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The Attention Economy

Shashwat Pande

The Library of Babel – Jorge Luis Borges, 1941



The Information Economy?

- “all information in all places at all times” (Godfrey & Parkhill, 1979).
- Data to information: Presenting, cataloguing, structuring, storing, retrieving and transmitting information more effectively.

The Information Economy?

- In 1472 the Queen's college library in Cambridge housed 199 books.
- In 2018 the same holds a collection of 20,000 'early printed books.'
- 2017- 444,000 in China; 304,912 in the US and 184,000 (i.e. 20 an hour) in the UK.

PINTEREST
USERS PIN

3,472
images.

VINE
USERS

SHARE

8,333

VIDEOS.

SKYPE
USERS

CONNECT FOR

23,300 HOURS.

YELP USERS POST

26,380

YOUTUBE
USERS UPLOAD

72 HRS.
OF NEW
VIDEO.

EMAIL
USERS SEND
204,000,000
MESSAGES.

Google

RECEIVES OVER

4,000,000

SEARCH

QUERIES.

FACEBOOK

USERS SHARE

2,460,000

PIECES OF CONTENT.

TINDER

USERS SWIPE

416,667

TIMES.

WHATSAPP
— USERS SHARE —

3,17,222

EVERY
MINUTE
OF THE
DAY



The Information Economy?

- “all information in all places at all times.”

MANCHESTER
1824

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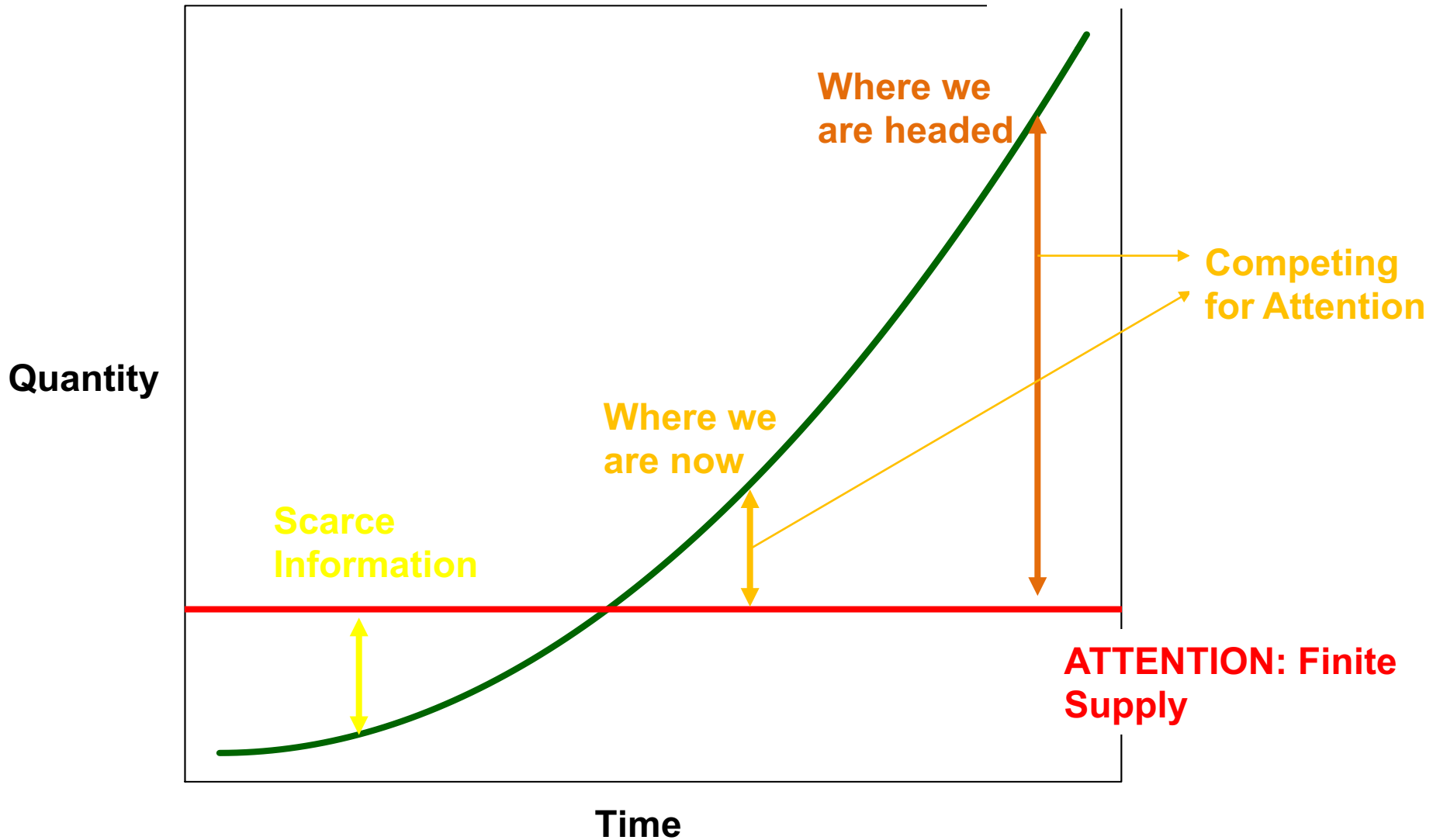
Flaubert

Bouvard et Pécuchet

The Attention Economy

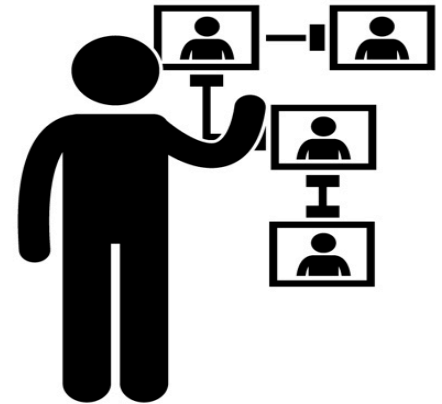
- “...in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it (Simon 1971, pp. 40–41).”

INFORMATION: Exponential Growth



Attention

- Before we can allocate attention we need to define it!



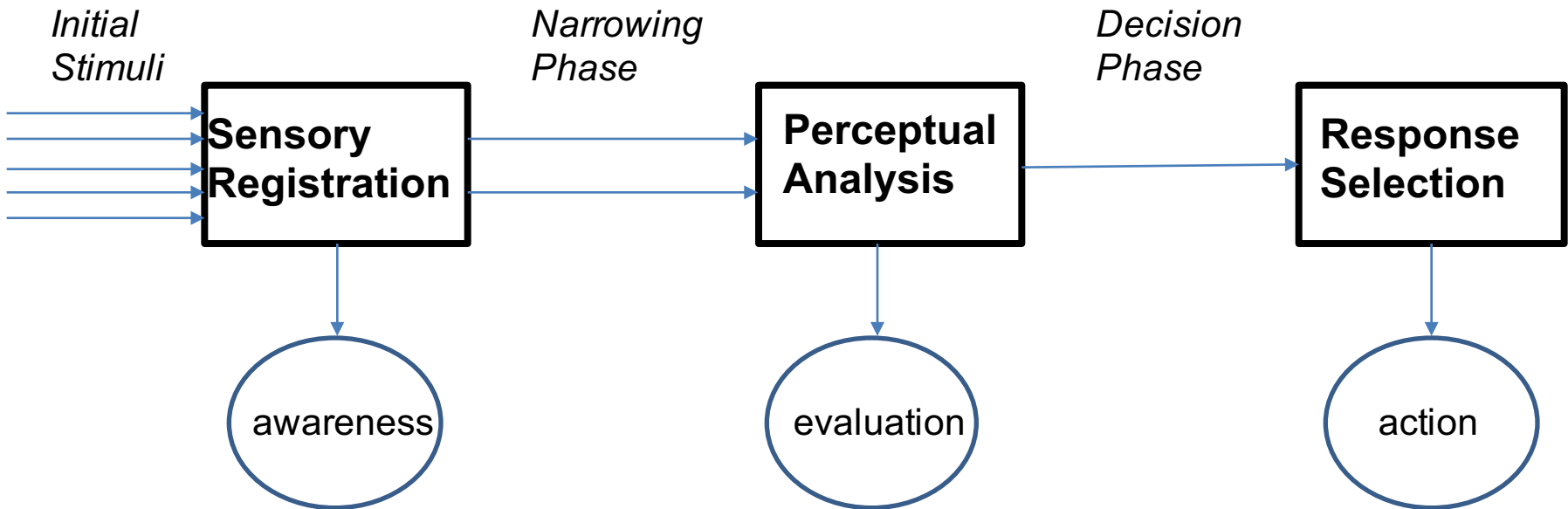
Attention as a subjective and contingent faculty

- Mid 19th Century and the emergence of Phenomenology, Neuroscience, and Cognitive Psychology (Husserl, 1901; James, 1950; Merleau-Ponty, 1962; Simmel, 1971; Schopenhauer, 1995; von Helmholtz, 2004).
- *“My experience is what I agree to attend to. Only those items which I notice shape my mind—without selective interest, experience is an utter chaos (James, 1950, pp.402, emphasis in text)”*.

What attention is and what attention is also

- Focused mental engagement on a particular item of information. Items come into our awareness, we attend to a particular item, and then we decide whether to act (Davenport & Beck, 2001).
- An unconscious background task that directs human beings to matters of concern (Massumi, 2010).
- A mechanism that controls and determines the significance of stimuli (Kahneman, 1973).
- *Selection, Orientation, Action*

Attention as Process

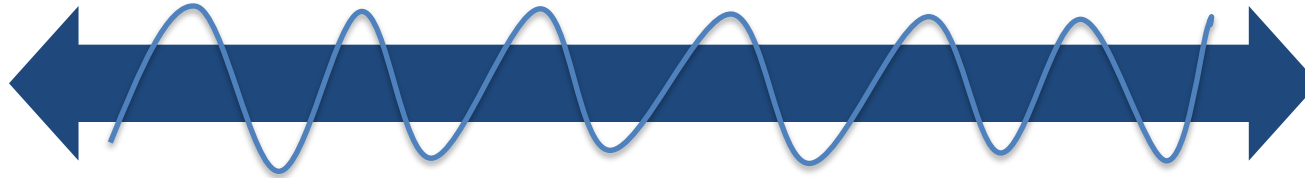


(adapted from Broadbent, 1958; Davenport & Beck, 2001)

Attention as Spectrum

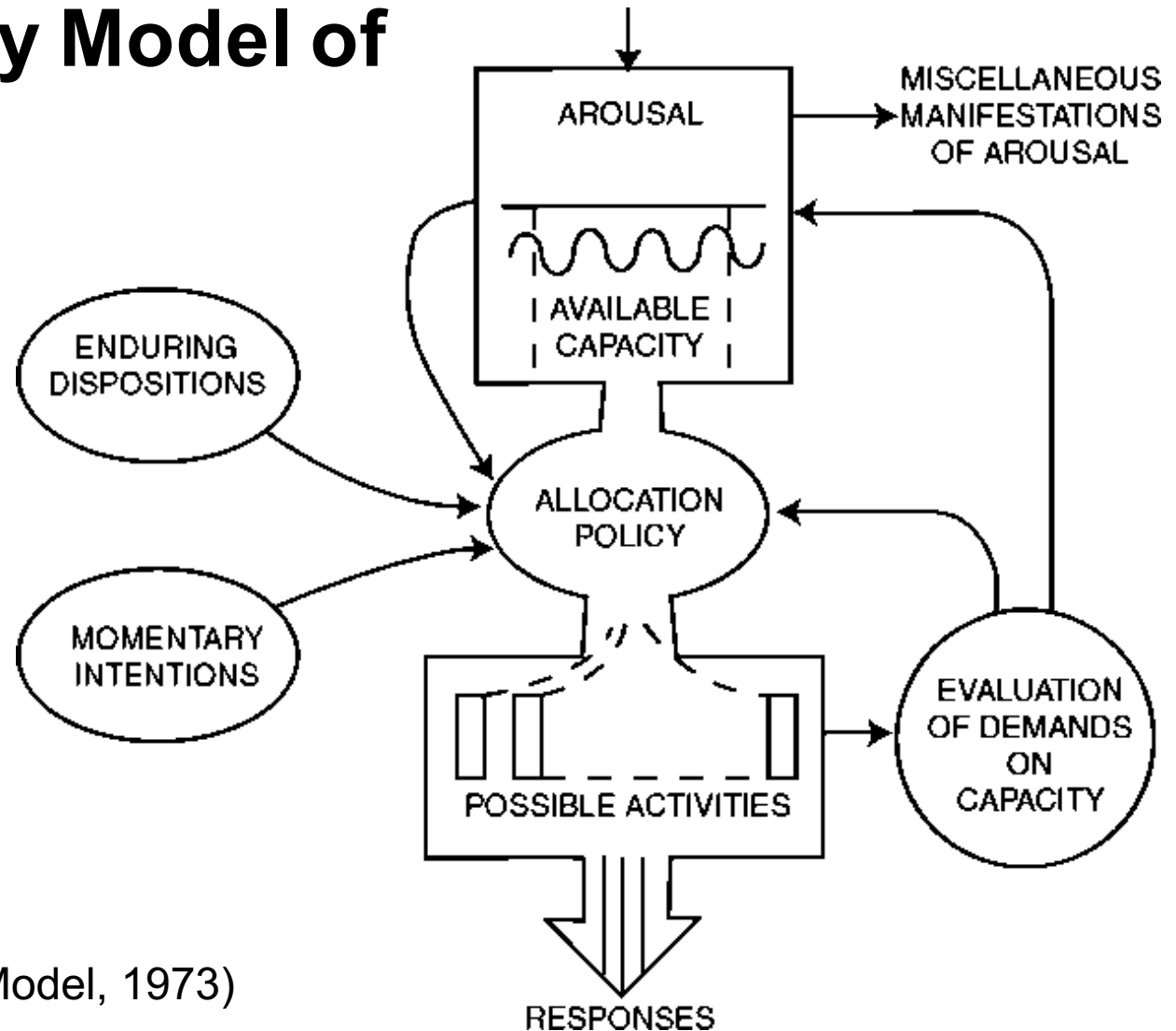
“Vigilance”: Focused
mental engagement

“Floating listening”:
Background task



(adapted from Lanham, 2002; Massumi, 2010; Stiegler, 2010)

The Capacity Model of Attention



(Kahneman's Capacity Model, 1973)

Awareness Tests

- <https://www.youtube.com/watch?v=Ahg6qcgoy4>
- <https://www.youtube.com/watch?v=ubNF9QNEQLA>

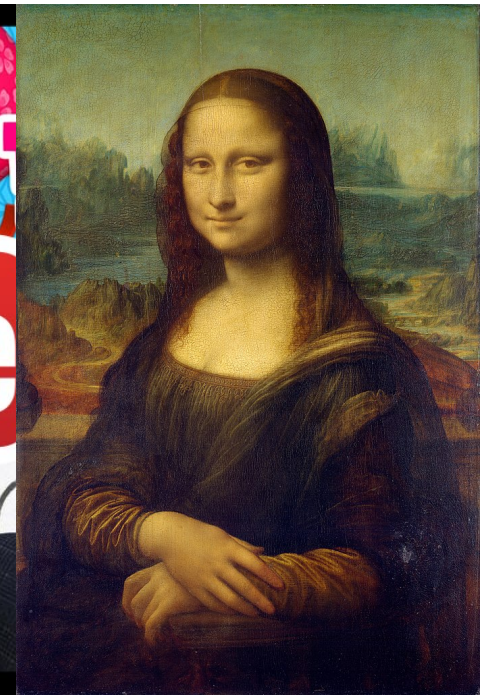
The Economy of Attention and the Web

- “Attention is the currency of cyberspace (Mandel & Van der Leun, 1996).”



The Economy of Attention and the Web

- Attention is a form of “visual labour,” a value adding resource (Beller, 2001).



The Economy of Attention and the Web

- At the same time:
 - The total pool of attention is fixed i.e. competition for attention is essentially a zero-sum game.
 - Time spent with a competitor is time lost.
- Together, this combination makes for a very intense economy.

The Ideological Dimension of Selective Attention

The Telegraph

theguardian

facebook



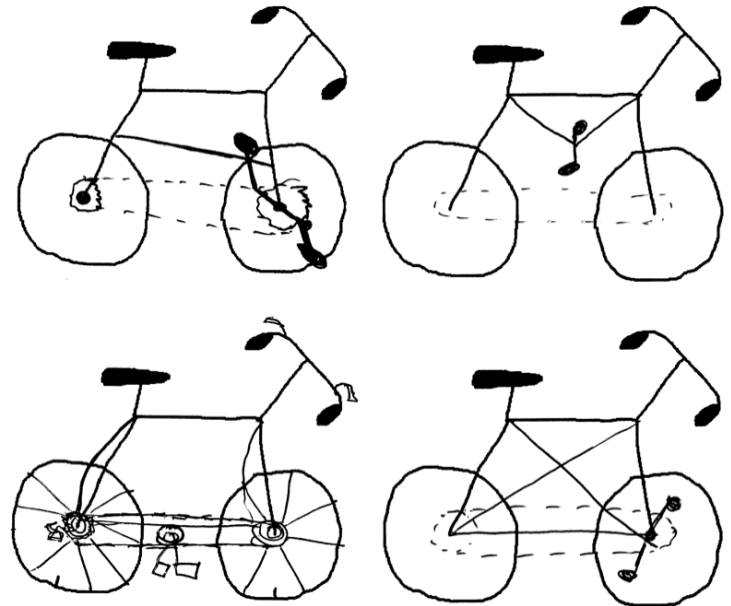
Compensating Lost Attention

- How do we reconcile wasted effort in the attention economy if the act of attending is the value addition?



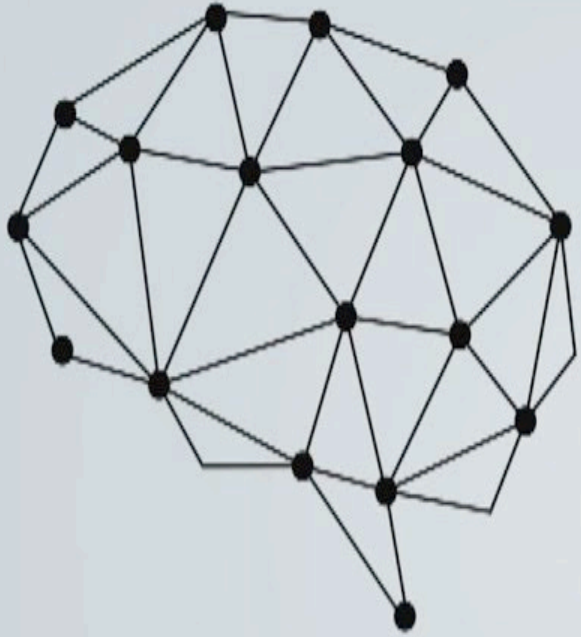
Attention as Association

- Lawson (2006)
- Experience with bicycles?
- Asked participants to complete a partial drawing of a bicycle.
- Over 40% made at least one error.



This is one reason why reading words with jumbled letters is possible!

- Attention is selective and picks out only what it ascribes to be meaningful in a message.
- What are the implications of this feature of selective attention for information environments that incentivize agents to attend less to more information?



Cambridge
Analytica



The Thought Police is here and it's name is Facebook!

- Continuous surveillance
- Destruction of the self
- Universal truth (MoT)
- Bureaucratic control

- Continuous surveillance
 - **Participatory surveillance**
- Destruction of the self
 - **Fragmentation of the self**
 - Multiple personality disorder: the socialising self, the corporate self, the celebrity self, the journalistic self...
- Universal truth (MoT)
 - **Post-truth:** *“Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief (Oxford dictionary, 2018).”*
 - “My experience is what I agree to attend to (James, 1890).”
- Bureaucratic control
 - **Algorithmic control**
 - Office holders are now codes, categories, procedures, data mining programs, automated algorithms– Who are the workers?

“a design or representation suitable to a world in which the scarce factor is information may be exactly the wrong one for a world in which the scarce factor is attention (Simon, 1968).”



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Thank you for your Attention!