amazon alexa + linked open data: theorizing concerning relationships between (surveillant) smart-home voice assistants and linked open data

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by Michelle Nitto
(1) how does Alexa (technically) work?

- “wake word” + voice recordings in the cloud
- voice interaction requires: alexa skill + amazon lambda
- AWS server (smart home skill adapter)
- Alexa skills (90,000+ as of 2018)
(2) yes, Alexa is probably always listening (or is technically able to).

People also ask

- How do I stop Alexa from listening?
- Can Alexa be hacked?
- Does Alexa listen in on conversations?
- Does Alexa record you all the time?

screenshot of google search “is alexa always listening” 9/9/2019
“All the user need do is ask and the white-voice delivers.”
(Phan, 2019, p. 30)
(4) conversational AI + linked open data (LOD)

**linked open data:** structured and machine readable data released under an open license.

- Transliteration capabilities + language pairs in wikidata
- Alexa Prize for open domain dialog (using LOD)
(6) Amazon Alexa + healthcare industry

- Alexa skills kit + patient health records (HIPAA)
- Voice monitoring via audio interruptions
- Healthcare companies + surveillance of workers
(7) education: amazon “revel” skill (Pearson)
What effects could Amazon Alexa pairing with textbook publishers have on library collections & services?

How is Amazon’s usage of linked open data for Alexa’s skills and services at odds with ethical open access to knowledge?

Does Amazon developer’s usage of linked open data remind you of any other commercial entity extracting publicly licensed information for profit?
(9) works cited:


Rae-Dupree, Janet (2019). “Health: Protection vs. privacy: How much info should ‘Doctor Alexa’ have access to?” *Palm Beach Post*.

