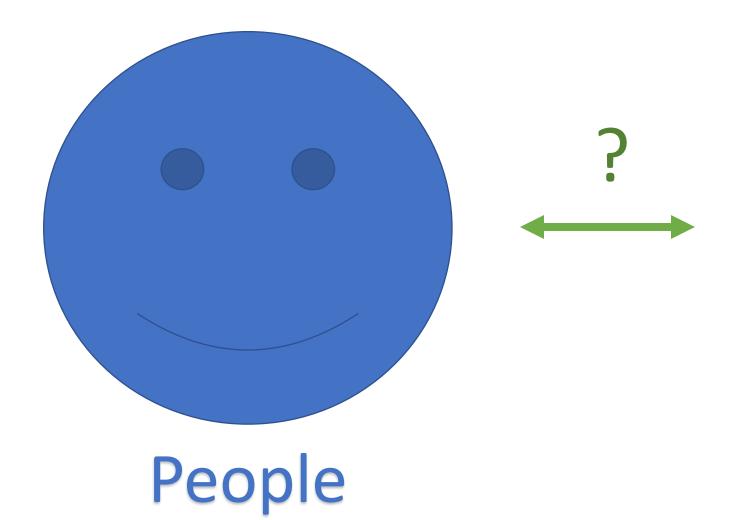
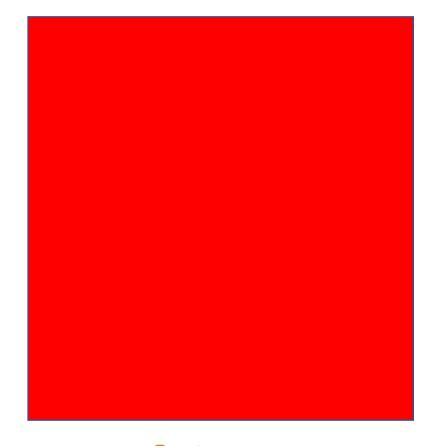
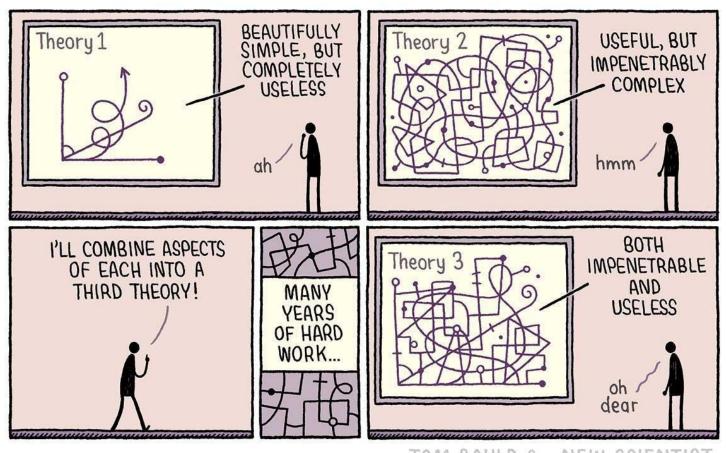
Uplifting Technological Appropriation Reflecting on the integration of sociotechnical ideas

- Martín Pérez Comisso / @mapc
- EASST/4S 2020 virPrague
- August 18th, 2020





Things

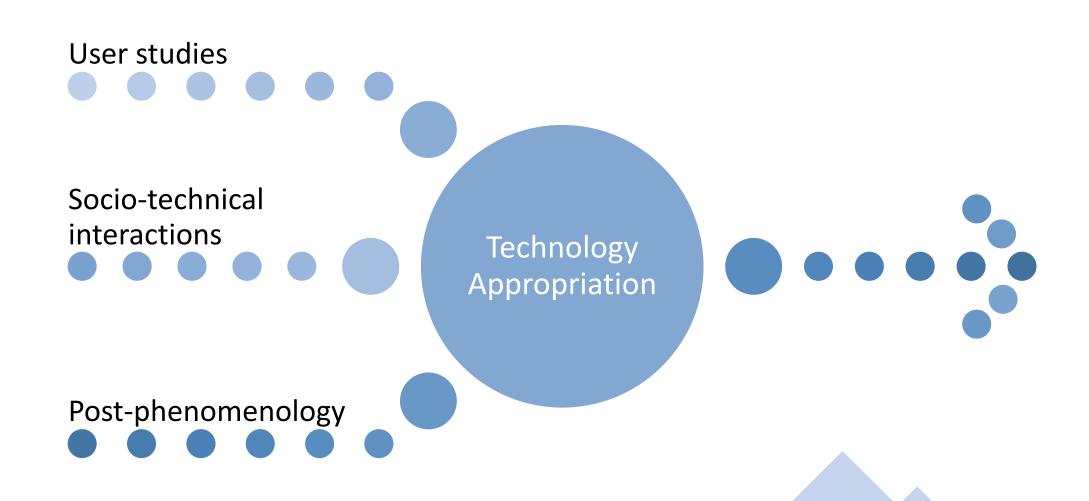


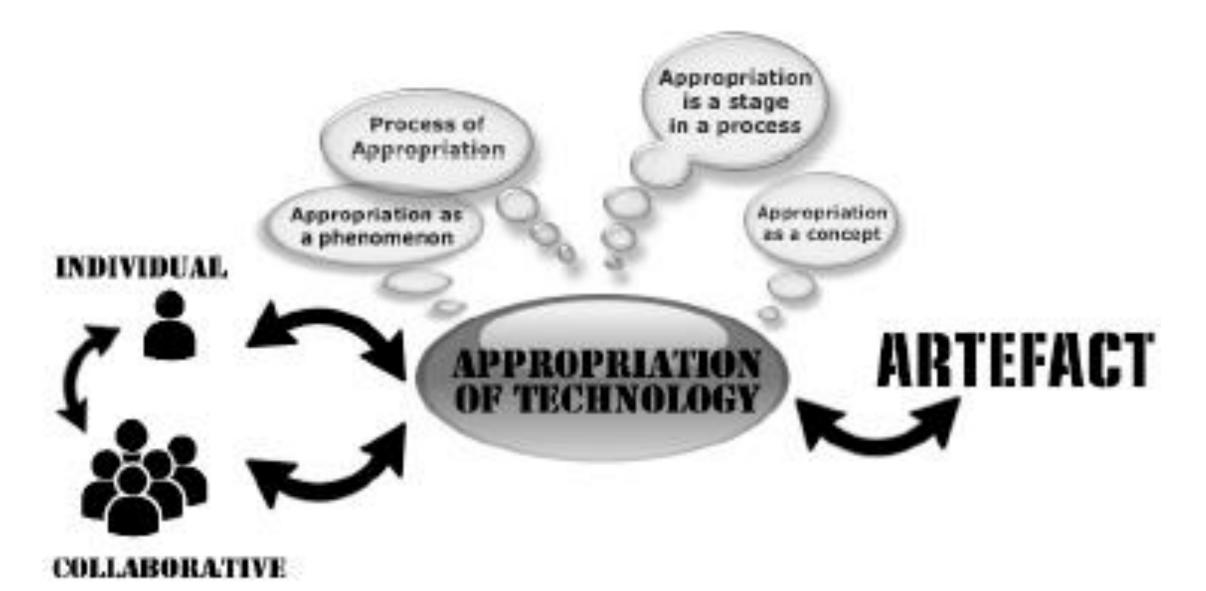
TOM GAULD for NEW SCIENTIST

What is technology appropriation

"not just about a user's ability to effectively use technology but also how that technology is embraced and absorbed into the individual's lifestyle to meet specific needs." (Adjin-Tettey & Mbatha, 2019)

Trajectories of "technology appropriation"

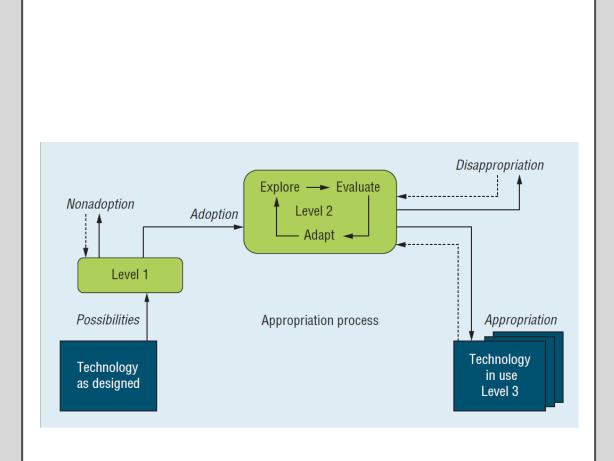




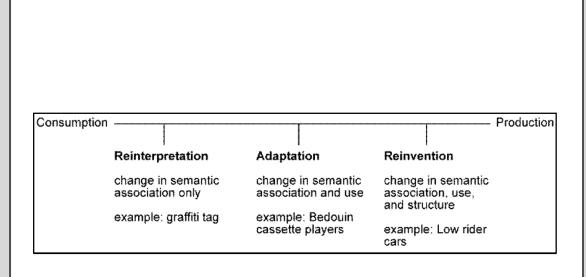
Al Zubaidi-Polli, A. M. (2017). Comparative study of technology appropriation concepts. In *Proceedings of IEEE Student Branch Conference Mikulov 2017* (pp. 3-6).

Why appropriation?

- Becoming part of a sociotechnical system is an open question that can be theorized through technological appropriation.
- Based on designers' and users' visions of technology, technological appropriation may allow the inclusion of marginalized (and non-marginalized) voices on the configuration of social imaginaries of technology



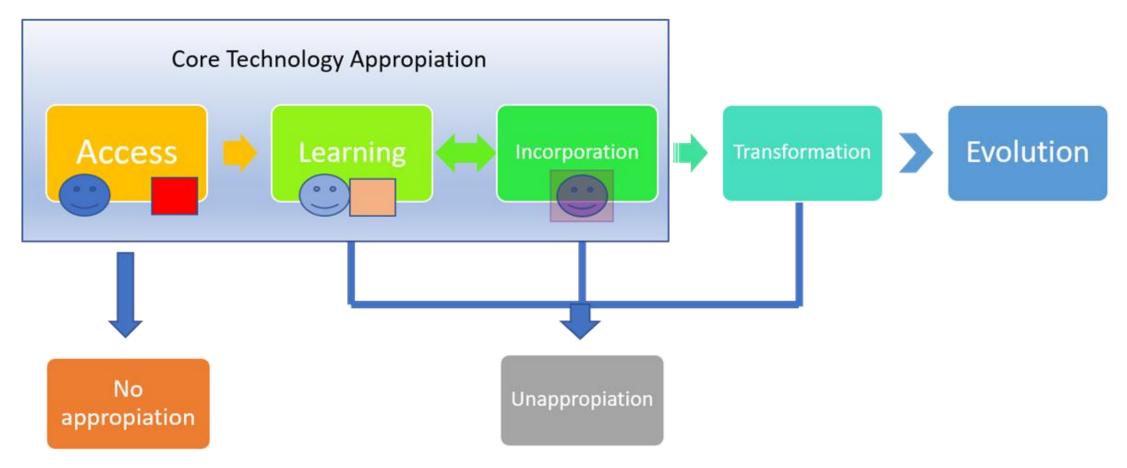
Fidock, J., & Carroll, J. (2011). Why do users employ the same system in so many different ways?. *IEEE intelligent systems*, *26*(4), 32-39



Eglash, R. (Ed.). (2004). *Appropriating technology: Vernacular science and social power*. U of Minnesota Press // Odumosu, T. B. (2009). *Interrogating mobiles: A story of Nigerian appropriation of the mobile phone*. Rensselaer Polytechnic Institute.



Rational Model of Technology appropriation

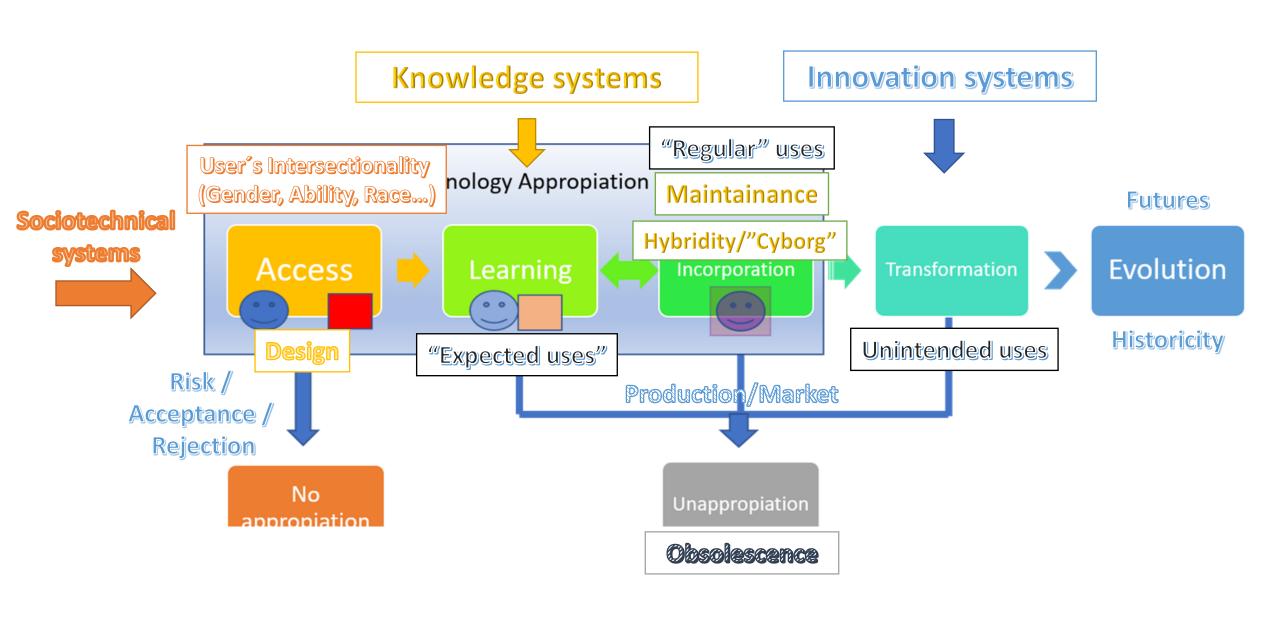


Quezada, C., & Comisso, M. P. (2016). De telegrafía sin hilos a radiodifusión: Apropiación tecnológica de la radio en Chile, 1901-1931. Hib: Revista de Historia Iberoamericana, 9(1), 103-125.

- (i) Access is a non-return first step, in which human a non-human actively or passively recognize the system. It is the beginning of the construction (or rejection) of individual imagination
- (ii) Learning is defined a discontinuous, incremental and social process to engage with the meanings (knowledge) and practices (know-how) of a sociotechnical system.
- (iii) Incorporation is another discontinuous and incremental process to engage with the individual practices of sociotechnical systems. Broadly in literature is described as uses.
- (iv) Transformation is the level that an innovation system emerges in socio-technical narratives. Traditional transformation's human roles are called inventors, innovators, designers, and engineers in a professional level.
- (v) Evolution, related to the formal evidence of the historicity of a sociotechnical system in a situated context.

Becoming part of a Sociotechnical system



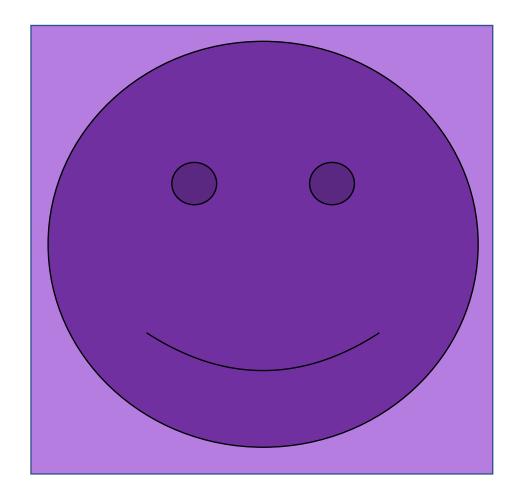


Methodological underpinns

- The researcher oscillates among the data: narratives, surveys, documentatio, and direct and indirect observation of people, places and parts (devices, production processes, objects, code) will help to reconstruct the stories behind.
- Appropriation is always local: A same technology had/is having/will have different trajectories in time and places.
- Stages as analytical tool: Phases and transitions of technological appropriation are messy (as humans), but can be rationalized through the use of general stages.

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Thanks for listening