"Framing Complexity" –
An Essay in Squaring the Circle

Anna Wiehl
University of Bayreuth

Prelude or:
"The Century of Complexity"

➢ How can we deal with **ambiguities, uncertainties, plurivocality and subjectivity** and **diverging truths**?

➢ To what extent is an embrace of complexity **enriching**, and where are aesthetic, cognitive or affective limits to it?

➢ Which role do **networking and networkedness** play in this context? How do they affect the **epistemological and ontological** status of evolving documentary practices?

➢ What changes if complexity is rendered **experiential** in embodied and emplaced interaction?

➢ And finally: what contribution can we as **media scholars** make?

Prelude or:
"The Century of Complexity"

➢ Complexity – a (not) so new phenomenon?

   precedencies in other disciplines and / or media history, social history, art history or the history of technology

➢ Complexity affects now all aspects of our lives

Complexity, Representation and Abstraction – A Multi-Dimensional Approach

"The keys to coping with complexity are to be found in **two aspects of understanding.** First is the **design** of the thing itself that determines its understandability. Does it have an underlying logic, a foundation that, once mastered, makes everything fall into place? Second is our own set of abilities and **skills**: Have we taken the time and effort to understand and master the structure?

Understandability and understanding: two critical keys to mastery."

(Norman 2011, pp. 4–5)

Defining Complexity

"Complexity is a property of open systems that consist of a large number of diverse, interacting components, often called agents.

Complex systems can be distinguished from other systems by seven features:

connectivity, autonomy of agents, emergent behaviour, non-equilibrium, nonlinearity, self-organisation and co-evolution."
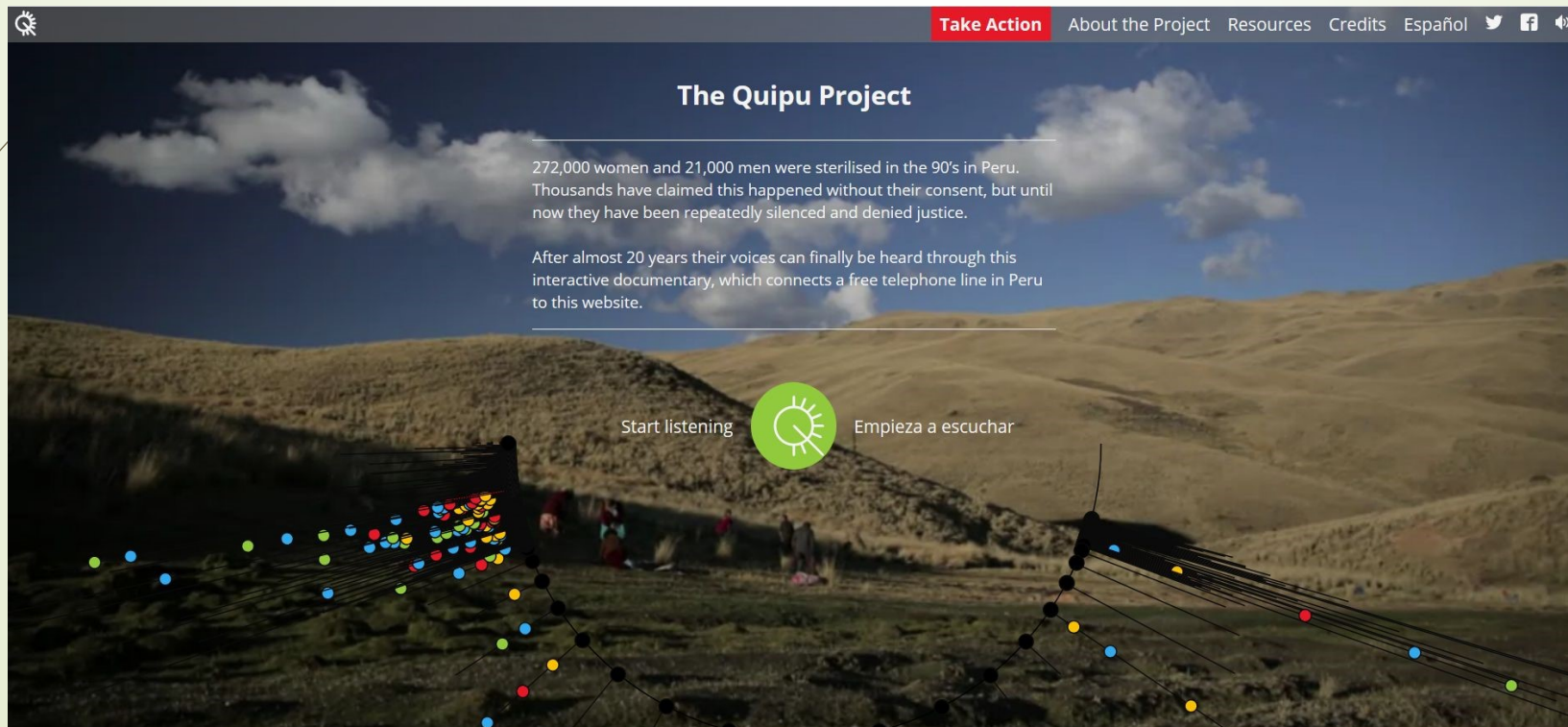
(Rzevski 2015, pp. 191–192)

Defining Complexity

connectivity

autonomy of agents

emergent behavior

non-equilibrium

nonlinearity

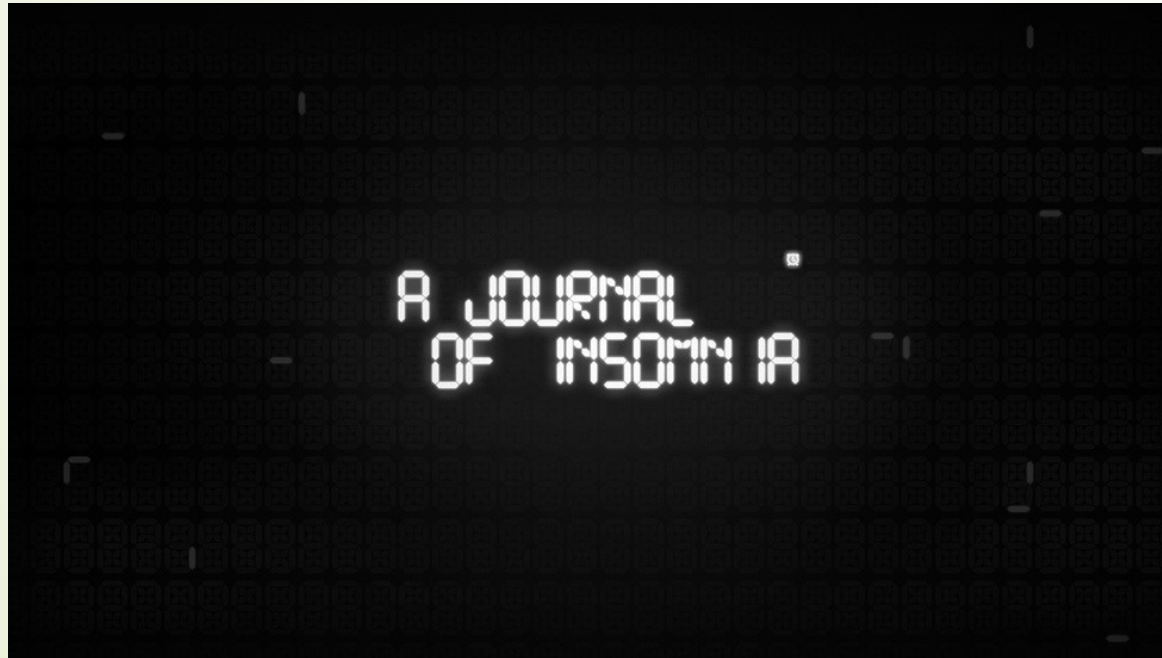self-organisation

co-evolution

Defining Complexity

connectivity

Defining Complexity

autonomy of agents

Defining Complexity

emergent behavior

Defining Complexity

non-equilibrium

Defining Complexity

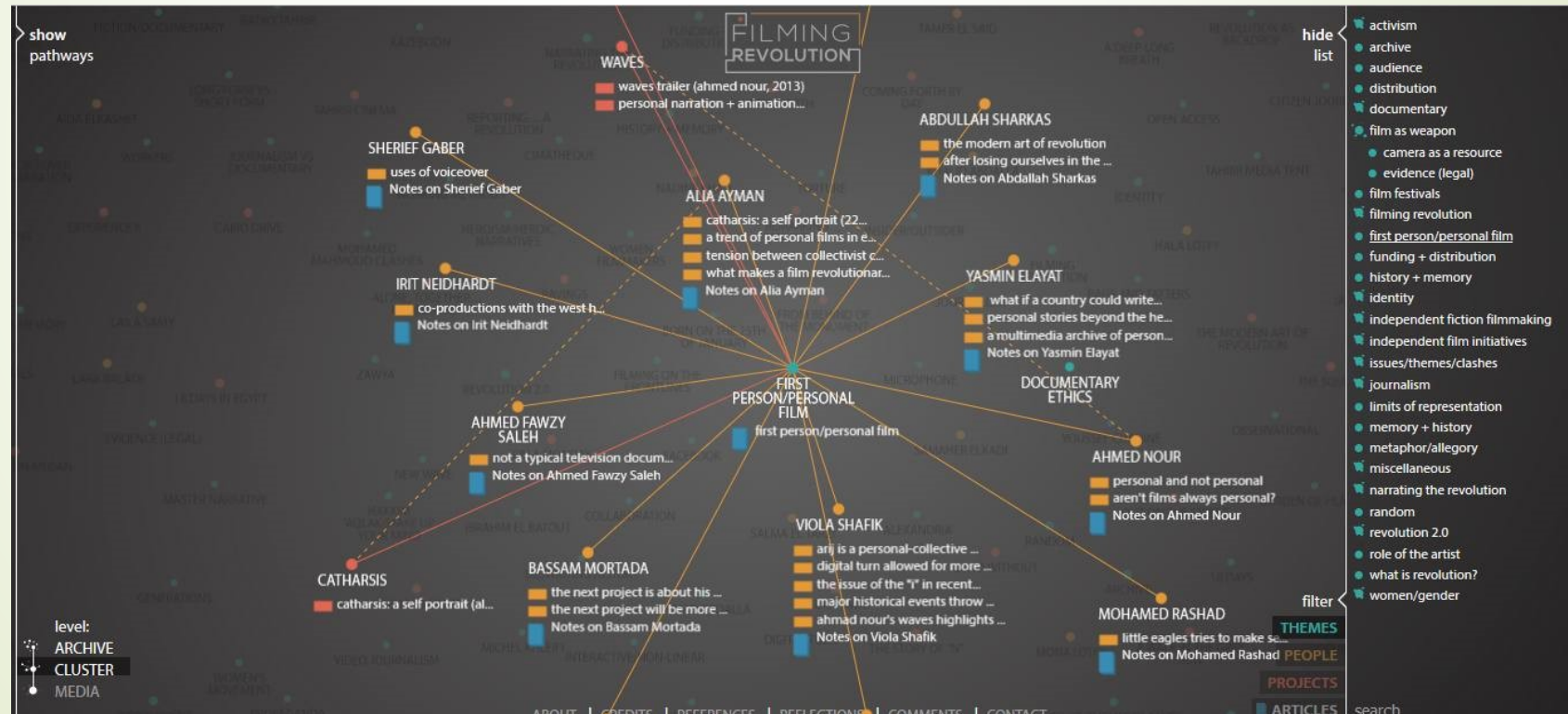**nonlinearity**

Defining Complexity

self-organisation

Defining Complexity

co-evolution

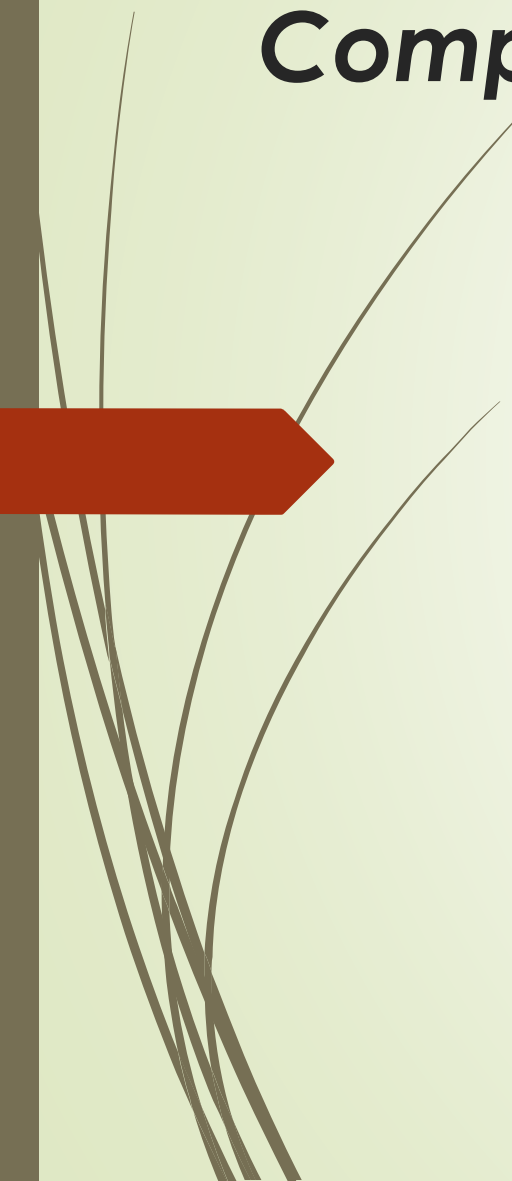# Defining Complexity

co-evolution

Filming Revolution
will be updated and relaunched in **2018**
by **Stanford University Press.**

Please come back soon.

Complexity as Challenge – Complexity as Opportunity

"The dictionary definition for **"complexity"** suggests things with many intricate and interrelated parts […]. The definition for **"complicated"** includes as a secondary meaning **"confusing"**, which is what I am concerned with in my definition of that word. I use the word "complex" to describe the state of the world, the tasks we do, and the tools we use to deal with them. I use the word "complicated" or "confused" to describe the psychological state of a person in attempting to understand, use, or interact with something in the world. […] **"complicated" means "puzzling complexity."**

(Norman 2011, pp. 2–4)

Complexity as Challenge – Complexity as Opportunity

We basically need two things to cope with complexity:

good design

and

literacy

Experiencing Complexity in Digital Documentary: Jonathan Harris' Network Effect

NETWORK EFFECT

HUMAN LIFE ON THE INTERNET

7:07

YOUR TIME HERE IS LIMITED

From your IP address, we see you live in The United States, where the average life expectancy is 78.4 years — so after 7.84 minutes (7:50), your access will be blocked for a day, so you can get back to your life.

12AM

/slēp/

1. Sleeping is going to not be easy tonight.
7 July, 2015 12:53 am — Monique on Twitter

2. Sleeping is so hard when you can't stop thinking. ||
7 July, 2015 12:49 am — Arabian Beauty ♕ on Twitter

3. Sleeping is as hard as understanding physics right now
7 July, 2015 12:44 am — ◈DEER BOY◈ on Twitter

4. Sleeping is my thang, maar dat heb ik al gedaan
7 July, 2015 12:15 am — lia☻ on Twitter

5. Sleeping is stressful because i dream about work and then when im awake i lay there ...
7 July, 2015 12:06 am — James on Twitter

6. Sleeping is seriously my way out from problems I'm too annoyed to deal with
7 July, 2015 12:03 am — de la torre on Twitter

7. Sleeping is nice, you forget everything for a little while."
6 July, 2015 1:16 pm — Ali_A on Twitter

8. Sleeping is never a thing but slow internet connection will always be a thing!
6 July, 2015 1:08 pm — araceñidoza on Twitter

11PM

9. Sleeping is your drug, your bed is your dealer and your alarm clock is the police.
6 July, 2015 12:55 pm — IoT Updates Bot on Twitter

SLEEP

Source: Sentences from Twitter containing "sleeping is"

?

Conclusion
or opening the field

Complexity

"not as a nuisance which needs to be quickly reduced to simple elements and rules, but instead as the source of life – something that is **essential** for the healthy existence and evolution of natural, biological and social systems."

(Manovich 2010, p. 346)

Literature Quoted

Manovich, Lev (2010): "Abstraction and Complexity". In Grau, Oliver (ed.): *Media Art Histories*. Cambridge: MIT Press, pp. 339-354.

Miles, Adrian (2017): a murmuration is not a story. In: Adrian Miles (ed.): *The Material Turn and Interactive Documentary. A Panel*, pp. 6-22. Online: https://zenodo.org/record/1120448/files/MaterialTurn.pdf.

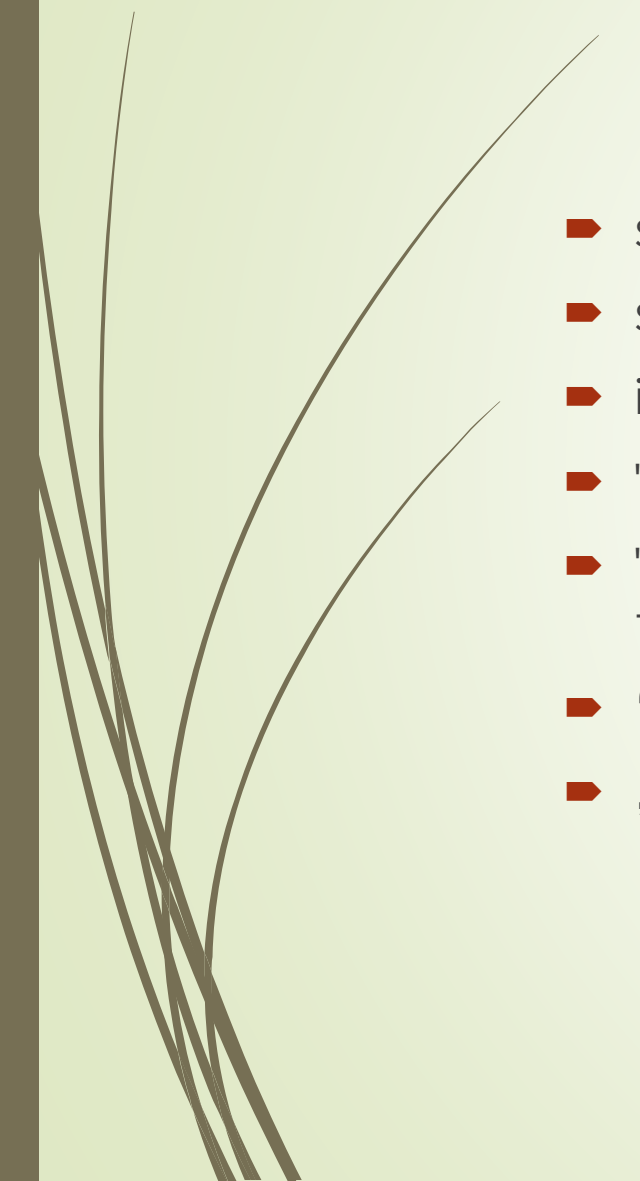Norman, Donald A. (2011): *Living with complexity*. Cambridge: MIT Press.

Rzevski, George (2015): "Complexity as the defining feature of the 21st century". In *International Journal of Design & Nature and Ecodynamics* 10 (3), pp. 191-198.

Bishop, Claire. "Antagonism and Relational Aesthetics." The 'Do-It-Yourself' Artwork: Participation from Fluxus to New Media. Ed. Anna Dezeuze. Manchester: Manchester University Press, 2012. 257–280.

Frankham, Bettina (2011): "Evidentiary to experiential: a poetic approach to documentary". AUT University.

Wrap Up Day 1

- story is a great to solve the problem of the death of knowledge
- sharing stories as distributing knowledge → work together in efficient ways
- information changes by being shared
- "inventions by accident", aka 'evolution'
- "stories are like songs" – "stories are like pills" (it changes what people think if the pill is taken)
- "Stories are programs"
- „Stories can change the behaviour."

Wrap Up Day 1

- CSF – Current Contemporary Story Format
  - creating conflict requires extremes
  - work with extremes, i.e. put the focus on differences instead of seeing similarities → this prevents us from seeing patterns
- democracy is attacked by the CSF!
- "new interest in the complexity of the normal"
- !! a question of focus !!
- ?? the normal – the standardized ?? NO!!! not necessarily!!
- **if we have a larger variety of storytelling we have an enriched view of the world!**

"Materialist philosophies describe the world as a complicated tangle of human and non human, sentient and non sentient things, all of which have agency. This agency is understood as the capacity of things to do. Because things act all amongst themselves in a myriad of ways, quite apart from us, what results is characterised variously as a meshwork (Ingold), actor–network (Latour), entanglement (Barad), or even an assemblage (Deleuze and Guattari). […]

{Miles 2017: 12-13}

What then, do we talk about when we want to talk about an interactive documentary?

One answer that I am proposing, which emerges from the intuition that materialist philosophy provides a significant methodology for interactive documentary, is to talk about what comes to matter for any interactive documentary. This 'coming to matter', which is indebted to Latour's idea of 'matters of concern' (Latour, pp. 87-120 passim), includes those things we think matter for interactive documentary in relation to what might be its story, truth claims, and work as nonfiction. But, as importantly, it also needs to include the deliberate consideration of how an interactive documentary makes these visible things come to matter by what all its many other parts are doing, for it is in the agency of these other parts that an interactive documentary can be made to matter at all."

{Miles 2017: 12-13}