Teaching Infrastructures Breaching through Data Journalism and Data Activism

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“This article is in a way a call to study boring things. Many aspects of infrastructure are singularly unexciting... It takes some digging to unearth the dramas inherent in system design creating, to restore narrative to what appears to be dead lists” (p. 37)


“The most salient characteristic of technology in the modern (industrial/post-industrial) world is the degree to which most technology is not salient for most people, most of the time...

mature technological systems... reside in a naturalized background, as ordinary and unremarkable to us as tree, daylight, and dirt. Our civilization fundamentally depend on them, yet we notice them mainly when they fail, which they rarely do”

Infrastructure invisibility
“Procedurally it is my preference to start with familiar scenes and ask what can be done to make trouble. The operations that one would have to perform... to produce the socially structured affects of anxiety, shame, guilt, and indignation; and to produce disorganized interaction should tell us something about how the structures of everyday activities are ordinarily and routinely produced and maintained” (p. 37)


**On the use of “breaching experiments”**
“My husband and I were watching television. My husband remarked that he was tired. I asked, ‘How are you tired? Physically, mentally, or just bored?’

(S) I don’t know, I guess physically, mainly

(E) You mean that your muscles ache or your bones?

(S) I guess so. Don’t be so technical. (After more watching)

(S) All these old movies have the same kind of old iron bedstead in them

(E) What do you mean? Do you mean all old movies, or some of them, or just the ones you have seen?

(S) What’s the matter with you? You know what I mean

(E) I wish you would be more specific

(S) You know what I mean! Drop dead” (p. 43)

Stanley Milgram, Liberty, H. J., Toledo, R., & Wackenhut, J., 1986
“a similar methodology was advocated by Harold Garfinkel, for investigating the taken-for-granted features of social life... The methodological assumption underpinning the study of controversies is similar, only in this case the breach in the normal social operation of science is produced by the scientists themselves. By studying a scientific controversy, or moments of contestation, one learns something about the underlying dynamics of science and its relations with wider society”

“I have stopped in the engineering school where I teach, to give a social science class: I only ask the young engineers to follow for one year, in real time, a scientific or technical controversy… They learn more science – meaning research – and it just happens that, without even noticing it, they learn also more law, economics, sociology, ethics, psychology, science policy and so on, since all those features are associated with the piece of science they have chosen to follow”

Bruno Latour, *From the two cultures debate to cosmopolitics*


A breaching didactics for data infrastructures
Data Journalism, 2016  
King’s College London  
with Liliana Bounegru

- BA students in “Digital Culture”
- Focus on data visualization and story-telling
- Collaboration with data activists
  - Tax Justice Network
  - Open Trials project
  - Amnesty International Decoders
  - Ressources contract Open Oil

Data Activism, 2017  
École Normale Supérieure, Lyon  
with Axel Meunier

- MA students in “Information Architecture”
- Focus on data collection and usage
- Collaboration with grassroot activist
  - Open source developers in Lyon
  - Migrants help associations

A breaching didactics for data infrastructures
Data Journalism, 2016
King’s College London
with Liliana Bounegru

1. Introduction to data storytelling (2 hours)
2. What makes a good data story? (2 hours)
3. Collecting data (2 hours)
4. Cleaning data (2 hours)
5. Data analysis (2 hours)
6. Turning data into images (2 hours)
7. Data sprint (2 full days)
8. Conclusion (2 hours)

Data Activism, 2017
École Normale Supérieure, Lyon
with Axel Meunier

1. Course introduction (3 hours)
2. Project section and group formation (3 hours)
3. Help with project development (30 min Skype)
4. Ethnography mini-workshop (2 full days)
5. Help with project development (30 min Skype)
6. Data sprint (3 full days)
1. **Successful data projects are rare**, for they demands the alignment of

   • an interesting and precise research question (which is generally not evident)
   • and a dataset that can allow to tackle it (which is generally not available)

   • Give students time to test & explore, but help them avoiding wrong track

2. **Data creation** is where the action is

   • Both in terms of problems and of learning occasions (data is always oriented)
   • But it is also the longest and most frustrating operation (data is never right)

   • Encourage students to invest efforts in the creation of data
3. **Ethnography** is crucial but also difficult because

- It takes time to find the right informants and build a relation with them
- Informants’ ideas about “data projects” are too definite or not enough
- Allocate time & support to the construction of a shared “scope statement”

4. **Most student will fail the exercise**, but not the course if

- They use the discussion within their group to adopt a reflexive posture
- The final report describes the process and not only the product
- Make clear that the exercise is about de-construction as much as construction
Internal migration example

- Creation of a medium to represent the reality of migrants roaming in Lyon.
  - Under the form of a Webdoc.
  - Allows sensitization to the action of the association and to the reality that has emerged during the seminars and discussions.

- Creation of an outil or "Kit" of Lyon "Migrant-friendly".
  - In the form of a map offering different possibilities (accommodation, food, etc.).
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“INTERNAL MIGRATION” EXAMPLE

"L'ÉTAT parle par la voix du préfet et le préfet nous parle mal”

UN HÉBERGEMENT POUR TOUS-ETES
“Internal migration” example
From “how can we make the public opinion aware of the problem?”

To “how can we facilitate the delivery of help, without exposing the migrants?”

• The issue was not about public awareness, but about expert practices
• The addresses was not the public or the migrants, but the intermediaries
• The problem was not about making data visible, but making it invisible (and yet usable)
• The contribution may have been about setting up a data infrastructure rather than using it

“Internal migration” example