

## FOR THE INTREPID WORKSHOP (TOPIC 3 SLIDE#24 AND FOLLOWING)

The power point that I used in Barcelone is a bit heavy due to videos and drawings.

The following slides, presented elsewhere could be of Help, associated to these references:

(total speech act) Austin, J. L. (1962). *How to do Things with Words: The William James Lectures delivered at Harvard University in 1955*. Oxford: Clarendon.

(iterability) Butler, Judith. *Bodies that matter: On the discursive limits of sex*. Taylor & Francis, 2011.

(embodiment) Sedgwick, Eve Kosofsky, and Adam Frank. *Touching feeling: Affect, pedagogy, performativity*. Duke University Press, 2003.

(compositionist manifesto) Latour, B. (2010). An attempt at a “Compositionist Manifesto”. *New Literary History*, 41(3), 471-490.

(triangle with worldview, moral values and material constraints) Vanderlinden, J.-P., Baztan, J., Touili, N., Kane, I. O., Rulleau, B., Simal, P. D., . . . Zagonari, F. (2017). Coastal Flooding, Uncertainty and Climate Change : Science as a Solution to (mis)Perceptions? - A qualitative enquiry in three European coastal settings. *Journal of Coastal Research*, SI77, 127-133.

# Art and science integration : three case studies -

**KEYNOTE ADDRESS: MICRO2016 INTERNATIONAL CONFERENCE  
FATE AND IMPACT OF MICROPLASTICS IN MARINE ECOSYSTEMS:  
FROM THE COASTLINE TO THE OPEN SEA,  
LANZAROTE MAY 25-27, 2016**

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# ART AND SCIENCE INTEGRATION : WHAT?

Art and science integration is about conducting an hybrid practice of scientific and artistic research.

- Artists are researcher
- Scientists are researcher
  - They work tightly together.

It is not about

- Instrumentalizing scientists to renew artistic practices
- Instrumentalizing artists to better convey the scientific discourse
- It is not about scientist expressing their creativity through their hobby
  - It is about not stepping on complicated susceptibilities

# ART AND SCIENCE INTEGRATION : THEN WHY?

It is about

- Rearticulating knowledge
- Making sense of art, and of subjects
- Cross fertilization in times of questioning

A scientific practice leading to

reconceptualization

renewed methods  
embeddedness of  
scientific knowledge  
at the production  
phase, but not only

*Holism, this time including culture*

Data collection device

*Performativity*



# **ART AND SCIENCE INTEGRATION : HOW AND WHO?**

# IN A NUTSHELL PART 2

=> What can philosophy teach us in order to justify AND achieve successfully such a reconfiguration

=> What can other experiences stemming from addressing other coastal/marine issues can teach us.

=> How could we conceptualize our ability to do things with words

All this connected to the specifics of looking into plastic issues

# IN A NUTSHELL PART 3

## Rules

1. You will determine the content of my talk
2. Yet your choice is limited to three options
3. You will thus vote for one, and only one of these topics
4. I will do the counting and final arbitration

=> 1 HOW DO WE CONCEPTUALIZE SUCCESSFUL INTERDISCIPLINARY PRACTICES

=> 2 HOW IS INTERDISCIPLINARY WORK CONDUCTED AT THE COAST

=> 3 HOW DO WE GENERATE CHANGE BY PRODUCING (SCIENTIFIC) WORDS.

All this connected to the specifics of looking into plastic issues



**HOW DO WE  
CONCEPTUALIZE  
SUCCESSFULL  
INTERDISCIPLINARY  
PRACTICES?**

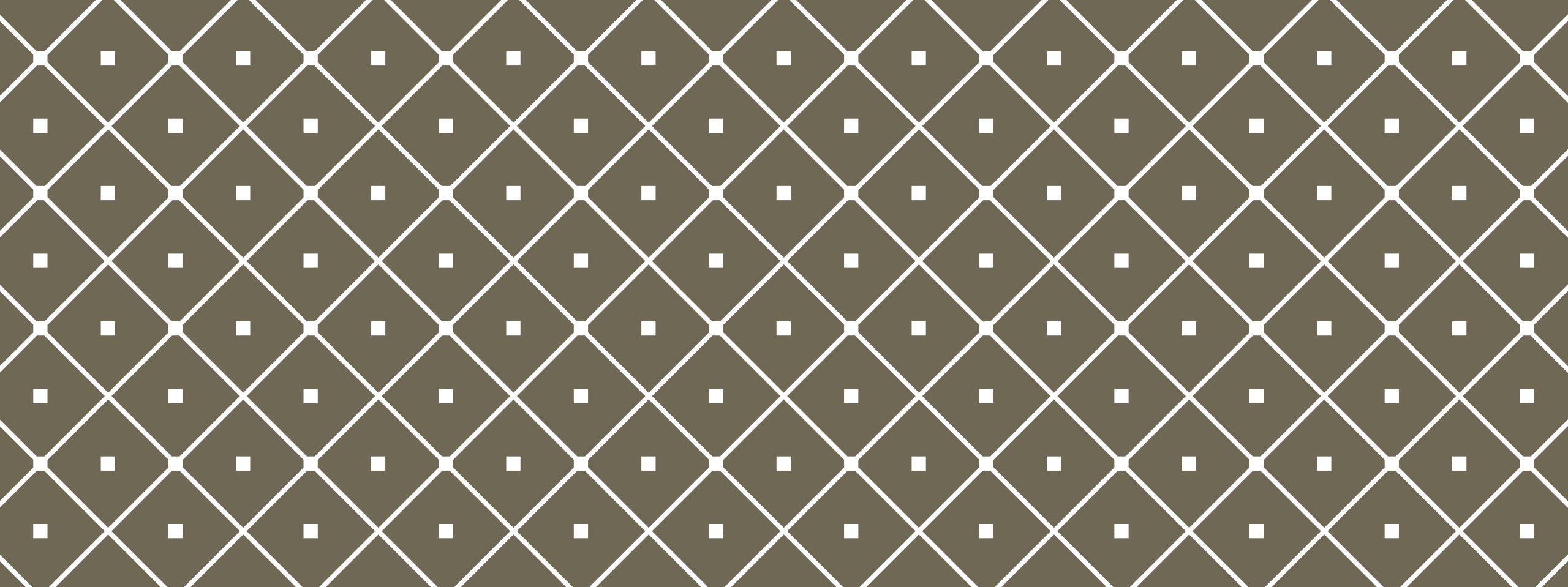




HOW IS  
INTERDISCIPLINARY  
WORK  
CONDUCTED AT  
THE COAST, ON  
THE OCEAN?

3

HOW DO WE  
GENERATE  
CHANGE BY  
PRODUCING  
(SCIENTIFIC)  
WORDS?



**TOPIC 1 : HOW DO WE CONCEPTUALIZE  
SUCCESFULL INTERDISCIPLINARY  
PRACTICES**

# HORCKEIMER AND ADORNO - BLUMENBERG

Two philosophical thoughts very much and very differently impacted by Nazism and the second world war.



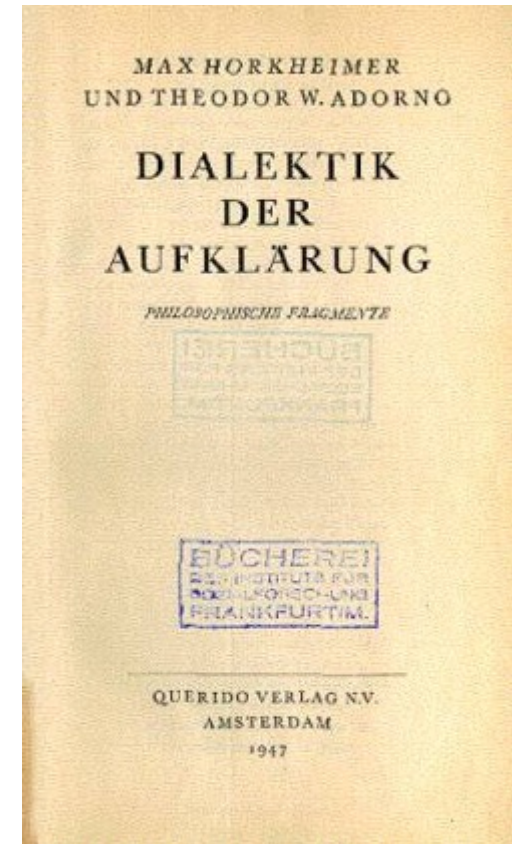
# DIALECTIC OF ENLIGHTENMENT HORCKEIMER AND ADORNO

We, modern, enlightened human, did lack the discipline needed to assess, question, the practices that led to our takeover of the world:

1. We established artificial segmentations of reality.
2. We asserted undue control over nature and other humans.

=> This opens three leads

1. Need for reflexivity
2. Need to acknowledge that the world is One
3. We must question, and get rid of, relationships of domination



# THE LEGIBILITY OF THE WORLD

Metaphors are the closest thing to reality (the further from ideology):

1. Metaphor of the Book of nature:
2. Why would we want to access the book of nature?
  1. To be amazed by the beauty of nature
  2. To become the equivalent of its creator.



# INTERDISCIPLINARITY AND REFLEXIVITY ARE INTERTWINED

Was it just possible to follow this demonstration?

- No!!! Too many shortcuts, lets simply connects some of the key concepts by turning them into metaphors

Failure of our unique ability to transform knowledge into action that protects us from ourselves.

1. Find its origin in segmentation => we need to reconnect the disconnections
2. Find its origin in domination => we need to question our actions

Yet fighting disconnection may be generated by a desire to ascertain power – while what is needed is to face the wonders that the world offers to us.

=> Extreme care must be taken when engaging into interdisciplinary practices

This care may take the form of a deeply embraced practice of reflexivity.

# THREE MODES OF INTERDISCIPLINARY PRACTICES

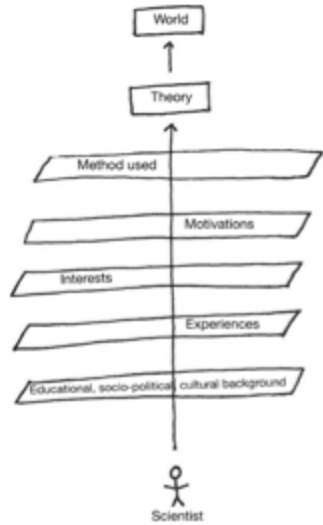


Figure 2: Linear 'benign introspection':  
Reflexivity to extend scientific legitimacy

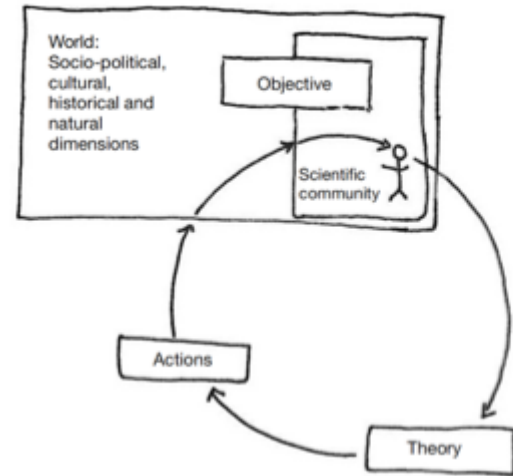
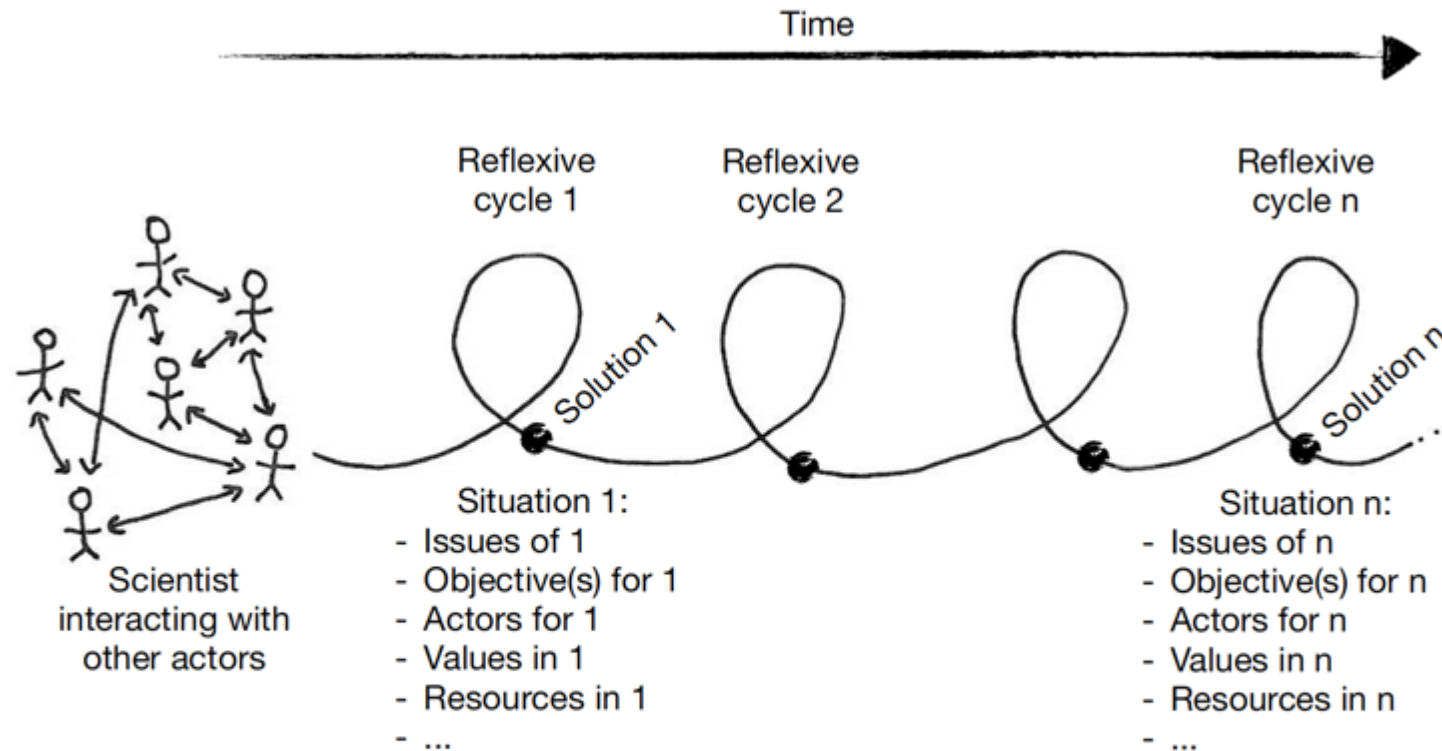


Figure 3: Action - reflection cycle: Reflexivity to solve issue-based problems

- Blanchard, A. (2011). *Reflexive interdisciplinarity. Supporting dialogue on the role of science for climate change.* (PhD), Bergen University/ Université de Versailles Saint-Quentin-en-Yvelines, Bergen/Guyancourt.
- Blanchard, A., & Vanderlinden, J.-P. (2010). Dissipating the fuzziness around interdisciplinarity: the case of climate change research. *Surveys and Perspectives Integrating Environment and Society (S.A.P.I.EN.S)*, 3(1). Retrieved from <http://sapiens.revues.org/990>
- Blanchard, A., & Vanderlinden, J.-P. (2013). Prerequisites to interdisciplinary research for climate change: lessons from a participatory action research process in Île-de-France. *International Journal of Sustainable Development*, 14(1/2), 1-22.



# THREE MODES OF INTERDISCIPLINARY PRACTICES



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Figure 4: Integrated, adaptive and critical spiral: Reflexivity to empower

# TRICKS AND TOOLS

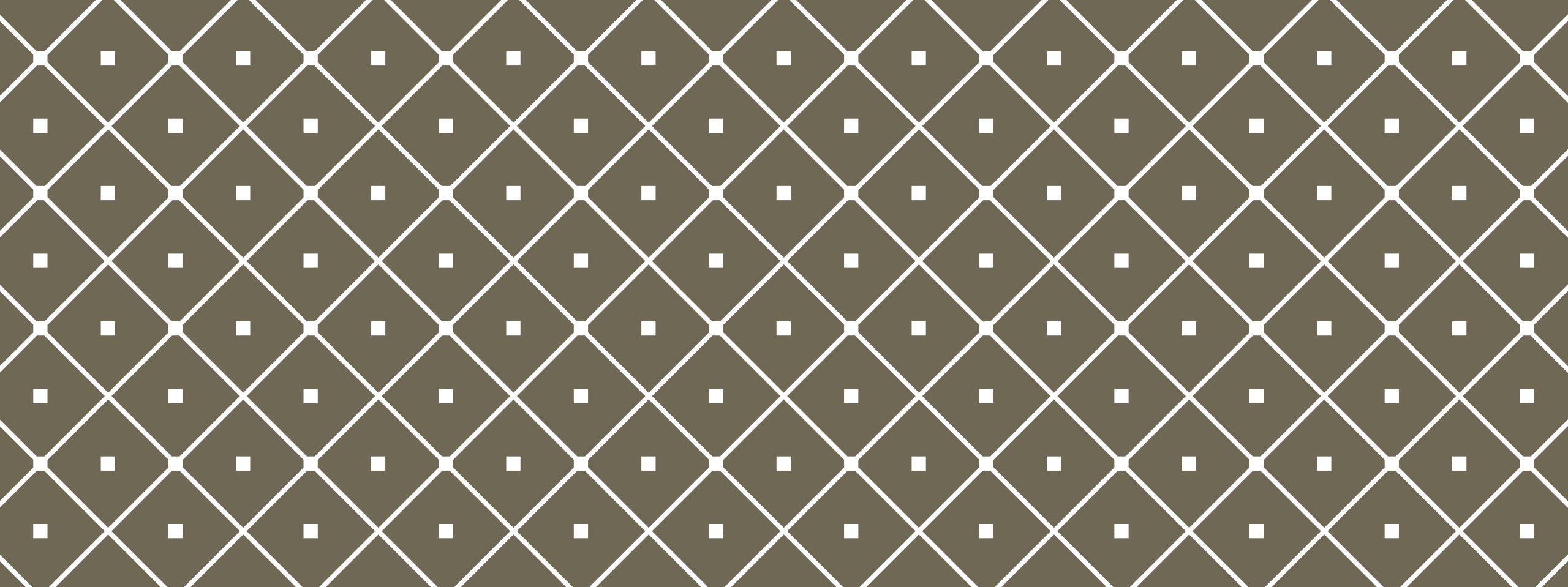
Share your rules explicitly

Be explicit about power imbalance

Share your intentions explicitly

**Use metaphors, both for what you analyze jointly  
AND for your practice**

Do not try to guess what the other thinks, use language to be explicit about what you think about the subject and the process.



# TOPIC 2: HOW IS INTERDISCIPLINARY WORK CONDUCTED AT THE COAST

Four short stories  
Fisheries  
ICZM  
Aquaculture  
Adaptaiton to CC



# FISHERIES

A story on bionomics and institutions



# AQUACULTURE

A story on the Neolithic revolution, and the last frontier  
and also on institutions, risk and flexibility.



# ICZM

A story on the joys of working together, and on the discovery of concepts that may not be fit for function.



# ADAPTATION TO CC

A story on the never ending discussions as to what words may mean, strategy polysemy, and fads.



# TOPIC 3: HOW DO WE GENERATE CHANGE BY PRODUCING (SCIENTIFIC) WORDS?

Lessons from  
Fisheries  
ICZM  
Aquaculture  
Sea level rise



## THE STARTING POINT

Performativity is the process by which semiotic expression (in language or a symbol system) produces results or real consequences in extra-semiotic reality, including the result of constructing reality itself.

# AVATARS OF PERFORMATIVITY



Identified/created/invented the concept

1. Austin

Cavell, Searle

Total speech  
act



1;  
Context  
Intentions  
Finality  
Public

# AVATARS OF PERFORMATIVITY



Identified/created/invented the concept

Austin, Cavell, Searle	Derrida, de Man
Total speech act	Iterability,



Context  
Intentions  
Finality  
Public  
Always the  
same, always  
different

# AVATARS OF PERFORMATIVITY



Identified/created/invented the concept

Austin, Cavell, Searle	Derrida, de Man, Butler
Total speech act	Iterability, identity



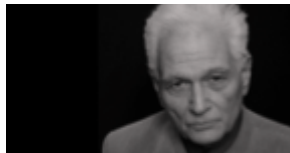
Context  
Intentions  
Finality  
Public  
Always the  
same, always  
different  
Iterability is a  
source of  
stability and of  
instability

# AVATARS OF PERFORMATIVITY



Identified/created/invented the concept

Austin, Cavell, Searle	Derrida, de Man, Butler	Buttler, Kosofsky- Sedgwick
Total speech act	Iterability, identity	Embodiment of utterances



Context  
Intentions  
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# AVATARS OF PERFORMATIVITY



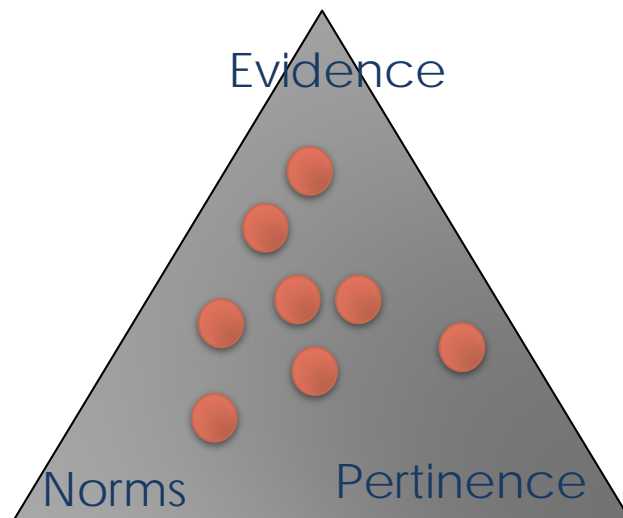
Identified/created/invented the concept

Austin, Cavell, Searle	Derrida, de Man, Butler	Buttler, Kosofsky- Sedgwick	And other variations
Total speech act	Iterability, identity	Embodiment of utterances	Is liberalism a product of economic science



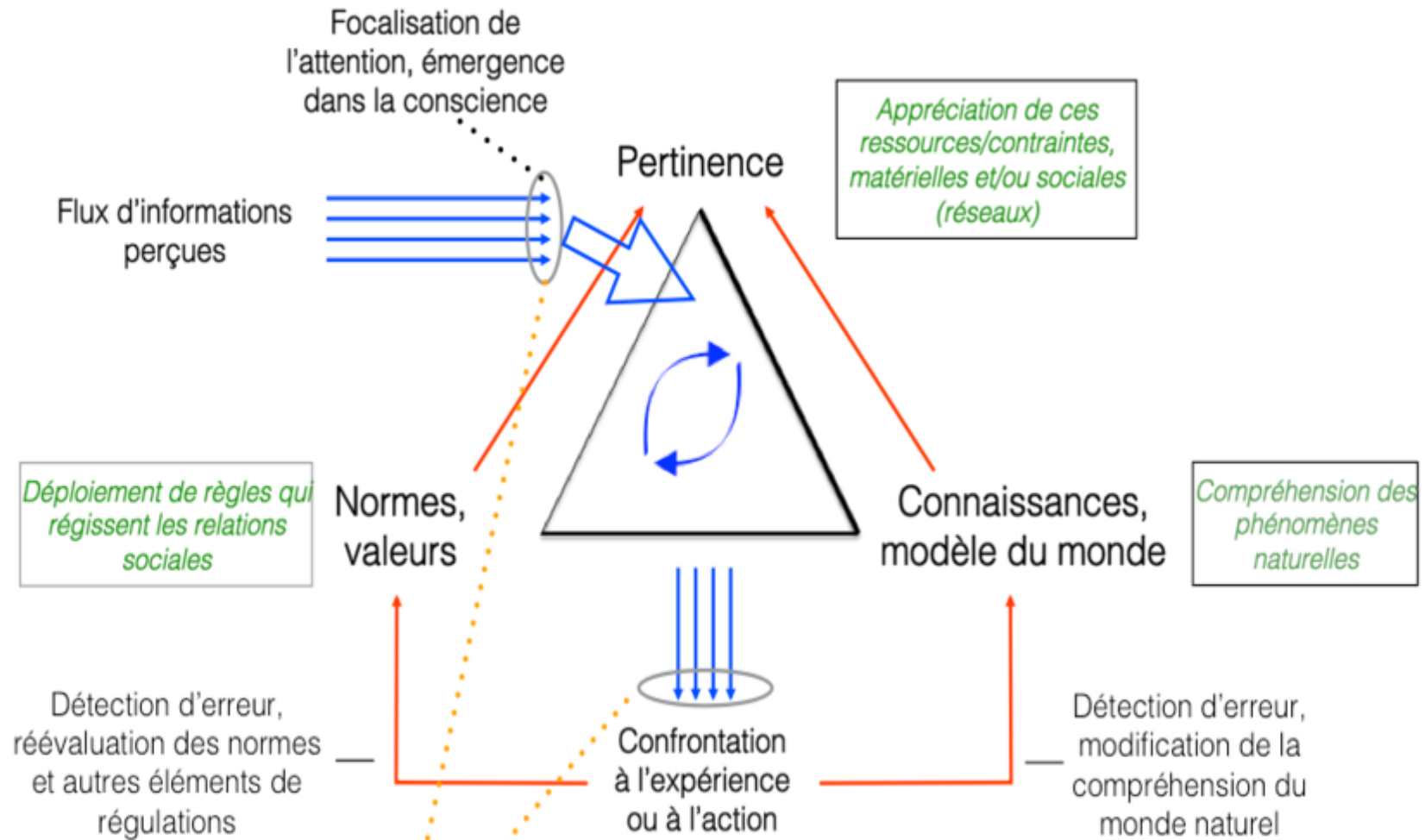
## Another way to look at it

- Attitudes/Actions be the results of a balance between three dimensions
  - Material constraints ← ←
  - Moral constraints ← ← ←
  - Understanding of the way the world functions ←
- These constraints will appear under the guise of
  - Pertinence claims ← ←
  - Normative claims ← ← ←
  - Evidence claims ←





# PERFORMATIVITY, PERCEPTIONS AND SOCIAL REPRESENTATIONS



Remvikos, 2014  
Interventions/Performativité

• Flux d'informations  
Opérations mentales

# SEMIOTIC EXPRESSION?

Scientific discourse

Science based narratives big and small

as it connects with, relate to, our desire for action

# WHAT DO WE DO THEN?

We open three lines of questioning when we produce discourse

Coming from analytical philosophy:

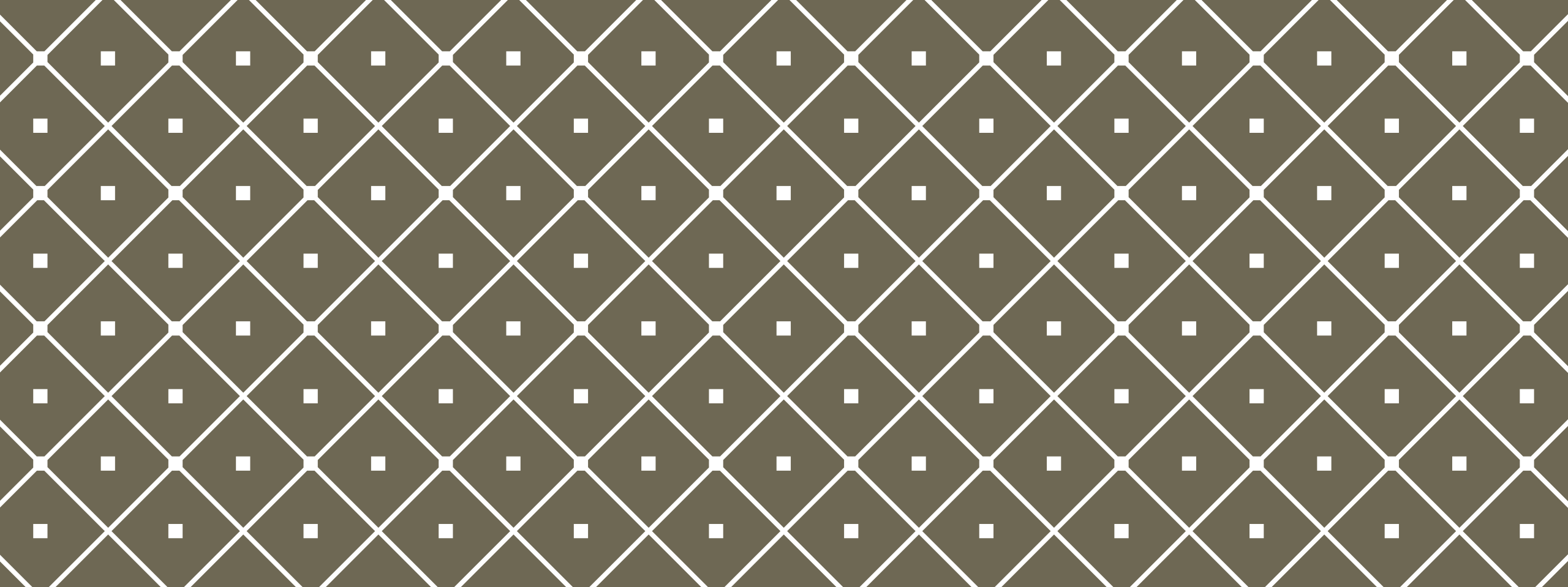
- Context, finality, intentions, and public

Coming from continental philosophy

- Reiterations and contexts, we do not take for granted the uniqueness of meaning

Coming from risk studies

- We try to frame words, ours and those we hear with values, material constraints and paradigms, we look for dissonance, we make them explicit.



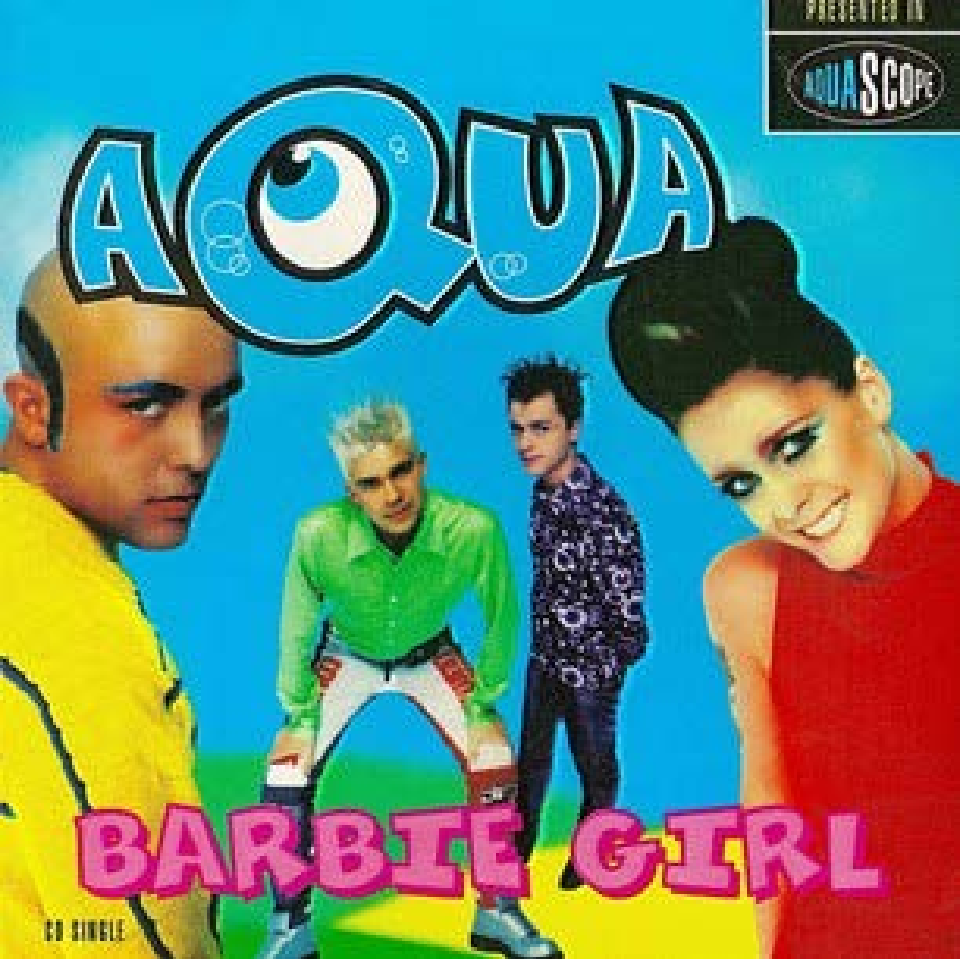
# PLASTICS

Ubiquitous  
Appreciated



**UBIQUITOUS**

Plastic is



WELL LIKED

Plastic is

# A FASCINATING COUPLE OF DAYS

Ubiquity and use manifests itself through a wealth of multi scale local (and not so local) actions.

We are near where theory and or experience tells us we should be.

Yet why is there still so much plastic lying around.

The world is amazing, lets keep it this way

■ **HOW?**