

# Visual communication in EIA: stakeholders' perspectives



**Ana Roque de Oliveira**

*Portugal*

ana\_roque\_oliveira@yahoo.com



# Visual communication in EIA: stakeholders' perspectives

Ana Roque de Oliveira ◆ Sofia Bento ◆ Maria Partidário ◆ Angus Morrison-Saunders



# Visual communication in EIA: stakeholders' perspectives

Ana Roque de Oliveira ◆ Sofia Bento ◆ Maria Partidário ◆ Angus Morrison-Saunders





# Inclusive Public Participation & Visual Literacy

Ana Roque de Oliveira

Maria Partidário



“  
*[Image] is the  
worthiest, most  
striking translation of  
thought*”

Frédéric Mistral (1830 – 1914)







**António Damásio**

*“Without emotion we  
do not reason well.”*



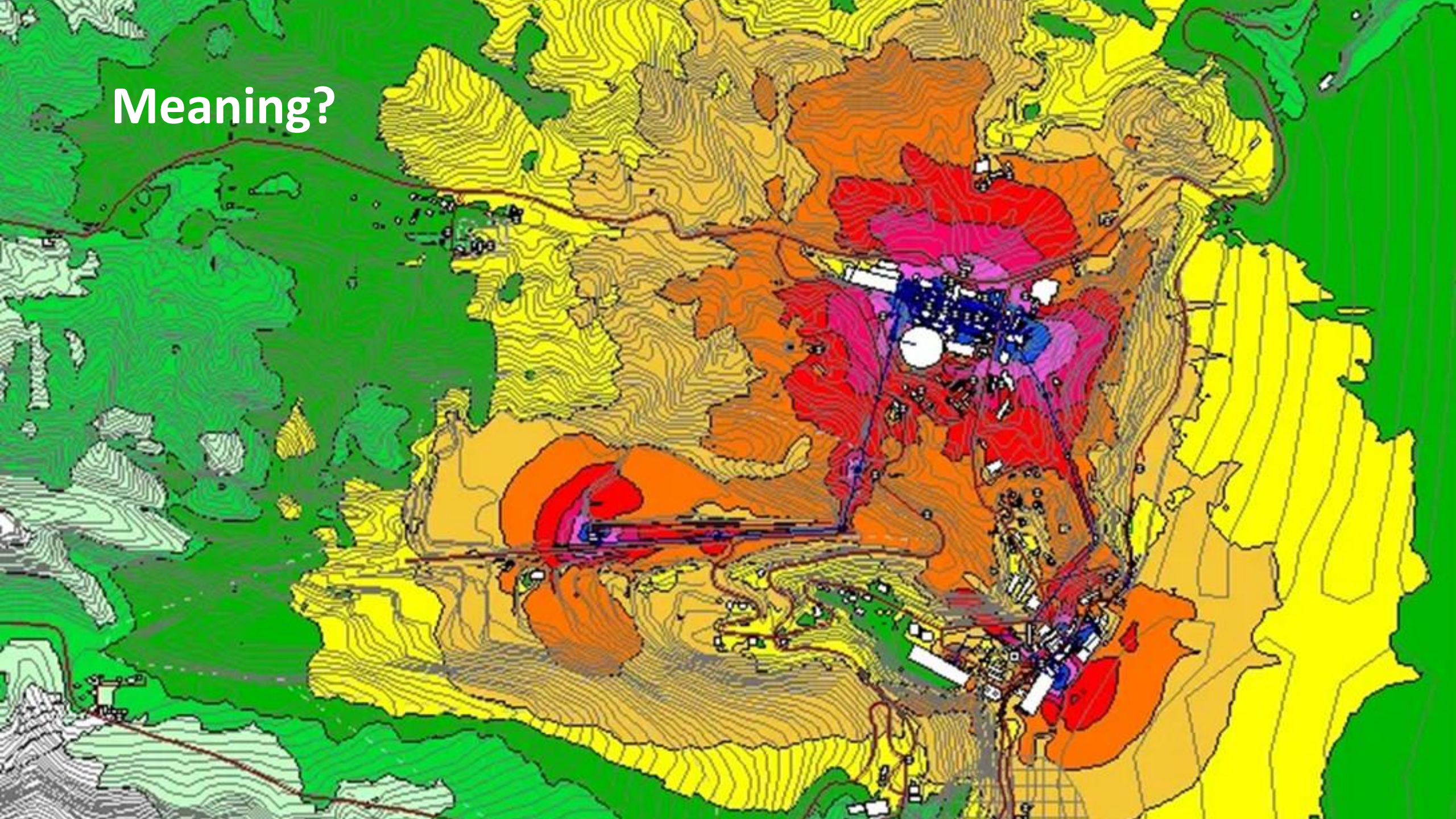
© Luiz Munhoz



K.I.S.S.



Meaning?



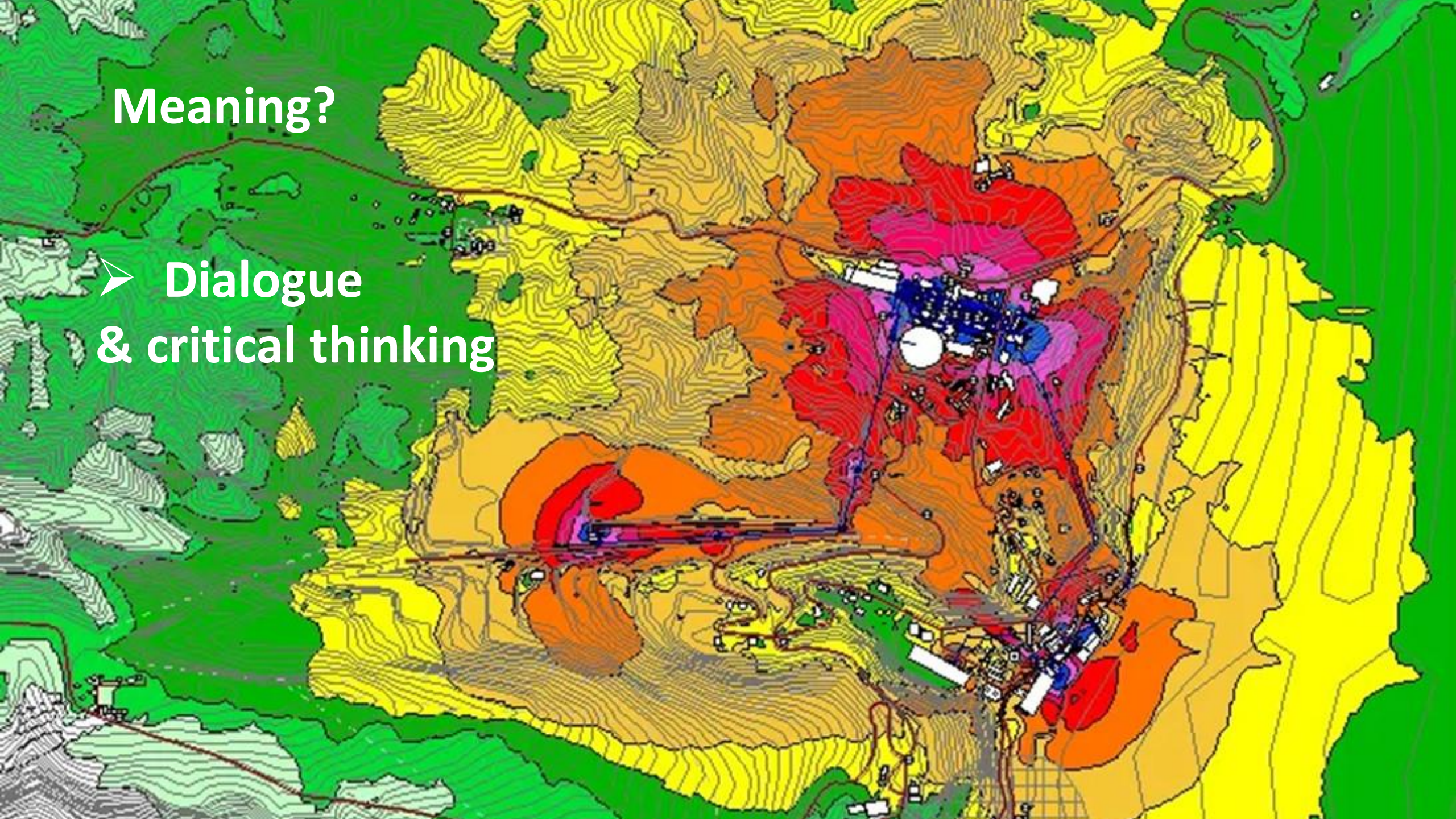
“  
*each map/diagram is a mental construct,  
which can tell something about  
how different groups of people see reality.*”



Cees Leeuwis (2004)

Meaning?

➤ Dialogue  
& critical thinking



# *Visual literacy*

*The ability to successfully **decode and interpret** visual messages  
and to **encode and compose** meaningful visual communications.*

*Bamford (2003)*

# PHOTOGRAPHY

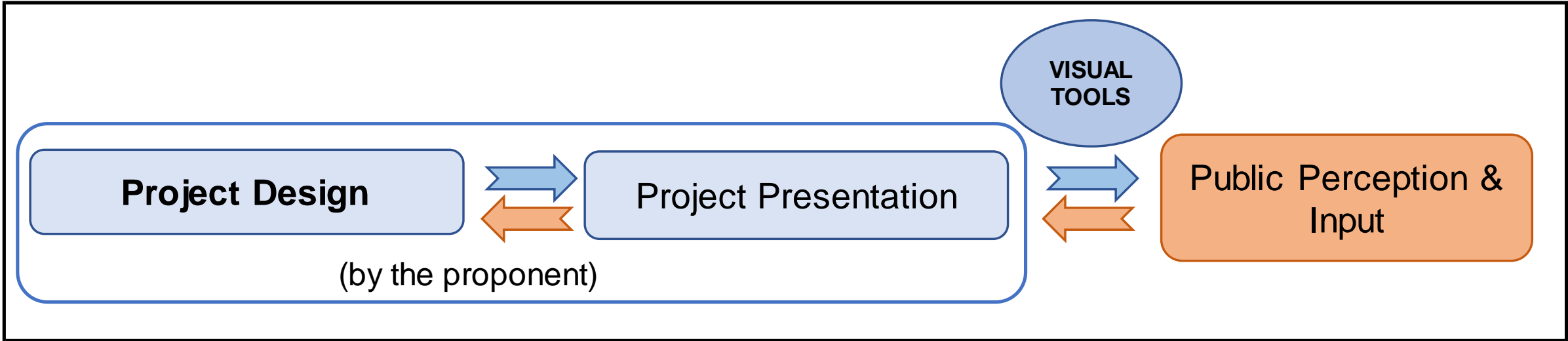
## Photo visioning













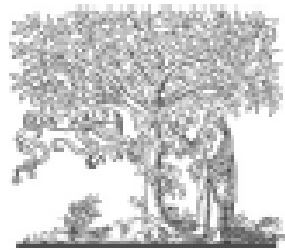
# *Visual literacy*

Contexts (e.g. verbal form) and relationships



Questioning, challenging, interacting

# *Critical visual literacy*



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

## Environmental Impact Assessment Review

journal homepage: [www.elsevier.com/locate/eiar](http://www.elsevier.com/locate/eiar)



*You see what I mean?* – A review of visual tools for inclusive public participation in EIA decision-making processes

Ana Roque de Oliveira\*, Maria Partidário

*CEG-IST, Instituto Superior Técnico, Universidade de Lisboa, Portugal*





**IAIA21**



# VISUAL TOOLS IN TODAY'S EIA PUBLIC PARTICIPATION

**Ana Roque de Oliveira & Maria Partidário**

*CEG - IST*

*Portugal*

[anaroliveira@tecnico.ulisboa.pt](mailto:anaroliveira@tecnico.ulisboa.pt)



# VISUAL TOOLS IN TODAY'S EIA PUBLIC PARTICIPATION

*How to design? Who to involve?*

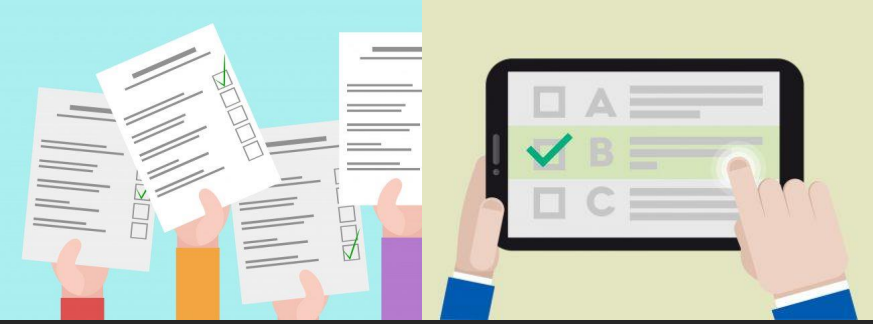


# SURVEYS



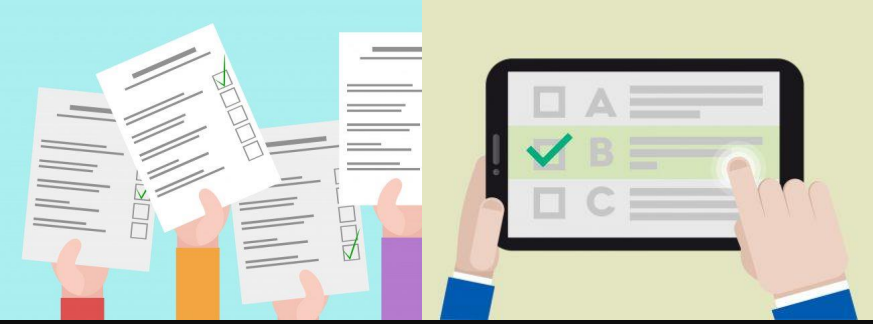
Rovaniemi, Finland  
December 2017

January-March 2018



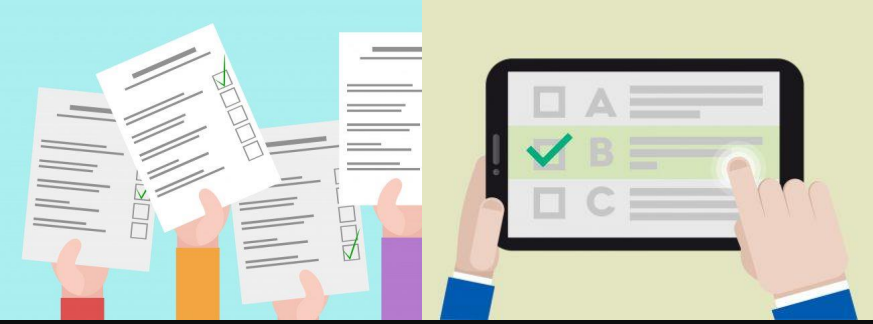
## CONCLUSIONS

- 1** Visual Tools may promote inclusive public participation
- 2** Visual Tools should be adequate to the stakeholders



## RECOMMENDATIONS

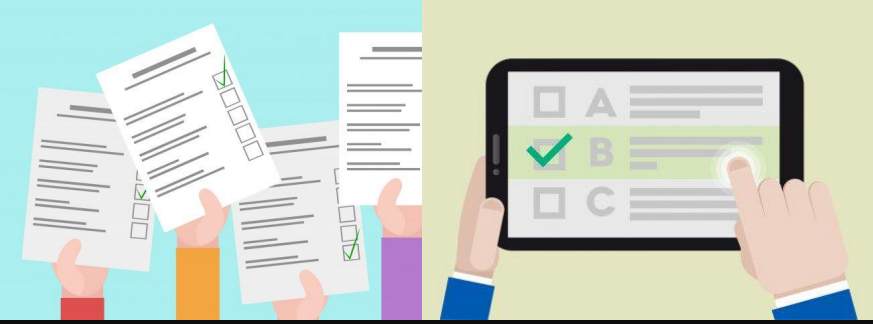
- 1** Move away from the “**one size fits all**” approach



## RECOMMENDATIONS

Customize your visual tools!



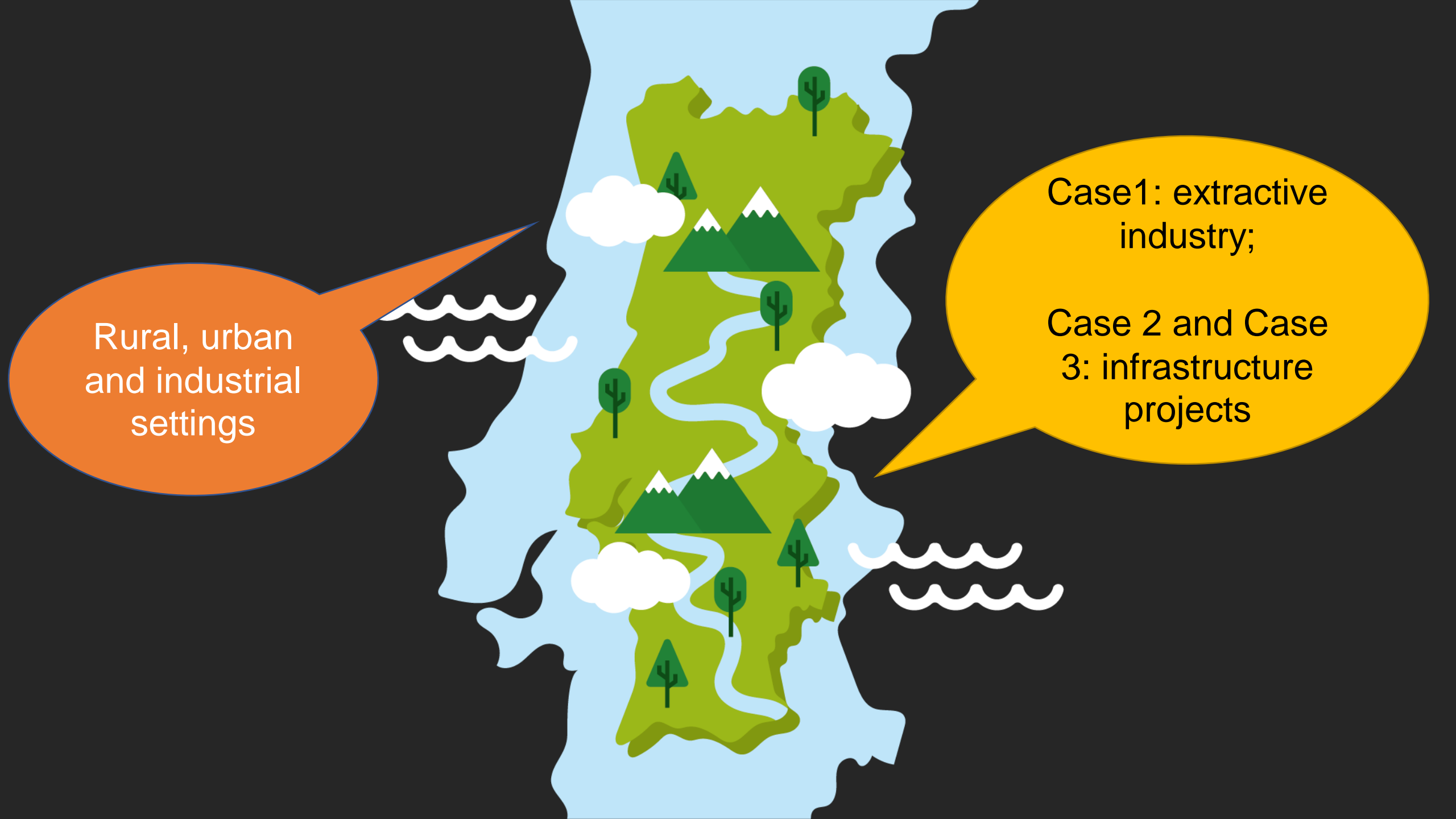


## RECOMMENDATIONS

- 1** Move away from the “one size fits all” approach
- 2** Allow for stakeholders’ active participation in the **choice and design** of the Visual Tool



# Visual communication in EIA: stakeholders' perspectives

A stylized map of the United Kingdom is centered on a dark grey background. The map is light blue and contains several green icons: a winding river, two mountain ranges with white peaks, and several trees. White clouds and wavy lines representing water are scattered around the map. Two callout boxes are present: an orange one on the left and a yellow one on the right.

Rural, urban  
and industrial  
settings

Case 1: extractive  
industry;

Case 2 and Case  
3: infrastructure  
projects

# (Non-participant) observation





# In-depth interviews



## Interview Guide – Proponent/Consultant

### Introduction

This research is being conducted as part of my PhD at Instituto Superior Técnico, in Lisbon, to get to know the views of public participation participants/visitors to information centers about the use of visual tools such as photographs, maps, charts, videos, models, etc.

I am especially interested in knowing the basis for the choices about content and type of the visual tools used in this public session/information center. The conclusions of this research can be used to improve future communication between the project proponents and the public, and to guide the incorporation of local knowledge into the design of future projects.

All the information you provide in this interview will only be used for this research project and will not be shared outside the research team. Your name will not be used, so that nobody can identify you with any answers. This interview will be audio recorded, including your verbal consent. Do you consent to this interview? [if requested by interviewee, sign consent form]. If yes, **do you have any questions before we begin?**

### Background information

No. of interview:

# Stakeholders



Project proponents



Public



**Proponent** perception about  
the design and use of visual  
communication

**Public** perceptions regarding their  
understanding and experience of visual  
communication



# Who designs the visual tools?

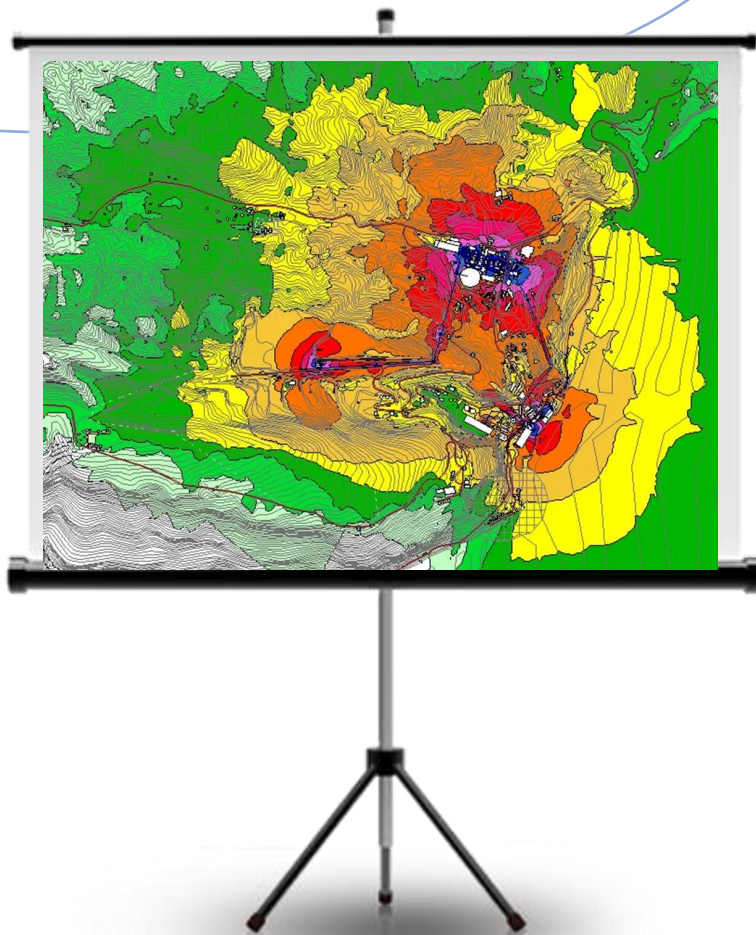


# Who designs the visual tools?



*We defined, together with the consultants that we used to conduct the environmental impact report, the presentation guide. So, we defined what we wanted to communicate and how we wanted to communicate (...). I believe [it] involved the people that it should involve (...)*

[we used] noise maps (...) so they would understand (...)



(...) I don't understand anything (...)





**Project proponent's  
low visual literacy**

- Lack of perception of public needs

**Public's low visual  
and technical  
literacy**



**Visual tools/Representation of proposed project**

**Project proponent's low visual literacy**

- Lack of perception of public needs

- Complex images
- Low-quality images
- Technical language

**Public's low visual and technical literacy**



# Technical language



*Those who make these presentations are **very technical people**, very technical engineers, very familiar with the project, and with the concepts and the technical terms, right?*

**Visual tools/Representation of proposed project**

- Complex images
- Low-quality images
- Technical language

**Project proponent's low visual literacy**

- Lack of perception of public needs

**Public's low visual and technical literacy**

**Presentation of the proposed project**

- Fast-paced presentations
- Separation of roles / Formal relationships
- Disempowerment

# Fast-paced presentations



*(...) after unloading all that quickly, [they asked] 'do you have any questions?' That is not how it should be. (...).*

**Visual tools/Representation of proposed project**

- Complex images
- Low-quality images
- Technical language

**Project proponent's low visual literacy**

- Lack of perception of public needs

**Public's low visual and technical literacy**

- No understanding of visual and technical information
- Fear, distrust, inhibition

**Presentation of the proposed project**

- Fast-paced presentations
- Separation of roles / Formal relationships
- Disempowerment

Distrust...



the truthfulness of 'well-rehearsed'  
oral information



the real intentions of proponents

- simply complying with an obligation
- overcoming the public through weariness

...lack of power...



*The one that presents has to come down  
off the pedestal, to come down to earth*

no legitimacy to intervene:

*'The oral part did not seem that bad, but who  
am I to say so?, right?'*





...and other strong feelings



fear

of making a fool of themselves

## indignation



- not being heard in the project design
- not being well informed about the project's impacts



frustration:

*'Oh, those numbers*

*[pictograms with statistics],*

*don't ask me because*

*I don't know how to read that!'*

**Visual tools/Representation of proposed project**

- Complex images
- Low-quality images
- Technical language

**Project proponent's low visual literacy**

- Lack of perception of public needs

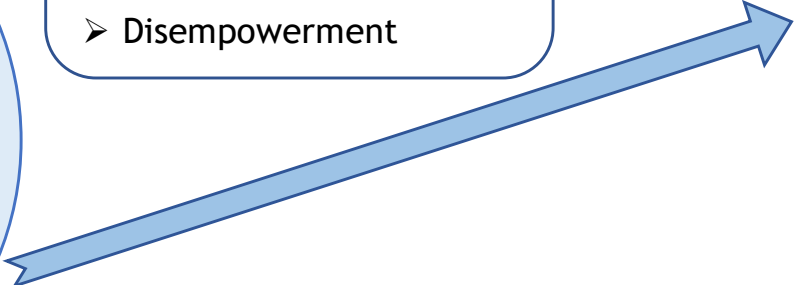
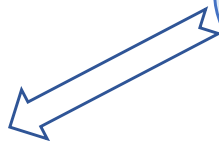
**Public's low visual and technical literacy**

- No understanding of visual and technical information
- Fear, distrust, inhibition

**Presentation of the proposed project**

- Fast-paced presentations
- Separation of roles / Formal relationships
- Disempowerment

- No reflection
- No dialogue



# Time for reflection



*(...) meanwhile the information settled in, right?,  
(...), and only later we remember that, hey, and  
what if we had asked this or that?*

**Visual tools/Representation of proposed project**

- Complex images
- Low-quality images
- Technical language

**Project proponent's low visual literacy**

- Lack of perception of public needs

**Public's low visual and technical literacy**

- No understanding of visual and technical information
- Fear, distrust, inhibition

**Presentation of the proposed project**

- Fast-paced presentations
- Separation of roles / Formal relationships
- Disempowerment

- No reflection
- No dialogue

**No critical visual literacy**



ELSEVIER

Contents lists available at [ScienceDirect](#)

## Environmental Impact Assessment Review

journal homepage: [www.elsevier.com/locate/eiar](http://www.elsevier.com/locate/eiar)



### Understanding stakeholder experiences with visual communication in environmental impact assessment



Ana Roque de Oliveira <sup>a</sup>, Sofia Bento <sup>b</sup>, Maria Partidário <sup>c</sup>, Angus Morrison-Saunders <sup>d,e,\*</sup>

<sup>a</sup> *Environmental Consultant, Portugal*

<sup>b</sup> *SOCIUS/CSG, Lisbon School of Economics & Management (ISEG), Universidade de Lisboa, Portugal*

<sup>c</sup> *CiTUA, Instituto Superior Técnico, Universidade de Lisboa, Portugal*

<sup>d</sup> *Centre for People Place and Planet, Edith Cowan University, Australia*

<sup>e</sup> *Research Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa*

Open  
Access



**UNIVERSIDADE DE LISBOA**  
**INSTITUTO SUPERIOR TÉCNICO**

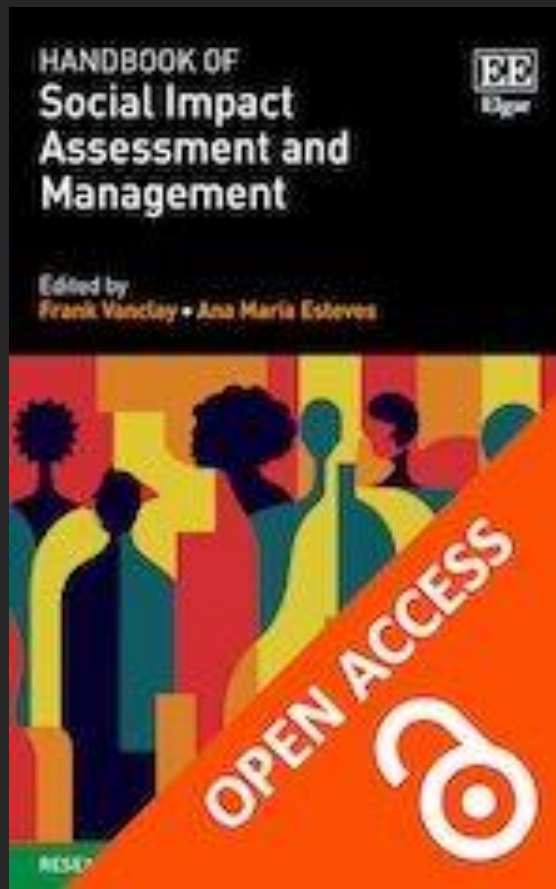


**PhD Thesis**  
**(2022)**



**The Role of Visual Tools**  
**in Inclusive Public Participation**  
**in Environmental Impact Assessment**





# Handbook of Social Impact Assessment and Management

*Edited by*

Frank Vanclay

*Professor of Cultural Geography, Department of Cultural Geography, Faculty of Spatial Sciences, University of Groningen, the Netherlands*

Ana Maria Esteves

*Director, Community Insights Group, the Netherlands; Visiting Professor, Faculty of Engineering, University of Strathclyde, Scotland*

---

32. Visual tools in social impact assessment: issues of perception, communication, and ethical dilemmas

---

*Ana Roque de Oliveira*

---

# Let's continue the conversation!

Post questions and comments in the IAIA24 app.



**#iaia24**

**Ana Roque de Oliveira**

*Portugal*

ana\_roque\_oliveira@yahoo.com