**Slide 1**

# Bend it like Latour

Or to (actually) use Actor-Network Theory
as a research method

Tommaso Venturini
CNRS Centre Internet et Société
tommasoventurini.it

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**Slide 2**

Actor–network theory (ANT) is a theoretical and methodological approach to social theory where everything in the social and natural worlds exists in constantly shifting networks of relationships. It posits that nothing exists outside those relationships. All the factors involved in a social situation are on the same level, and thus there are no external social forces beyond what and how the network participants interact at present. Thus, objects, ideas, processes, and any other relevant factors are seen as just as important in creating social situations as humans. ANT holds that social forces do not exist in themselves, and therefore cannot be used to explain social phenomena. Instead, strictly empirical analysis should be undertaken to "describe" rather than "explain" social activity. Only after this can one introduce the concept of social forces, and only as an abstract theoretical concept, not something which genuinely exists in the world.[1] Although it is best known for its controversial insistence on the capacity of nonhumans to act or participate in systems or networks or both, ANT is also associated with forceful critiques of conventional and critical sociology. Developed by science and technology studies (STS) scholars Michel Callon and Bruno Latour, the sociologist John Law, and others, it can more technically be described as a "material-semiotic" method. This means that it maps relations that are simultaneously material (between things) and semiotic (between concepts). It assumes that many relations are both material and semiotic.

Broadly speaking, ANT is a constructivist approach in that it avoids essentialist explanations of events or innovations (i.e. ANT explains a successful theory by understanding the combinations and interactions of elements that make it successful, rather than saying it is true and the others are false).[2] Likewise, it is not a cohesive theory in itself. Rather, ANT functions as a strategy that assists people in being sensitive to terms and the often unexplored assumptions underlying them.[3] It is distinguished from many other STS and sociological network theories for its distinct material-semiotic approach.

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Conflict theory · Structural functionalism · Symbolic interactionism

Actor-Network Theory
en.wikipedia.org/wiki/Actor–network_theory

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**Slide 3**

**1. Agnosticism**: "the observer … abstains from censoring the actors when they speak about themselves or the social environment. He refrains from judging the way in which the actors analyze the society which surrounds them. No point of view is privileged and no interpretation is censored", Callon, 1984, p. 200).

**2. Generalised symmetry**: "We know that the ingredients of controversies are a mixture of considerations concerning both Society and Nature. For this reason we require the observer to use a single repertoire when they are described… the rule which we must respect is not to change registers when we move from the technical to the social aspects of the problem studied"

**3. Free association**: "Instead of imposing a pre-established grid of analysis upon these, the observer follows the actors in order to identify the manner in which these define and associate the different elements by which they build and explain their world"

Callon, Michel. 1984. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." *The Sociological Review* 32(S1)

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**Slide 4**

**John Law**: "The desire to know clearly what we are talking about, the desire to point and name, to turn what we now call ANT into a 'theory', I believe that all of these things have done harm as well as good. 'Have theory, will travel'".

**Bruno Latour**: "Far from being a theory of the social… it always was, and this from its very inception, a very crude method to learn from the actors without imposing on them an a priori definition of their world-building capacities".

**Michel Callon**: "ANT's main shortcoming is that it is everything but a theory – which explains why it cannot explain anything!… ANT is not a theory. It is this that gives it both its strength and its adaptability. Moreover, we never claimed to create a theory. In ANT the T is too much ('de trop'). It is a gift from our colleagues. We have to be wary of this type of consecration especially when it is the work of our best friends. Timeo danaos et dona ferentes: I fear our colleagues and their fascination for theory".

Law, John, and John Hassard. 1999. *Actor Network and After.*

### Slide 5



To the doctoral students I had the good fortune of accompanying through some of their travails

Figure 1

Latour, Bruno. 2005. *Reassembling the Social An Introduction to Actor-Network Theory.*

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### Slide 6

"This lesson is negative, to be sure" (p. 42);

"the key training for practicing ANT is negative at first" (p. 118);

"ANT is first of all a negative argument ... about how to study things, or rather how not to study them (pp.141,142);

"ANT is a method, and mostly a negative one" (p. 142);

"ANT's lessons will be only negative because clearing the way is what we are after"(p. 174);

"[ANT] is a negative, empty, relativistic grid that allows us not to synthesize the ingredients of the social in the actor's place" (p. 221)

Latour, Bruno. 2005. *Reassembling the Social An Introduction to Actor-Network Theory.*

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### Slide 7

Professor: Tell me, can you imagine one single topic to which Bourdieu's critical sociology, which you are so fond of, could not apply?

Student: But I can't imagine one single topic to which ANT would apply!

Professor: Beautiful, you are so right, that's exactly what I think.

Student: That was not meant as a compliment.

Professor: But I take it as a true one! An application of anything is as rare as a good text of social science.

Student: May I politely remark that, for all your exceedingly subtle philosophy of science, you have yet to tell me how to write one.

On the Difficulty of Being an ANT: An Interlude in the Form of a Dialog

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### Slide 8



Actor-network theory (ANT) is a theoretical and methodological approach to social theory where everything in the social and natural worlds exists in constantly shifting networks of relationships. It posits that nothing exists outside those relationships. All the factors involved in a social situation are on the same level, and thus there are no external social forces beyond what and how the network participants interact at present. Thus, objects, ideas, processes, and any other relevant factors are seen as just as important in creating social situations as humans. ANT holds that social forces do not exist in themselves, and therefore cannot be used to explain social phenomena. Instead, strictly empirical analysis should be undertaken to "describe" rather than "explain" social activity. Only after this can one introduce the concept of social forces, and only as an abstract theoretical concept, not something which genuinely exists in the world.[1] Although it is best known for its controversial insistence on the capacity of nonhumans to act or participate in systems or networks or both, ANT is also associated with forceful critiques of conventional and critical sociology. Developed by science and technology studies (STS) scholars Michel Callon and Bruno Latour, the sociologist John Law, and others, it can more technically be described as a "material-semiotic" method. This means that it maps relations that are simultaneously material (between things) and semiotic (between concepts). It assumes that many relations are both material and semiotic.

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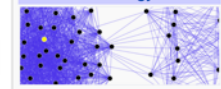
Actor-Network Theory
en.wikipedia.org/wiki/Actor-network_theory

# «Exister, c'est différer»

Gabriel Tarde, 1893.
*Monadologie et Sociologie*

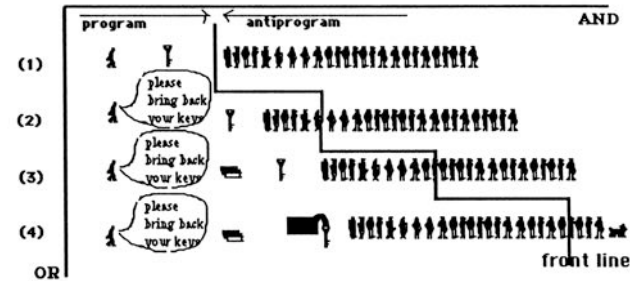**ANT as a theory of action**

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**Figure 9.2**
The hotel manager successively adds keys, oral notices, written notices, and finally metal weights; each time he thus modified the attitude of some part of the "hotel customers" group while he extends the syntagmatic assemblage of elements.

**It takes effort to become an actor**

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For agency to be expressed and consequences produced, that is for a difference to be made, actions need to

(1) involve several actors (acting as collecting);

(2) whose contributions must be coordinated (acting as aligning);

(3) by bending their trajectories (acting as detouring);

(4) and redefining their identities (acting as being).

**4 felicity conditions of actions**

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Law, J., & Callon, M. (1992). The Life and Death of an Aircraft: A Network Analysis of Technical Change. In W. Bijker & J. Law (Eds.), Shaping Technology / Building Society: Studies in Sociotechnical Change (pp. 21–52). MIT Press.
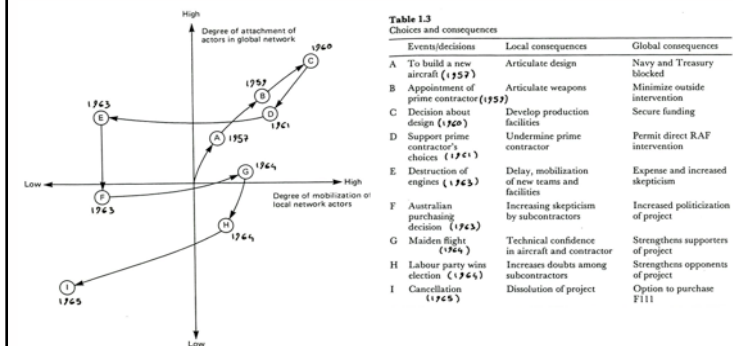


**(1) Acting as collecting**

Slide 13:

Latour, B. (1995). The "Pédofil" of Boa Vista: a Photo-Philosophical Montage. *Common Knowledge*, 4(1), 144–187.



**(2) Acting as aligning**

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Slide 14:

Latour, B. (1995). The "Pédofil" of Boa Vista: a Photo-Philosophical Montage. *Common Knowledge*, 4(1), 144–187.
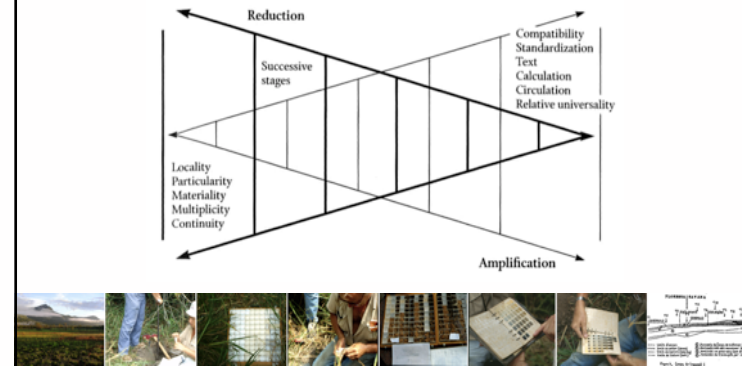


**(2) Acting as aligning**

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Slide 15:

Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. In J. Law (Ed.), *Power, action and belief: a new sociology of knowledge?* (pp. 196–223). London: Routledge.
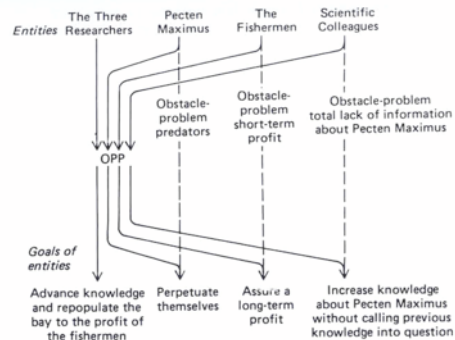


**(3) Acting as detouring**

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Slide 16:

Kohler, R. E. (1994). Lords of the Fly. Drosophila Genetics and the Experimental Life The University of Chicago Press



**(4) Acting as being**

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## Slide 17

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**Actor–Network Theory**
en.wikipedia.org/wiki/Actor–network_theory

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## Slide 18

"Relativism is not the relativity of truth, but the truth of relation"
Deleuze, G. (1988). *Le pli : Leibniz et le Baroque*. Paris: Editions de Minuit.



**Relationism**

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## Slide 19

ANT is

not a theory of actors *and* networks, actor + networks

but a theory of actors *as* networks,  actors = networks
(and of networks *as* actors)

**Actor=Network Theory**

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## Slide 20

actions comme unités de recherche

(caractère de ce qui est unitaire)  (qualité de ce qui forme un tout)

acteur        -        réseau

**Actions as unities**

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**Slide 21**

« L'ethnométhodologie et la sémiotique
sont les deux mamelles de la sciences »

« Pour moi acteur-réseau c'est une version *light*
de l'ethnométhodologie et de la sémiotique »

« Actor-network c'est la sémiotique
plus l'ethnométhodologie pour les nulles »

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**Slide 22**

« Parce que les sciences sociales pensent qu'il y a des acteurs, il y a un cadre matériel, il y a des normes sociales, il y a une société, il y a un système économique etcetera. 99,99% des sciences sociales partent d'un répertoire sur les existants du monde qui est gros comme ça. Et la moindre sémiotique, la moindre ethnométhodologie paf! on commence à respirer »

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**Slide 23**

« De l'ethnométhodologie on a enfin le déploiement des mondes, mais avec un vocabulaire qui reste très naïf sur la pratique, parce que chez Garfinkel c'est quand même essentiellement des règles, des humains, des intentions etcetera;

alors que la sémiotique c'est un fantastique déploiement des mondes, mais … l'inconvénient c'est qu'on dit que c'est que des textes, et dans le langage et pas dans le monde.

Alors il faut avoir le moyen de faire la combinaison … l'ethnométhodologie permettant à la sémiotique de basculer dans la pratique, et la sémiotique permettant à l'ethnométhodologie de saisir enfin le texte comme étant account…

les deux ensemble me paraissent toujours des *organons* essentiels de tout renouvellement des sciences sociales »

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**Slide 24**



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"Since the turn of the century, scores of men and women have penetrated deep forests, lived in hostile climates, and weathered hostility, boredom, and disease in order to gather the remnants of so-called primitive societies. By contrast to the frequency of these anthropological excursions, relatively few attempts have been made to penetrate the intimacy of life among tribes which are much nearer at hand. This is perhaps surprising in view of the reception and importance attached to their product in modern civilised societies: we refer, of course, to tribes of scientists and to their production of science."

Latour, Bruno, and Steve Woolgar. 1979. Laboratory Life. The Construction of Scientific Facts. Sage.

## Anthropology of the laboratory

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"ethnography lets us see the relative messiness of practice. It looks behind the official accounts of method (which are often clean and reassuring) to try to understand the often ragged ways in which knowledge is produced in research"

Law, John. 2004. *After Method: Mess in Social Science Research*. Routledge.

"Paying the most commonplace activities of daily life the attention usually accorded extraordinary events"

Garfinkel, Harold. 1967. *Studies in Ethnomethodology*. Prentice Hall.

## Ethnography, why

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**1. Experiencing** (aka participant observation) refers to the direct exposure of the researchers to phenomena they study.

**2. Enquiring** (aka interviews) refers a specific type of ethnographic intervention that consists in asking questions to solicit information not otherwise available.

**3. Examining** (aka archival work) refers to the work of sieving through written documents and other forms of material records left by or about the phenomenon under investigation.

Wolcott, Harry. 2008. *Ethnography a Way of Seeing*. Altamira Press.

## Three ethnographic techniques

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Spradley, James P. 1980. *Participant Observation*. Rinehart and Winston.

## 1. Experiencing

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"In ethnographic interviewing, both questions and answers must be discovered from informants"

Spradley, James P. 1979. *The Ethnographic Interview* Holt, Rinehart and Winston

It could be said of ethnography that until you know the question that someone in the culture is responding to you can't know many things about the responses. Yet the ethnographer is greeted, in the field, with an array of responses.

He needs to know what question people are answering in their every act. He needs to know which questions are being taken for granted because they are what "everybody knows" without thinking... Thus the task of the ethnographer is to discover questions that seek the relationship among entities that are conceptually meaningful to the people under investigation (p. 144).

Black, Mary and Duane Metzger, 1965 "Ethnographic description and the study of law." In *The Ethnography of Law*, Laura Nader, ed. American Anthropologist 67(2): 141-165.

## 2. Inquiring

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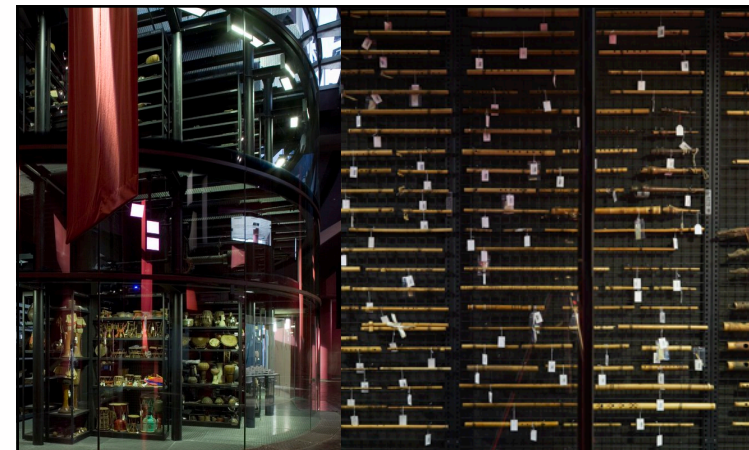


## 3. Examining

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## Armchair ethnography

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"Armchair anthropology was not a passive pursuit, with minimal analytical reflection that simply synthesized the materials of other writers. Nor was it detached from the activities of informants who were collecting and recording data in the field. In the 19th century, practitioners were highly attuned to the problems associated with their research techniques and continually sought to transform their methodologies"

"Within the confines of their study, these naturalists stockpiled evidence and conducted comprehensive cross-comparative analyses of materials. They would identify patterns within their data sets, and discard information that looked untrustworthy"

Sera-Shriar, Efram. 2014. "What Is Armchair Anthropology? Observational Practices in 19th-Century British Human Sciences." *History of the Human Sciences* 27(2): 26–40.

## Armchair ethnography

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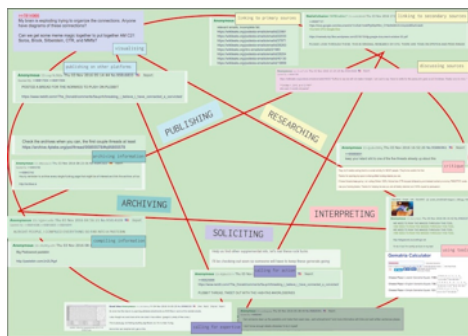
Tuters, Marc, Emilija Jokubauskaitė, and Daniel Bach. 2018. "Post-Truth Protest: How 4chan Cooked-up the Pizzagate Bullshit Introduction." *M/C Journal* 21 (3). http://journal.media-culture.org.au/index.php/mcjournal/article/view/1422.

**Digital ethnography**

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**Actor–Network Theory**
en.wikipedia.org/wiki/Actor–network_theory

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"semiotics [is] the study of how meaning is built, but the word 'meaning' is taken in its original nontextual and nonlinguistic interpretation; how one privileged trajectory is built out of an indefinite number of possibilities; in that sense, semiotics is the study of order building or path building"

Akrich, Madeleine, and Bruno Latour. 1992.
"A Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies"
In *Shaping Technology / Building Society*. MIT Press, 259–64.

**ANT semiotic turn**

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1. Describe the internal balance of forces

2. Define the actants through their action

**Two semiotic techniques**

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**Slide 37**



Eco, Umberto. 1962. Opera Aperta. Bompiani.

Eco, Umberto. 1979. Lector in Fabula. Bompiani.

## 1. Describe the internal balance of forces

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**Slide 38**

"Sociology is usually interested in the whys of the social. It grounds its explanations in somewhat stable agents or frameworks. Actor network's material semiotics explore the hows. In this non-foundational world nothing is sacred and nothing is necessarily fixed. But this in turn represents a challenge: what might replace the foundations that have been so cheerfully undone?

… Actor network theory… responded to this challenge in the only non-foundational way it could, by exploring the logics of network architecture and looking for configurations that might lead to relative stability"

Law, John. 2009. "Actor Network Theory and Material Semiotics."
In *The New Blackwell Companion to Social Theory*, ed. Bryan S. Turner. London: Blackwell, 141–58.

## An internalist yet non-reductive style of description

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**Slide 39**

| RESEARCH OPERATIONS | RESEARCH PRODUCTS |
|---|---|
| Chose a seemingly simple object (a time-honored institution, a stable piece of technology, a successful organization, an established idea, etc.). | overview observations |
| Show that this apparently single object is in fact a black box containing and aligning a network of actions and actors | evidence of underlying complexity |
| Describe how such a flourishing complexity is curbed (temporarily at least) through a series of black-boxing arrangements | traces of relational arrangements |
| Reflect on how these arrangements could be modified to make them more just and inclusive | occasions for intervention |

## 1. Describe the internal balance of forces

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**Slide 40**

***Actant:*** Whatever acts or shifts actions, action itself being defined by a list of performances through trials; from these performances are deduced a set of competences with which the actant is endowed; the fusion point of a metal is a trial through which the strength of an alloy is defined; the bankruptcy of a company is a trial through which the faithfulness of an ally may be defined; an actor is an actant endowed with a character (usually anthropomorphic).

Akrich, Madeleine, and Bruno Latour. 1992.
"A Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies"
In *Shaping Technology / Building Society*. MIT Press, 259–64.

## 2. Define the actants through their actions

## Slide 41

Propp, Vladimir. 1928
*Morphology of the Folktale*



| Character Types | Definition | Example |
|---|---|---|
| The Hero | The Hero is the character that is often looking for something, who's in some sort of a quest or mission, to solve something. It can be either gender. A good example could be Batman. | Shrek is the one who saves fiola in love with the princess Fiona This proves he is the Hero in the film. |
| The Villian | The Villian is the character who stops the hero from succeeding. The villian will do what ever it takes to not let the hero win. For example Prince charming as 'Shrek' who tries to get Fiona, and take her away from Shrek and make her his. | Lord Farquaad is obviously the villian as he is the one who sends all of them to the swamp. |
| The Donor | The Donor is the one who gives the hero something like a special power to help the hero, they help to complete the hero's quest. | The muffin man or donkey as he creates a giant gingerbread man to break through the castles. |
| The Princess | The Princess is used as a prize of reward for the hero. The typical story is that the hero is on a mission to try getting the princess to marry him. | Fiona is obviously the princess, as the guts race and falls in love with the hero. |
| The Princess's Father | The Princess's Father is an authority figure, and offers reward to hero. The reward might be a prince or new car. | He is definitely the princess's father. He is the shrek's side the whole time and helps him with everything. |
| The Helper | The Helper is the one that helps the hero. The helper will either work along side the hero helping with their mission or be helping in a different way but at he narrative and it proves wrong. | Donkey is like Shreks brothround. He is the shrek's side the whole time and helps him with everything. |
| The False Hero | The False Hero is the one that takes the credit for the hero's actions, and tries to marry the princess. Tryies to make out its a good guy but at the same loves and proves wrong. | Prince charming is the false hero as he's the one who tries to marry the princess & makes himself sounds good. |

**Propp's theory in 'Shrek'.**

*(handwritten notes on right side of slide)*
Harry Potter and the Philosopher's Stone.
Star Wars A New Hope; synopsis

Luke Skywalker is an orphan living with his uncle and aunt on the remote wilderness of Tatooine.

He is rescuced from aliens by wise, bearded Ben Kenobi, who turns out to be a Jedi Knight.

Ben reveals to Luke that Luke's father was also a Jedi Knight, and was the best pilot he had ever seen.

Luke is also instructed in how to use the Jedi light-sabra as he too trains to become a Jedi.

Luke has many adventures in the galaxy and makes new friends such as Han Solo and Princess Leia.

In the course of these adventures he distinguishes himself as a top X-wing pilot in the battle of the Death Star, making the direct hit that secures the Rebels victory against the forces of evil.

Luke also sees off the threat of Darth Vader, who we know murdered his uncle and aunt.

In the finale, Luke and his new friends receive medals of valour.

**2. Define the actants through their actions**

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## Slide 42



"actantial model" (*Sémantique Structurale. Recherche de Méthode,* 1966)
"canonical narrative schema" (*Du Sens. Essais Sémiotiques,* 1970)

**Algirdas Greimas' version**

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## Slide 43

Shifting the focus from essence to action
purposely neglect the general differences between

1. human/non-human actors
2. individual/collective actors

in order to observe:

1. the interferences between actors of different type
2. other more specific differences

**The consequences of taking
a pragmatic stance**

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## Slide 44



**Actor–Network Theory**
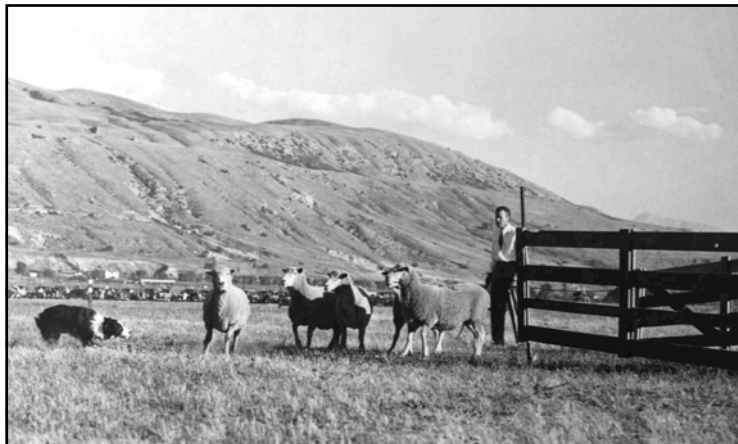en.wikipedia.org/wiki/Actor–network_theory
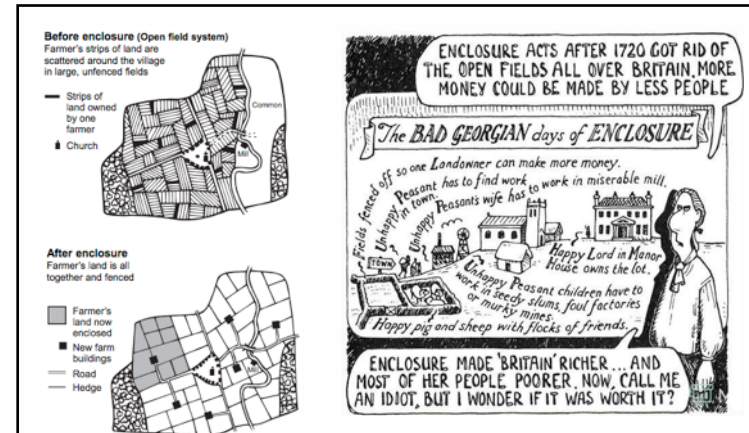
Human & non–human interferences

45



Human & non–human interferences

46



Human & non–human and more specific differences

47



Human & non–human and more specific differences

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## Slide 49

**Actor–Network Theory**
en.wikipedia.org/wiki/Actor–network_theory

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## Slide 50

Collective tendencies have an existence of their own; they are forces as real as cosmic forces, albeit of another sort; they too affect the individual from without, albeit through other channels. The proof that the reality of collective tendencies is no less than that of cosmic forces, is that this reality is demonstrated in the same way, namely by the uniformity of effects.
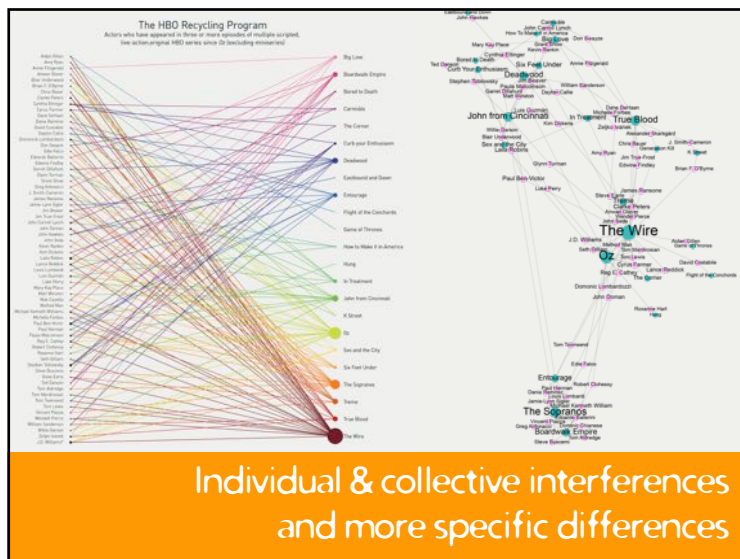
Durkheim, E. (1897). *Le Suicide.*

A social thing [...] devolves and passes on, not from the social group collectively to the individual, but rather from one individual [...] to another individual, and that, in the passage of one mind into another mind, it is refracted. The sum of these refractions, from the initial impulse of an inventor, a discoverer, an innovator or modifier [...] is the entire reality of a social thing at a given moment; a reality which is constantly changing, just like any other reality, through imperceptible nuances.
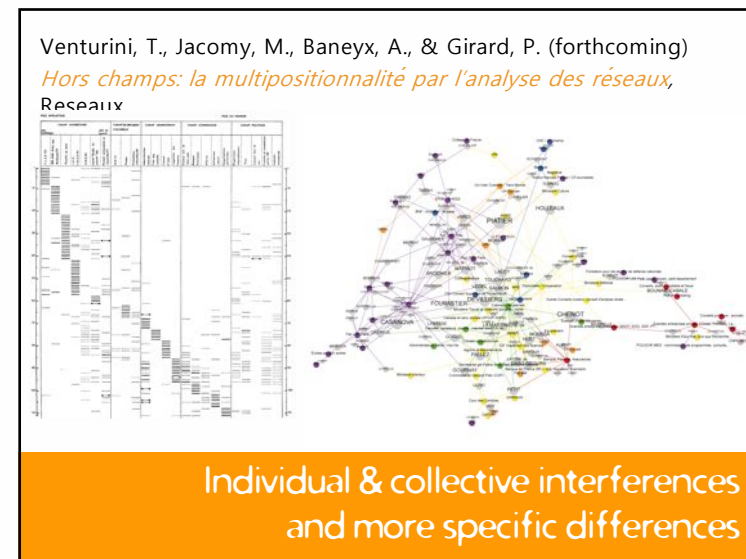
Tarde, G. (1995). *Les Deux éléments de la sociologie*

**social structures VS repetition and variation**

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## Slide 51

**Individual & collective interferences and more specific differences**

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## Slide 52

Venturini, T., Jacomy, M., Baneyx, A., & Girard, P. (forthcoming)
*Hors champs: la multipositionnalité par l'analyse des réseaux,*
Reseaux

**Individual & collective interferences and more specific differences**