

Automated media: key challenges and concepts for reception studies.

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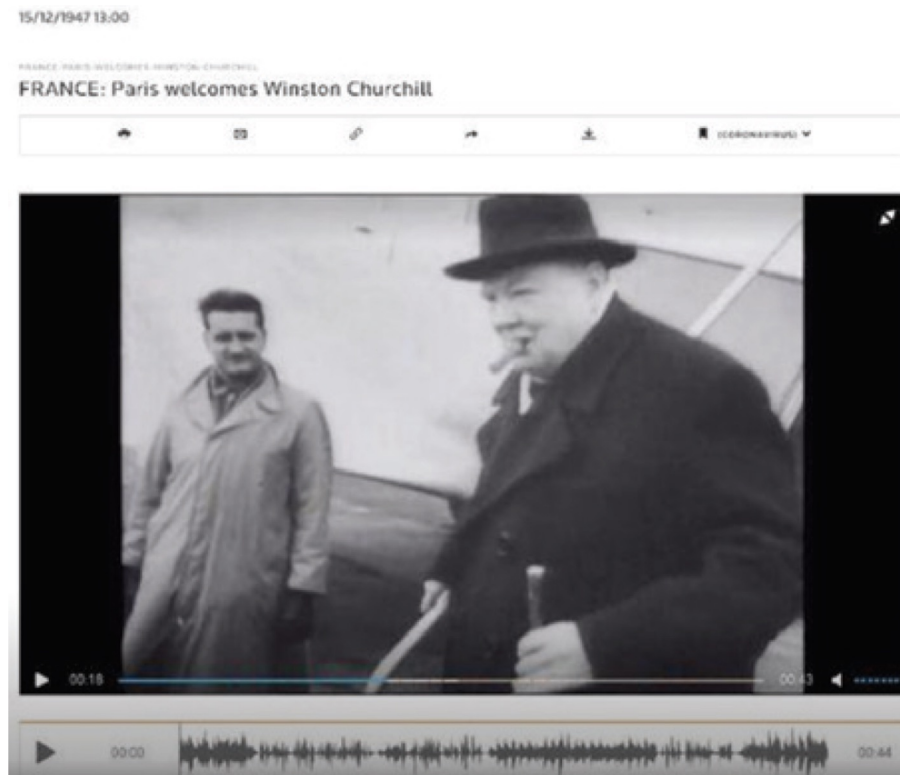


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Outline

1. Context: automated media are everywhere
2. Insights from research projects
3. Research goals
4. Theoretical background
5. Two key concepts for critical design and reception studies

Automated media: **Collect**



Reuters news agency has used speech-to-text technology to add transcripts to its entire archive of historic videos dating back to 1896, making it easier to search in 11 different languages.

Automated media: Produce (text)

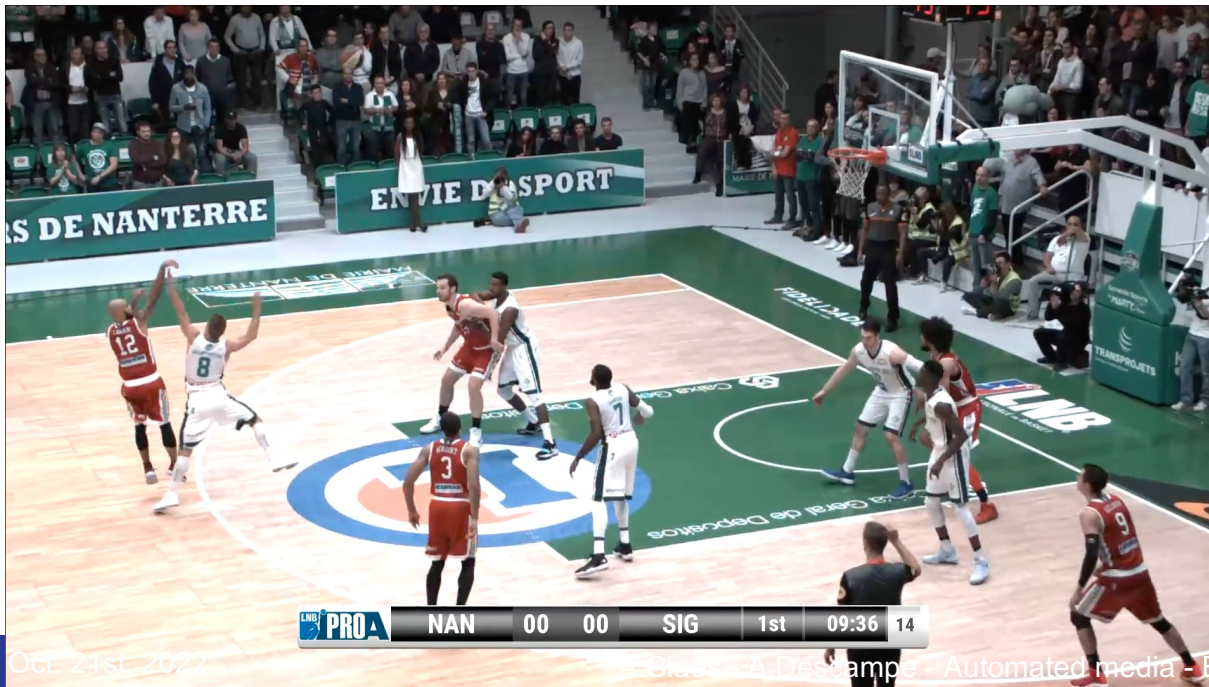
Political donations plunge to \$16.7m – down from average \$25m a year

**Australia's parties declare donations, with largest gift of \$2.3m
going to the Liberals**

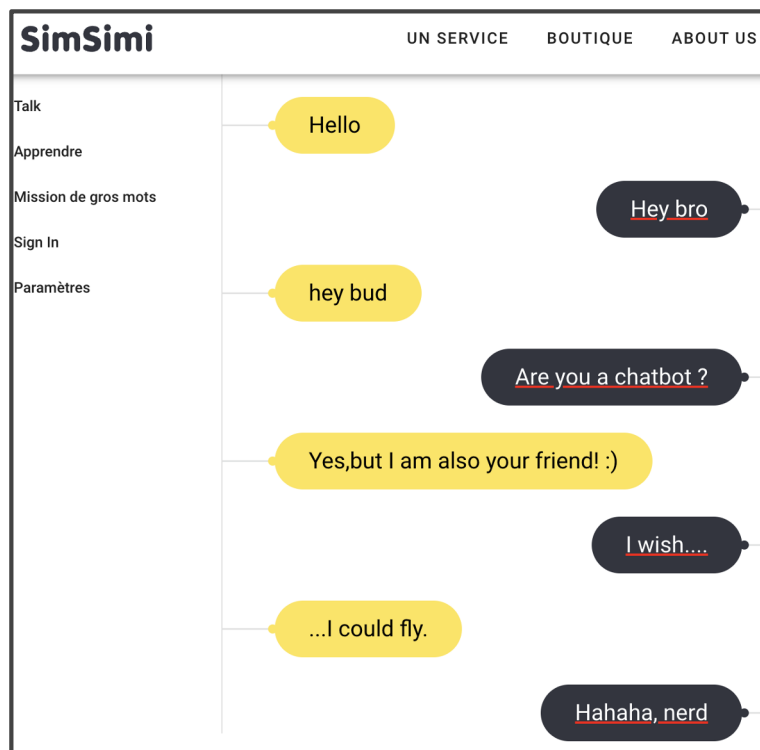
*This story was generated by ReporterMate, an experimental automated news
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AI-generated Guardian Australia
article (February 2019)

Automated media: Produce (AV)



Automated media: Distribute



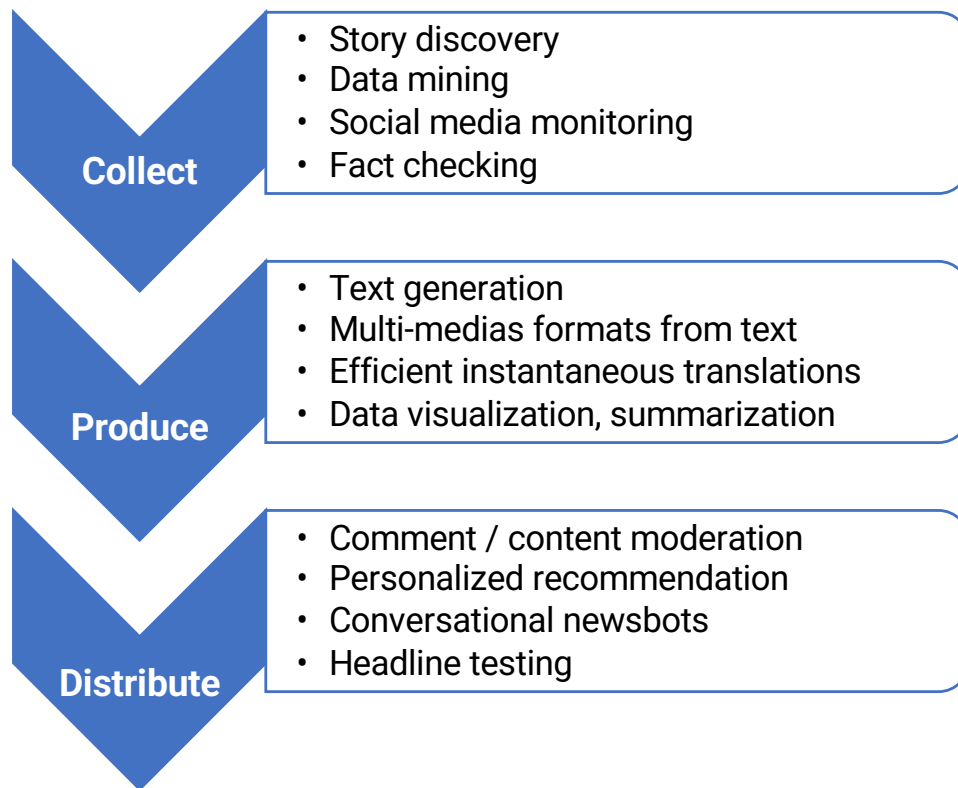
- media automation
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AI-based chatbot
Recommendation algorithms

Automated media

The whole information production workflow is impacted



Automation affects all stages of collection, production and distribution of information, and affects both editorial aspects and those related to marketing or the business model of a media.

Insights from three research projects

- **In the Shoes of An Algorithm:** teenagers and their concerns about recommendation algorithms
- **AlgOpinion:** passive use of recommendation algorithms
- **OpiNews:** automated analysis of linguistic subjectivity in french-written news articles

**Automated media is a key issue when trying
to understand contemporary media practices**

Research goals

Going beyond a generic notion of “algorithm” to explore :

- Their shape / their interface
- Their modes of interaction
- Their specific computational processes

Understand how the **design** given to these automated media influence

(1) users' perceptions of their potentialities

(2) users' capacities to adopt a critical stance on automated media.

Theoretical background

Media: sense-making as a performance

"A medium is a **recognizable human activity** that **organizes reality** into **readable texts** for **engagement**". (Anderson & Meyer, 1988, p. 316)

"The first principle of meaning is that meanings are not delivered in content but are constructed within the semantic frame in which the content appears and is a part. This principle changes the question of "What is the meaning of this sentence ?" to "What meanings are likely to appear given the particular sentence, communicants, and context involved in the action of a given scene ?" (p. 25)

Theoretical background

Automation: expanding from channel to source

Technology and automation processes are not only mediators (message channels) but also increasingly communicators (message sources)

(Lewis et al., 2019)

**... How automation influence this process of sense-making
when people interact with automated media ?**

Two key dimensions - Virtuality

The word "virtual" is derived from the Medieval Latin *virtualis*, itself derived from *virtus*, meaning strength or power. In scholastic philosophy the virtual is that which has potential rather than actual existence. (1998, p.23)

According to Levy: “(. . .) the virtual is a kind of problematic complex, the knot of tendencies or forces that accompanies a situation, event, object, or entity, and which invokes a process of resolution: actualization. This problematic complex belongs to the entity in question and even constitutes one of its primary dimensions” (1998, p. 24–25)

→ In this context: the sensitivity of the system to external influences and its ability to adapt to user inputs or environmental constraints.

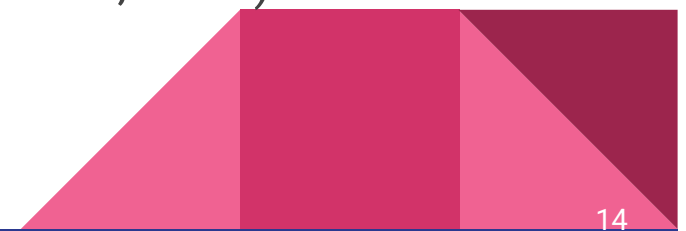
Two key dimensions - Anthropomorphization

A process by which individuals attribute human characteristics to non-human entities...

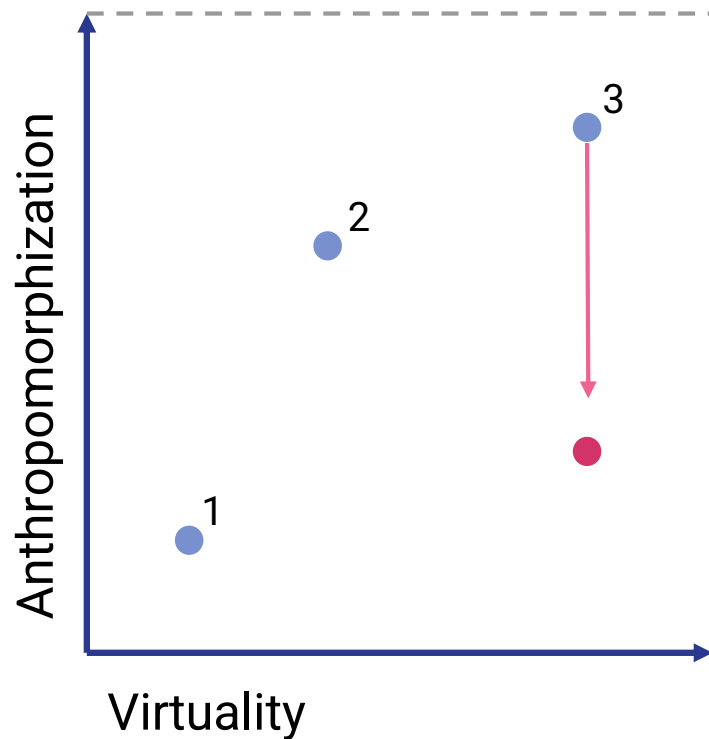
... but also as the concretization of a technical system into a defined set of representations and affordances designed to influence users' mental models by leveraging characteristics usually attributed to humans (appearance, behavior, use of speech, reasoning capabilities).

A conflicting literature explains our interest for this notion:

- An impediment to efficiency(Friedman & Kahn, 1992)?
- Or a stepping stone for critical thinking (Harambam et al., 2018) and creativity (Marenko and Van Allen, 2016)?



Mapping automated media landscape



1. Expert system (such as mortgage-approval algorithms)
2. A chat bot or a scripted character in a video game
3. Text-to-image diffusion model like Dall-E or Imagen

- How it is designed
- How it is perceived

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