PIRACY OF SCHOLARLY WORK COULD BE A THREAT TO INFORMATION ITSELF

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WHY?

- How do people receive information?
  - Access

- What role does information access play in societies/cultures?

- How is information accessed?

- What is the impact of access-at-all-costs sites?
  - (pun not intended, but acknowledged)

CURRENT LANDSCAPE

$1,000 in one week for a PhD student in Iran to pay for access to necessary papers for their own research meets any sensible threshold of being unreasonable (Bohannon, 2016)

Several options exist:

- Various Levels of Open Access
- Publisher Big Deals
- Black Access
- Concerted Movements
  - Government
  - Private

Researchers are just looking for access

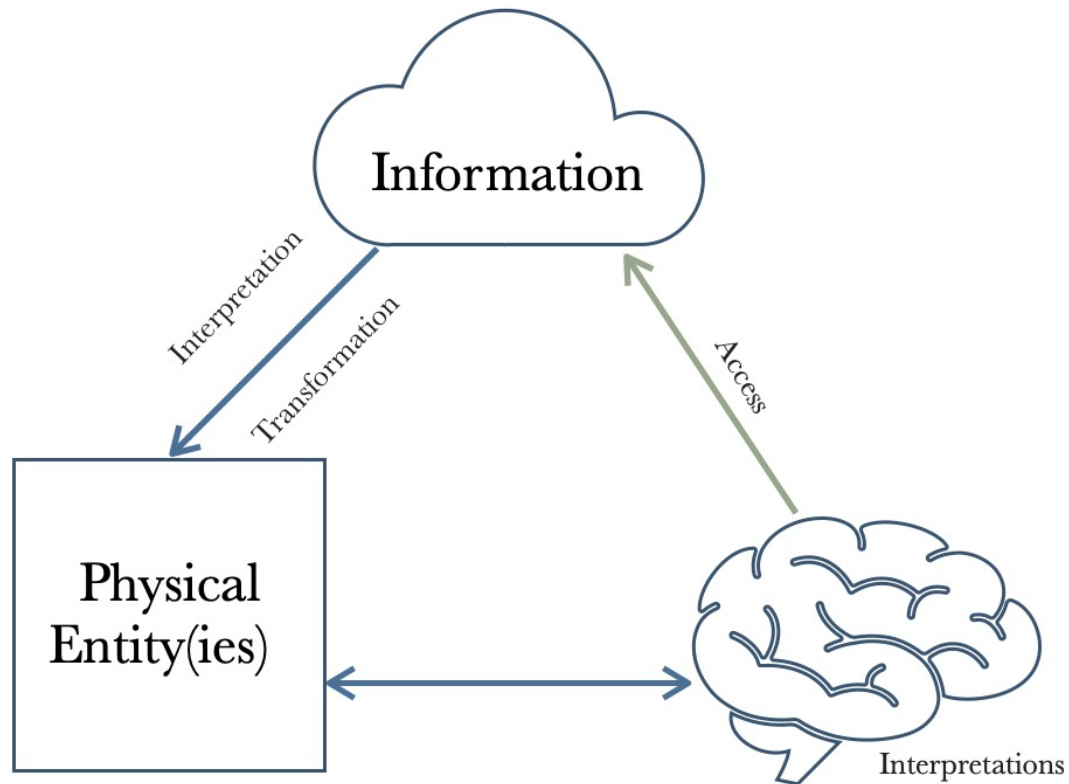How is this achieved ethically and without bringing the scholarly world crashing down?

- Open Access (e.g. Plan S in Europe- publicly funded works be available to public)

CONVENTIONAL ARGUMENTS AGAINST BLACK ACCESS SITES

- Moral:
  - Stealing is wrong
  - Somebody's intellectual property/efforts

- Bureaucratic
  - Producing/verifying/disseminating/sustaining scholarly work takes funding
  - People live in the real world- need to make a living

INFORMATION-AS-ABSTRACT

- Philosophy of information
  - Information-as-abstract (Dinneen & Brauner, 2017)
  - Objective and veridical (Mingers & Standing, 2018)

- Gardening Book Example
  - information vs non-information
  - "How to garden"
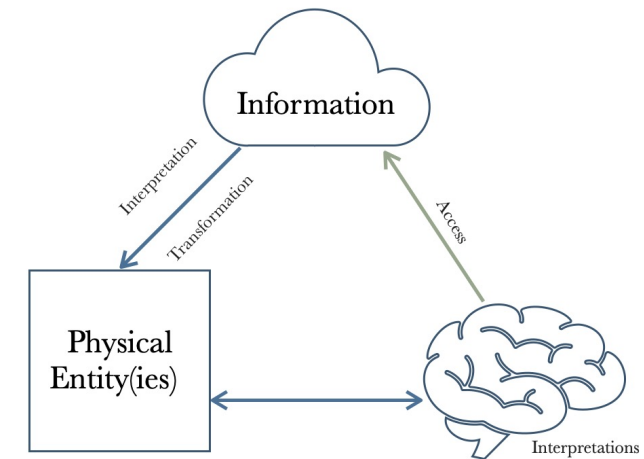
BLACK ACCESS

Merits

- Gives people access 🤷‍♂️
- Altruistic in its intent
- "Forces the issue" to the publishing industry

Detriments

- Hacker mentality (Bohannon, 2016)
  - Nature of piracy
- Culture of disruption
  - Consequences down the line?
- Does it achieve what it purports to?
  - Usage data suggests convenience rather than necessity (Nicholas, et al. 2019.)

THE THREATS

- Threat to the integrity of information from Black Access sites is twofold

1. BA sites undermine their own goal to provide information to everyone
   - information not disseminated is a threat unto itself

2. Could Threaten Information-as-abstract through disingenuous content

- Undermining Open Access:
  - Wealthy, research-producing nations drive effort
    - Innovation
  - BA sites lower demand for OA
- Culture of Disrupt
  - Dissatisfaction with any change

FIN

Open Access for all: 🤗

Black Access: 🤨

SOURCES, BACKGROUND & INSPIRATION

- Lewis, D. (2016) Will Sci-Hub Kill the Open Access Citation Advantage and (at least for now) Save Toll Access Journals? https://doi.org/10.7912/C2X07G

- Himmelstein, D.S., Romero, A.R., McLaughlin, S.R., Bastian, G.T., & Greene, C.S. (2018). Sci Hub provides access to nearly all scholarly literature. PeerJPrePrints, https://peerj.com/preprints/3100/

- Bohannon, J. (2016). The Frustrated science student behind Sci-Hub. Scienc e, 352(6285), 513. https://doi: 10.1126/science.352.6285.511\

- McNut, M. (2016). "My love-hate of Sci-Hub". Science, 352(6285), 497. https://doi: 10.1126/science.aaf9419

- Nicholas, D., Boukacem-Zeghmouri, C., Xu, J., Herman, E., Clark, D., Abrizah, A., Rodríguez-Bravo, B. and Świgoń, M. (2019), Sci-Hub: The new and ultimate disruptor? View from the front. Learned Publishing, 32: 147-153. doi:10.1002/leap.1206

- Ellis, L..(Feb 18, 2019). "A Turning Point for Scholarly Publishing." *The Chronicle of Higher Education*. Retrieved from https://www-chronicle-com.du.idm.oclc.org/interactives/Trend19-OpenAccess-Main Feb 4, 2020

- Esposito, J. (Mar 2, 2016). Sci-Hub and the Four Horseman of the Internet. Retrieved from https://scholarlykitchen.sspnet.org/2016/03/02/sci-hub-and-the-four-horsemen-of-the-internet/ Feb 11, 2020

- Anderson, R. (Nov 25, 2019). The Tyranny of Unintended Consequences: Richard Poynder on Open Access and the Open Access Movement. Retrieved from https://scholarlykitchen.sspnet.org/2019/11/25/the-tyranny-of-unintended-consequences-richard-poynder-on-open-access-and-the-open-access-movement/ Feb 11, 2020

- Russell, C., & Sanchez, E. (2016). Sci-Hub unmasked: Piracy, information policy, and your library. College & Research Libraries News, 77(3), 122-125. doi:https://doi.org/10.5860/crln.77.3.9457

- Mingers, J. Standing, C. (2018). What is information? Toward a theory of information as objective and veridical. *J Inf Technol* 33, 85–104. DOI: 10.1057/s41265-017-0038-6

- Dinneen, J.D. & Brauner, C. (2017). Information-not-thing: further problems with and alternatives to the belief that information is physical. Proceedings of 2017 CAIS-ACSI Conference

- Frické, M. (2009). The knowledge pyramid: a critique of the DIKW hierarchy. Journal of Information Science, 35(2), 131–142. https://doi.org/10.1177/0165551508094050

- Batra, S. (2014). Big Data Analytics and its Reflections on DIKW Hierarchy. Review of Management, Vol. 4, No. 1/2, June 2014, pp. 5-17 ISSN: 2231-0487

- Intezari, D. Pauleen, J., Taskin, N. (2016). The DIKW Hierarchy and Management Decision-Making. 49th Hawaii International Conference on System Sciences (HICSS), Koloa, HI, 2016, pp. 4193-4201. DOI: 10.1109/ICTKE47035.2019.8966872

- Buckland, M. (2005). The Philosophy of Information. *Journal of Documentation*, Vol. 61 No. 5, pp. 684-686. DOI: 10.1108/00220410510625921

- Thellefsen, M., Thellefsen, T. and Sørensen, B. (2018). Information as signs: A semiotic analysis of the information concept, determining its ontological and epistemological foundations. Journal of Documentation, Vol. 74 No. 2, pp. 372-382. https://doi.org/10.1108/JD-05-2017-0078

- Tungkasthan, A. Poompuang, P., Intarasema S. (2019). "Government Data Sharing Framework based on DIKW Hierarchy Model," 2019 17th International Conference on ICT and Knowledge Engineering (ICT&KE), Bangkok, Thailand, 2019, pp. 1-4. doi: 10.1109/ICTKE47035.2019.8966872

- Yang, C. Baets, B. D. Lachat, C. (2019). "From DIKW pyramid to graph database: a tool for machine processing of nutritional epidemiologic research data," 2019 IEEE International Conference on Big Data (Big Data), Los Angeles, CA, USA, 2019, pp. 5202-5205. doi: 10.1109/BigData47090.2019.9006469

- Yusof, W. S. E. Y. W., Zakaria, O., Zainol, Z., & Ananthan, S. (2018). DIKW Application on Knowledge Based Framework with Situational Awareness. International Journal of Academic Research in Business and Social Sciences, 8(6), 1110 1120.

SOLUTIONS

- Smaller Scholarly Communities
  - Fireside Poets, Transcendentalists, and the connection to the Sierra Club
  - Subscription on individual basis for alums of universities or Scholarly Communities to Big Deal-type access
  - Rallying around projects like PlanS
  - Develop plan to offer essential (TBD) information to professionals in restricted societies
    - Medical info, et all
  - Organic, but enforced, shut down of sites hosting pirated work