Corvinus University of Budapest

Doctoral School of Sociology and Communication Science

THESIS SUMMARY

When Activism, Tactical Media, Visual And Participatory Media Involve High Stakes: Investigating The Visual And Participatory Aspects Of Science Communication

Orsolya Bajusz

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Tutors: Lilla Vicsek, Anna Wessely

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Background and Relevance

Science communication takes different forms: dissemination, dialogue, participation. The dissemination model is based on the assumption that the public has an information deficit. The dialogue and the participation models involve initiating public engagement, through formats such as public hearings, citizen forums, science cafés, and various other public events. My research looks at certain applications and methods of the participatory model, namely the public debates of emerging biotechnology.

As I will elaborate in my thesis, I consider the promotion of biotechnological inventions as a testing ground: their public engagement initiatives insert technological inventions into much broader chains of meaning. A factor influencing these debates (or their absence) is how they happen, where, by whom- and nowadays science communication increasingly employs novel media formats. A large part of the toolkit employed by such science communication, based on visual media and participatory methods is derived from contemporary art (participatory art, tactical media, performance), which itself increasingly becomes a methodological toolkit, and loses its autonomy. This both means the popularisation of the toolkit of contemporary art, and the involvement and influence of other domains. Art has been separated from science and politics since antiquity, but now this is changing with media convergence (the interconnection of information and communications technologies, computer networks, and media content) and the increased extent of networking between various social actors. For example, regarding science communication, the same influencers often work for different sponsors, and scientific institutions can run social media pages or produce YouTube content, or science communication events happen in galleries or museums. The entanglement of these domains (which in turn also

fundamentally changes these domains) influences all social life. Studying novel formats of science communication can provide insight into these processes.

Contemporary research on science communication also acknowledges the importance of the visual, non-rational, non-discursive register (Frankel and DePace 2012, Estrada and Davies 2015, Williams and Newton 2007, Rigutto 2017, Bucchi and Canadelli, 2015). There is a claim that STS-informed practice and analysis of public engagement with science tends to focus on discourse, to the exclusion of other features, such as embodiment, materiality, affect and place (Davies 2014). There is a call to research the public ritual aspects of science communication (Blue 2018), and Fähnrich, Riedlinger, Weitkamp (2020:3) say that 'our understanding of activists as "alternative" science communicators has received little critical attention. The area lacks substantial research and evidence to inform theory'.

In my dissertation instead of focusing on practical applications, I intend to carry out a more in-depth sociological analysis of such visual and participatory media, including how it exerts effects as sociopolitical phenomena.

Methods

To study such novel science communication formats based on images and participation I conducted two case studies: on anti-GMO mobilization and pinkified cancer awareness, and then triangulated them with focus groups. Whilst constructing the cases, I describe what technologies I research, how they came to be adapted in Hungary, and who are the proponents or opponents in the debates.

My first case study features Hungarian anti-GMO mobilisation. I revisit the GMO debate in Hungary to see whether the mechanisms described in the literature I reviewed apply here as well, or whether there is anything specific about the Hungarian case. I look at the campaigns employed by the environmental and green lobbyists between 2005 and 2015 and will discuss how the anti-GMO images and events influenced political discourse at the time. Focusing on the site of the image (Rose 2001), I explore the broader ideological layers of the meanings and messages within the images and will explore the political connotations of these images. Following this, I continue with my second case study, which is on Mályvavirág Alapítvány, a Hungarian NGO affiliated with the Komen Foundation, partnered with councils, funded by medical tech and pharmaceutical companies, and Széchenyi Terv 2020 (EU). They promote ('raise awareness' about) technologies connected to cervical cancer prevention: HPV and PAP tests, HPV jab. By engaging with all these 3 technologies – I argue – they constantly counter their own claims, the relevant scientific evidence, or even the basic nature of reality. To support my claims, I use the visual material generated by Mályvák, and the documentation of participatory events as well as other content either adopted or generated by the organisation.

I used focus groups to get a picture of the lay interpretation of the political dimensions of the images, and I compared the conclusions of the expert groups with my own analysis. As I processed the focus groups I examined whether the respondents comprehend the images' rhetoric, and whether they relate to the topics on an affective level.

Research questions:

- 1 What types of ideological messages are transmitted by visual and participatory media involved in the public debates about emerging biotechnology?
- 2 Such images address an intersubjective register of moral axioms, identity elements, and coping strategies and they all have political connotations as well. How do the observed groups transmit such information through visual and participatory media?
- 3 Do the strategies implemented by the observed groups, the impact of their use of images, and efforts to encourage participation in such public debates indicate the existence of specific mechanisms that are also found in other public interventions?

Results

The Mallows openly admitted how inefficient and even dangerous were the technologies they promoted, and yet they refused to acknowledge that technology was a social construct and kept on appealing to the public to use certain technologies. Instead of focusing on invention or research or addressing the proprietors of the patents, they abstained from any critical engagement. The life-world of the Mallows is primarily a site of self-communication, and self-extension, where hierarchies and given ontological-epistemological constructions of the body, society and the individual become contingent. My most important finding is that most of such political work is carried out in non-linguistic, non-rational registers: mobilisation, staking out positions, creating communities, exclusion, inclusion, offering coping strategies, reproducing knowledge regimes, or turning ideology into a moral command. Visual and participatory media which directs the discourse to the register of feeling and experience has a privileged role in either

community-building or conferring meaning; such media itself does political work by positioning the Mallows outside the political field.

The anti-GMO image events were not really about science communication. Not much factual information was transmitted. Rather, there were attempts at social movement building and through it political mobilisation. LMP imported a toolkit and set of symbols into their own, locally accepted affective regime of political dissent. The organisers of these Hungarian anti-GMO events staged public rituals, affirming a collective social and symbolic order. Through these events, they utilised and performed visual political rhetorics- defining and situating actors and conferring meanings primarily related to Hungarian political discourse, not posthumanist ontologies. They imported what essentially is a tactical media toolkit and used it as large, fancy props. They did not understand the underlying philosophy of tactical media use, so they merely copied formal aesthetics, instead of creating their own tactical media, conceptually adapting already existing elements for a local context and audience. Through the use of visual rhetorics, GMO was cemented in the public consciousness as a vague symbol of a globalist threat, and therefore the governing (nationalist) party had an opportunity to channel the discourse into their own framework. Many were unhappy with the law, as it did not address problematic business models, and Glyphosate, the herbicide which GMOs are genetically engineered to withstand, is still used widely, despite the environmental concerns.

Overall, my case study could be an example of what happens when a complex hegemony crisis is interpreted solely as a political one, separated from an epistemological crisis and a crisis of meaning.

The focus group research also confirms that these images did not function as an element of science communication, but as a means of political mobilisation in a broader sense. Based on the focus groups, I can strengthen my conclusion that the political work of affiliation and identification was carried out in the affective register, and that the public probably responded to the confusion and condescension mediated at the affective level. An accentuated element was the participants' attempt to speculate on intent, and this mostly came up concerning the question of credibility. In most cases, participants did not begin to interpret the images conceptually but responded affectively to confusion and incoherence.

To answer my research questions:

To explore "What types of ideological messages are transmitted by visual and participatory media involved in the public debates about emerging biotechnology?", I conclude from the literature review and from my cases that such media either transmits binary modernist ideologies or promissory narratives staking novel ontological claims. Regarding the political connotations of these images, I can conclude that their visual rhetoric is sometimes directly and sometimes indirectly political, and the connotations are not contingent on the technologies this rhetoric refers to, but rather on political, biopolitical/biopower regimes and interests.

To answer the question "How do the observed groups transmit the political connotations of these images addressing an intersubjective register of moral axioms, identity elements, and coping strategies through visual and participatory media?", and whether it is possible to describe and generalize certain mechanisms ("Do the strategies implemented by the observed

groups, the impact of their use of images, and efforts to encourage participation in such public debates indicate the existence of specific mechanisms that are also found in other public interventions?")

I conclude that messages transmitted by images (and inseparable from the images' participatory formats), and their political and ideological connotations are context-dependent. In the studied cases, the visual elements engaged in political work by mobilising a plurality of mechanisms — of weaponising subjectivity, depoliticising their producers, utilising the political work inherent in representations, shifting the discourse towards emotions, mapping ideology (meaning) onto feeling. Visual and participatory media directed discourse to the register of feelings and experience, reserving a privileged role to community-building, whilst positioning the actors outside the political field.

In the following, I describe mechanism through which such media exerts effects.

- Metaphors functioned to anchor and transmit affects and sentiments, rather than aiding
 conceptual understanding and comprehension. They are not semiotic, but affective
 technologies, having a broader pubic effect as technologies of power.
- Weaponizing subjectivity: contemporary art provides a toolkit to the public staging of
 subjective experiences and subjectivities, which uproots epistemic hierarchies. As in the
 case of Mályvavirág, anyone who is truly invested in the extension of the fictitious
 worlds based on the "common sense consensus" overriding material realities, becomes a

sort of human shield who protects the consensus of "common sense" (now a matter of personal truth) and they are rewarded with symbolic recognition and distinction. Both my case studies transmitted mainly self-referential messages with political connotations pertaining to world-building. Moreover, they were explicitly political, ideological, and disengaged from 'factual', and 'rational' scientific discourse, performatively staking ontological claims through embodying their respective subject positions.

- Black boxing technologies: The media I analyze draws on science, but that does not mean it always communicates exact scientific facts, in fact sometimes it represents things that do not exist. In some ways these images are illustrations, but not technical illustrations they evoke sentiments, or propose ideas on how to imagine a description. They are not blueprints or diagrams they don't show how parts assemble or don't explain the underlying systemic logic. They "black box" technologies. The Mallows openly admitted how inefficient and even dangerous were the technologies they promoted, and yet they refused to acknowledge that technology was a social construct and instead of addressing the proprietors, they kept on appealing to the public to use certain technologies. The anti-GMO image events did not communicate facts about GM technology, and even helped cement GMO in the public consciousness as the symbol of corrupting Western influence.
- Science communication as public ritual: the ideological layers and political connotations of visual communications were so important that images were used as tools

of ritualisation, rather than of information transmission. Images combined with encouraged participation enabled ritualisation that made a conceptual grasp of the messages superfluous – one just had to repeat the same gestures according to a script. Novelty and new performative elements keep the audience engaged. These events were thoroughly ritualised practices affirming the social and symbolic order while they staked and transmitted political claims. I can conclude that I witnessed, described, and analysed public rituals controlling the representation of hybridization (merging nature-culture, human-nonhuman), and through the social saturation of images and participatory formats, constructing, controlling, and extending its affective economy.

- Imbuing ideology with affect: The modernist, teleological notion of progress used to rely on science both for legitimacy and positive sentiments and affects. I would argue that in some instances novel formats of science communication (as public rituals) assume these roles of science. Future research should explore the role of affective energies attached to 'progress' and the sense of superiority, in order to explore through what mechanisms ideology still retains its affective charge. Regarding my case studies, I suspect public rituals of science communication imbue ideology with sentiments and affects.
- Depoliticisation: Unlike artists, political movements stake claims for power, and yet
 through such media as described they can present their activity as being outside the
 domain of politics, whilst still having a political impact on an affective, ideological,
 institutional, intersubjective, and subjective level. In the cases, I studied visual and

participatory media directed the discourse to the register of feeling and experience, and had a privileged role in either community-building or conferring meaning. Such media itself does political work by positioning the actors outside the political field.

- The relevance of the critiques of the participatory turn in contemporary art:

 participatory formats provide the illusion of fake dissensus, consensus, and a popular base. The disappearance of the author hides the producers and proprietors, and obfuscates power relations. Through novel science communication formats, art movements are conflated with political committees, the global and corporate with the grassroots.
- Art, even if rebranded as activism, entangled with science communication, will not cease to be art- that is working through a non-linear causality. In the observed cases, the real political work took place detached from discourse; in fact, in conceptual opposition to other discourses of the organisations. Focusing on textual discourse could have misled me, as I could have repeated the emancipatory claims of the research subjects, as both depoliticization and politically charged subtexts were contingent on the visual register of discourse.

Selected References

Barry, A. (2014): Political machines: governing a technological society. Milton Keynes, Lightning Source.

Barry, A. (2001): Political Machines: Governing a Technological Society. London: Athlone Press.

Blue G. Science Communication Is Culture: Foregrounding Ritual in the Public Communication of Science. Science Communication. 2019;41(2):243-253. doi:10.1177/1075547018816456

Brunner, Elizabeth A. and DeLuca, Kevin Michael (2016): The Argumentative Force of Image Networks: Greenpeace's Panmediated Global Detox Campaign, Argumentation and Advocacy, 52:4, 281-299, DOI: 10.1080/00028533.2016.11821875

Clancy, K. A., & Clancy, B. (2016): Growing monstrous organisms: the construction of anti-GMO visual rhetoric through digital media. Critical Studies in Media Communication Davies SR, Halpern M, Horst M, Kirby DA, Lewenstein B.: Science stories as culture: experience, identity, narrative and emotion in public communication of science. JCOM. 2019;18(5). A01. doi.org/10.22323/2.18050201

DeLuca, Kevin Michael (1999): Image politics: The new rhetoric of environmental activism. New York: Guilford Press.

Elam, M. (2004): Contemporary science communication as a world of political invention. Science as Culture, 13(2), 229–258.

Fähnrich, B., Riedlinger, M. and Weitkamp, E. (2020). 'Activists as "alternative" science communicators — Exploring the facets of science communication in societal contexts'. JCOM 19 (06), C01.

Gregory, J., (2016): "Problem/Science/Society", in Science Museum Group Journal Autumn 2016, Issue 06 http://dx.doi.org/10.15180/160607/001

Gregory, J. (2020): 'Engaging with 'activists' and 'alternatives' in science communication'. JCOM 19 (06), C02.

Hellsten, I. (2002). Selling the Life Sciences: Promises of a Better Future in Biotechnology Advertisements. Science as Culture, 11(4), 459–479.

James, V. (2020): "Science Communication Efforts and Identity at Popular Culture Conventions", Science Communication Volume: 42 issue: 3, page(s): 395–418.

Keith, L. and Griffiths, W. (2020): "Space Plague": an investigation into immersive theatre and narrative transportation effects in informal pandemic science education'. JCOM 19 (07), N01. https://doi.org/10.22323/2.19070801.

Richardson, K. (2015) position paper "The Asymmetrical 'Relationship': Parallels Between Prostitution and the Development of Sex Robots" SIGCAS Computers & Society | Sept 2015 | Vol. 45 | No. 3 290.

Rigutto, C. (2017): 'The landscape of online visual communication of science'. JCOM 16 (02), C06.

Rodriguez, L., & Dimitrova, D. V. (2011): The levels of visual framing. Journal of Visual Literacy, 30(1), 48-65. doi:10.1080/23796529.2011.11674684.

Rose, Gillian: Visual Methodologies: An Introduction to the Interpretation of Visual Materials. London: Sage, 2001. Print.

Scheufele DA. Science communication as political communication. Proc Natl Acad Sci U S A. 2014 Sep 16;111 Suppl 4(Suppl 4):13585-92. doi: 10.1073/pnas.1317516111. Epub 2014 Sep 15. PMID: 25225389; PMCID: PMC4183176.

Shildrick, M. (2018). Visual Rhetorics and the Seductions of the Monstrous: Some Precautionary Observations. Somatechnics, 8(2), 163–177.

Stephens, Neil, and Martin Ruivenkamp: "Promise and Ontological Ambiguity in The In VitroMeat Imagescape: From Laboratory Myotubes to the Cultured Burger." Science as Culture 25, no. 3 (2016): 327-55. doi:10.1080/09505431.2016.1171836.

Thorpe C., Gregory J., Producing the Post-Fordist Public: The Political Economy of Public Engagement with Science, Science as Culture, 10.1080/09505430903194504, 19, 3, (273–301), (2010).

Thorpe C.: Participation as Post-Fordist Politics: Demos, New Labour, and Science Policy, Minerva, 10.1007/s11024-010-9157-8, 48, 4, (389–411), (2010).

Vicsek, L. (2014): GM Crops in Hungary: Comparing Mass Media Framing and Public Understanding of Technoscientific Controversy. Science as Culture, 23(3), 344–368. doi:10.1080/09505431.2014.884062

Wynne, B. (2001). Creating Public Alienation: Expert Cultures of Risk and Ethics on GMOs. Science as Culture, 10(4), 445-481. doi:10.1080/09505430120093586

Publications

Bajusz, O. (2019) A cukiság mint depolitizáló tényező: két magyar esettanulmány. *Replika* 112: 189–215.

Bajusz O. (2022) A magyar GMO-ellenes mobilizáció eseményképeinek hatása az alkotmányra, Jel-Kép, 2022/3 (accepted for publication)

Bajusz, O. (2022) Not quite science communication – the Hungarian anti-GMO protests, Journal of Science Communication (revisions after peer review)