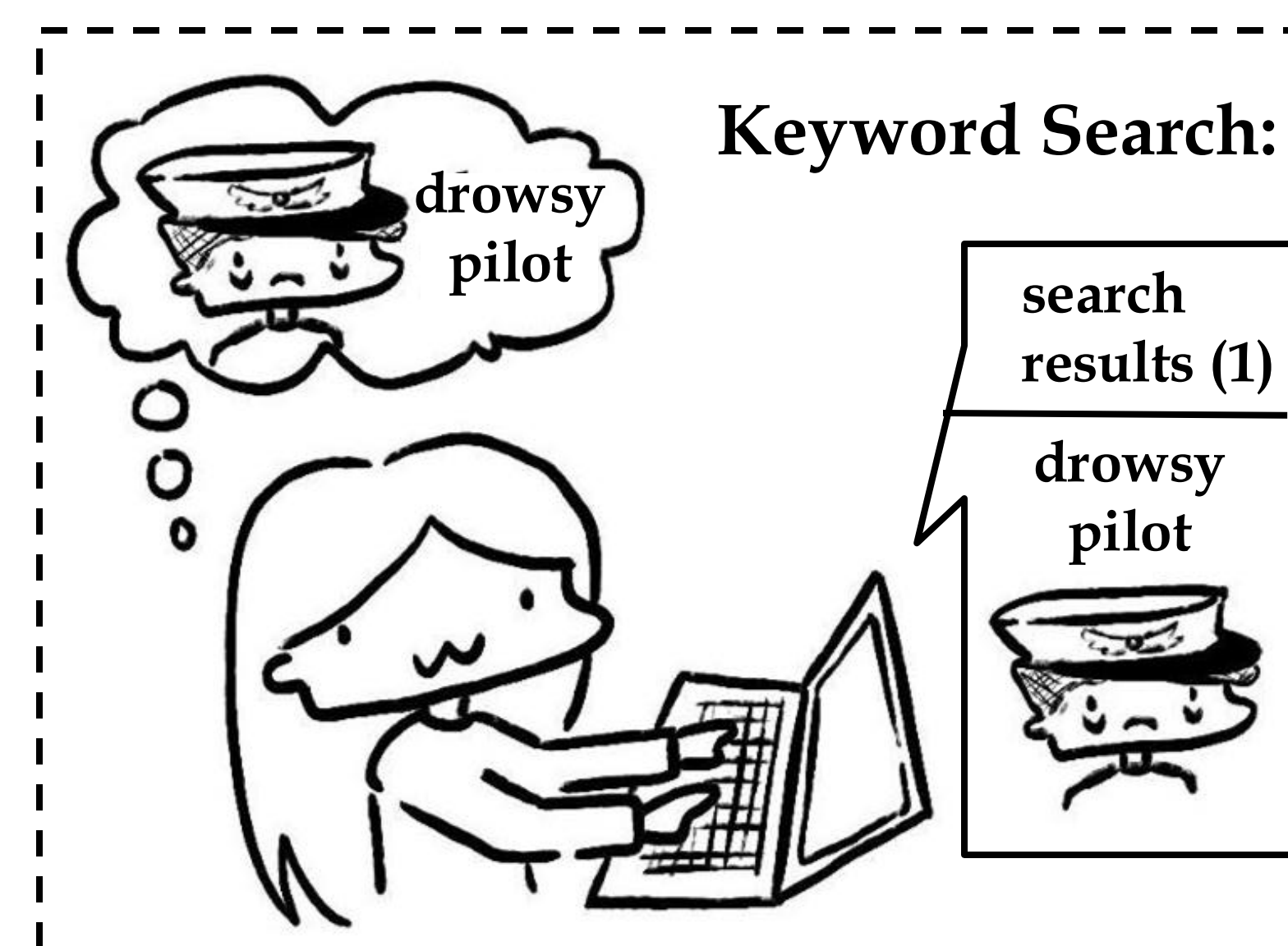
In our scope, the ASRS is a three-part system in which aviation incidents are reported, de-identified, and stored into a database, later searched for data products.



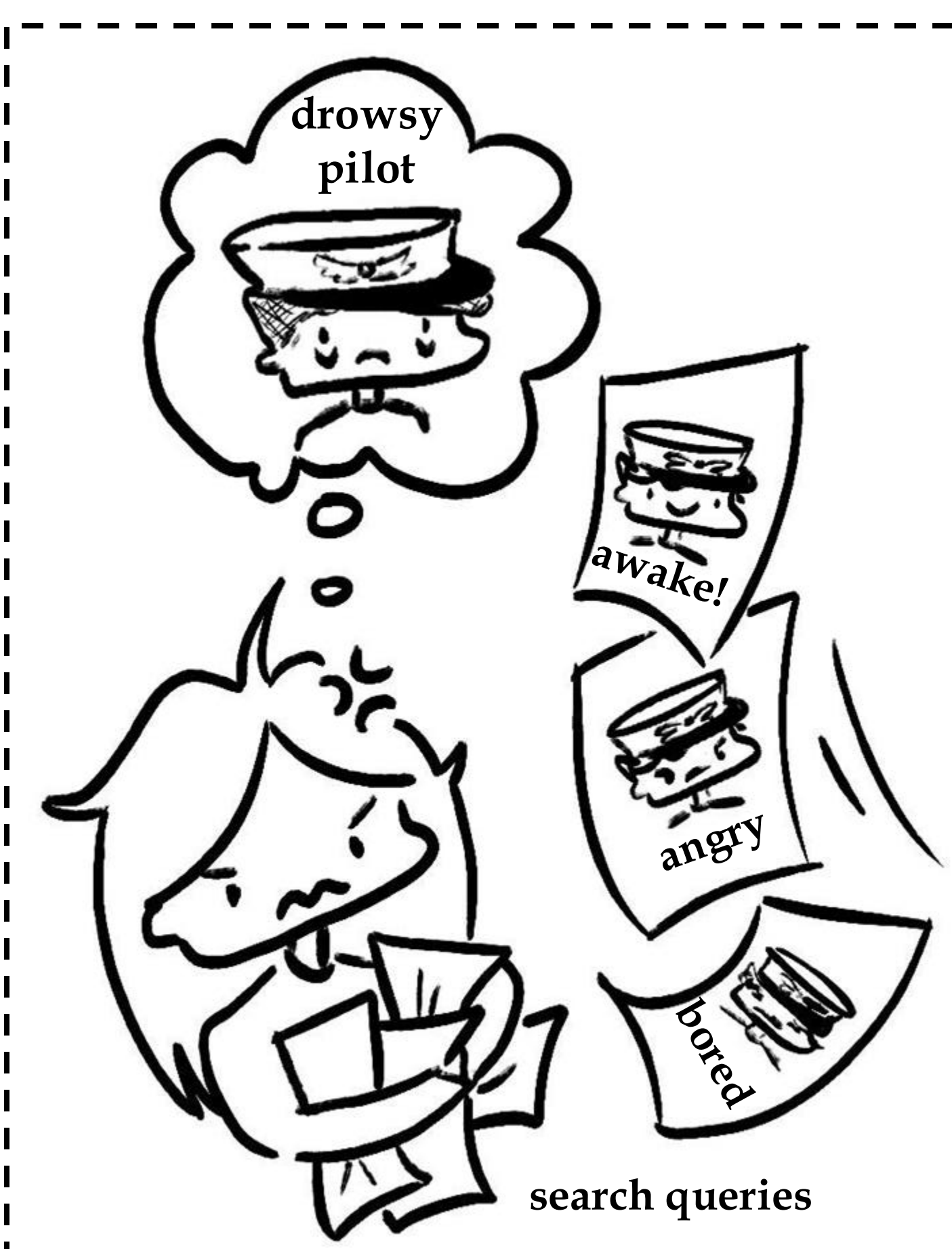
In addition to the Callback newsletter, ASRS offers a multitude of data products.

Keyword and Semantic Searching

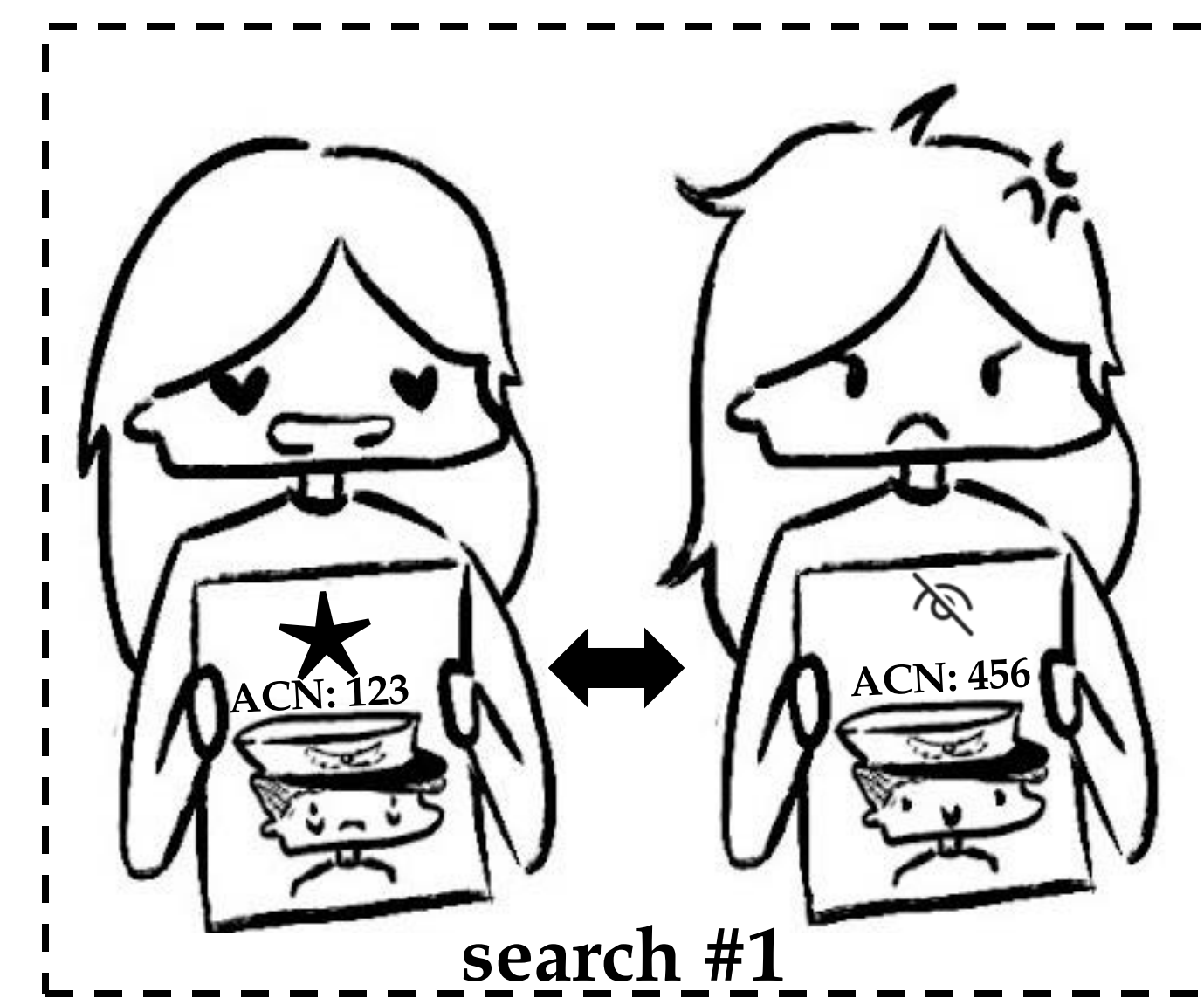
Kaona offers both keyword search (mimicking ASRS) and semantic search to increase discovery of incident reports.



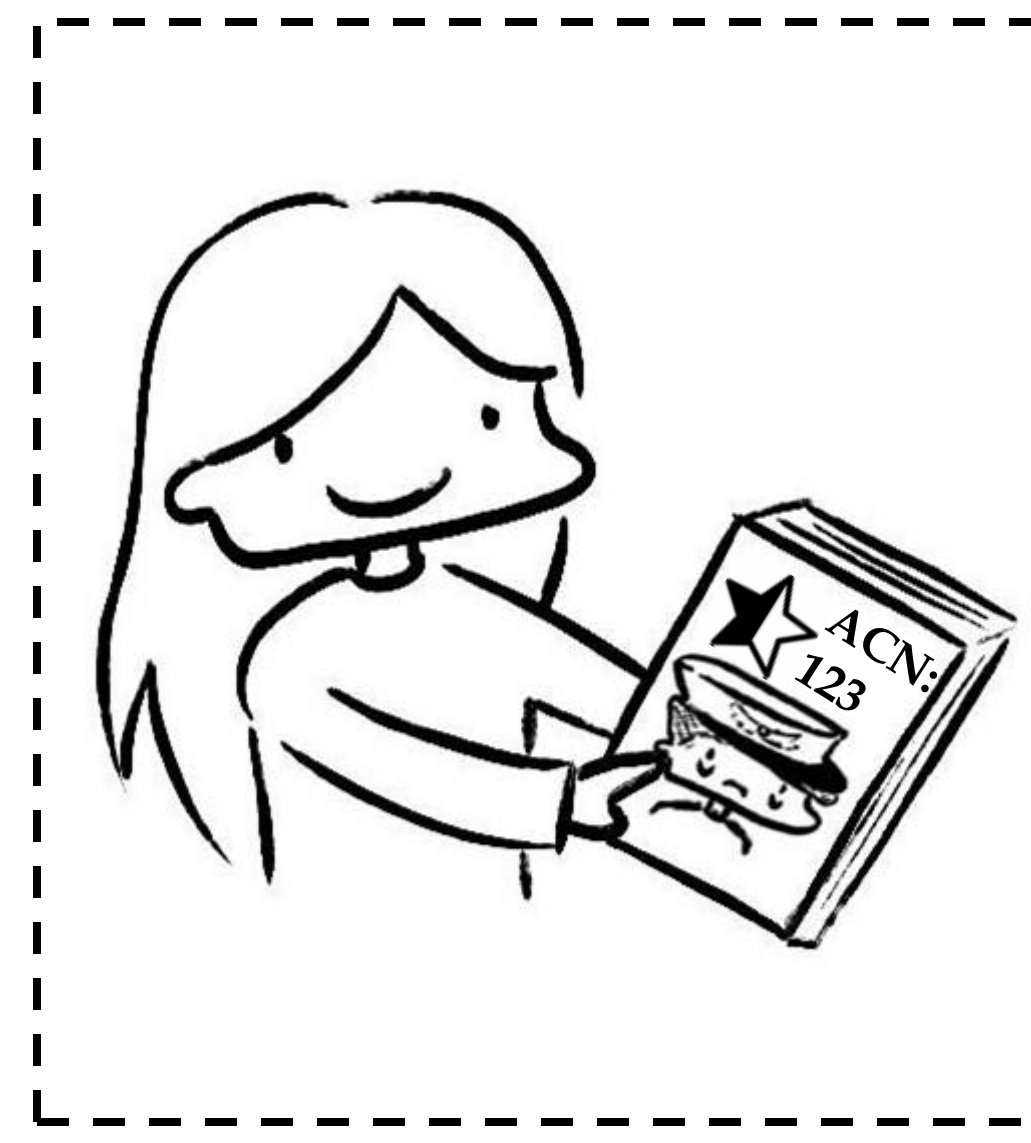
Narrative Curation and Search Tasks



search #1
search #2
search #3
search #4



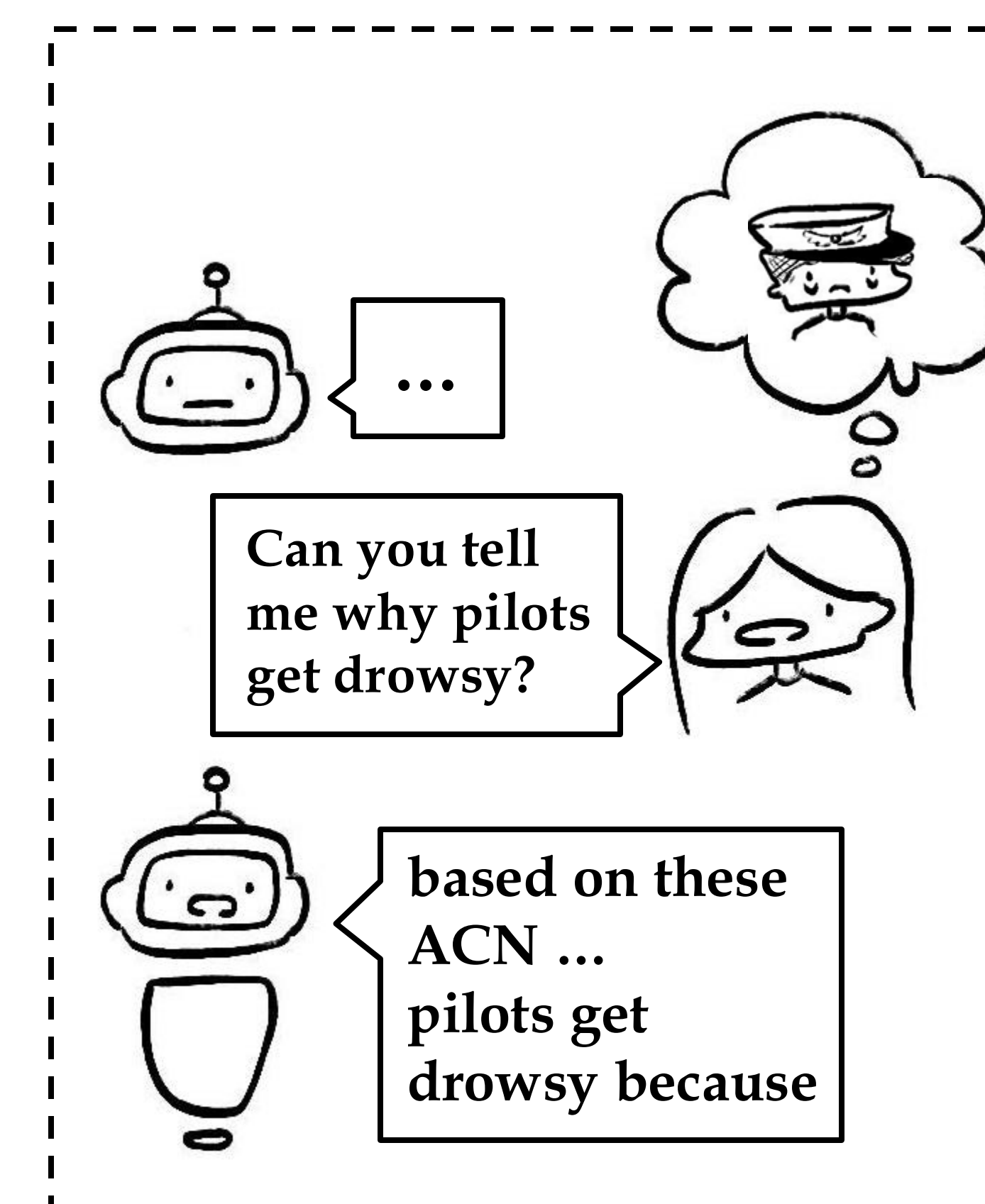
Accumulate multiple searches within a search task



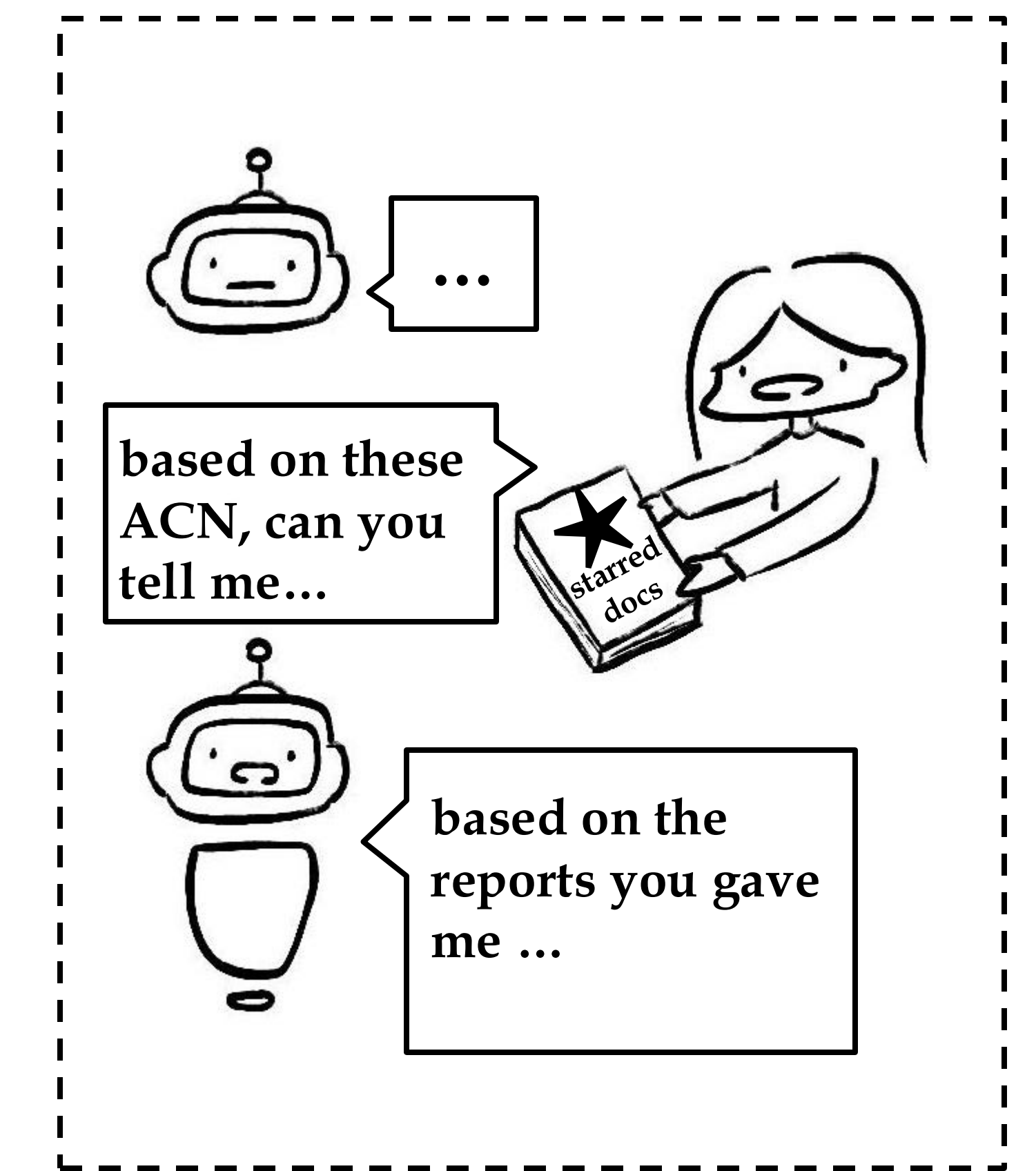
Explicit Curation: Users can 'star' relevant narratives and 'hide' non relevant narratives within a search task.
Implicit Curation: Non-read searches can be used as signal results are not useful.

In the next search of the same task, curated narratives are marked to avoid redundant work. They are also used to inform deep searches of what is useful or not.

Chatting about (curated) narratives



Any search method combination (keyword or semantic) vs metadata can be used to converse with a chatbot.



Alternatively, any search task's curated narratives can also be used to start a discussion with a chatbot (e.g. to assist with writing a newsletter!).