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

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For John Protevi, for his invaluable knowledge in affect theory and his kindness and generosity.

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1 Introduction

By now, science communication (transmitting information, educating, raising awareness about science and technology) has become a discipline in its own right, with methods, journals, and experts. This discipline is in great demand: the rate of scientific discovery and innovation has never been so fast, and it is accelerating - unfortunately alongside the widening of the gap between the public's ideas about science and what science actually entails. And yet science and technology are an integral part of contemporary life: one needs to evaluate scientific information to make consumer choices, decisions about medical care, or lifestyle choices. Science communication also has a role in aiding public policy decisions and mediating between the public and industry investors and various decision-makers. Most people will not read scientific publications, but rely on intermediaries such as news sites or social media accounts, and scientists are also increasingly expected to communicate their research results beyond their community.

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.

My research site is my native Hungary, where science communication is becoming both a discipline in its own right and research interest. So far there have been two local BCE science communication conferences (2018, 2020), and various public events (FameLab, SCIndikátor). Concerning the visual and participatory aspects of science communication, a few papers were published in thematic journal issues based on two conferences held at Corvinus University of Budapest (Papp 2019, Kondor 2019, Vásárhelyi-Györfi 2019, Simon-Kárpáti 2018).

Papp (2019) discusses how Szeged Scientists Academy (*Szegedi Tudós Akadémia*) used film and animation, Vásárhelyi and Györfi (2019) describe the process of organising the Day of Pollinators (*Beporzók Napja*) event series, which (among many others, more scientifically inclined events) offers modes of participation such as honey and bee themed crafts, building

beehives and other insect nesting sites, litter picking and tree planting. Based on the data of 217 surveys (supplemented by 20 individual interviews), Kondor (2019) claims that 21st-century people can be more easily engaged in science through a multimedia approach. Overall these papers generally follow an awareness narrative, focusing on the know-how of information dissemination, mostly providing descriptive accounts without analytical engagement, and in their respective conclusions, they consider practical and methodological issues – for example choosing the right date for an event or making a financial plan in advance (Gyórfi 2019). They feature visual and participatory media in their analyses to discuss whether it is an efficient tool for the task of disseminating information. 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.

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. Such new technologies are themselves out of conventional semantic bounds, and, being material practices, they penetrate both the body and the social domain, similarly to how science has become a part of everyday life. They embody and transmit new notions about subjecthood or the boundaries of the body, new modes of sociability, or new conceptualisations of human-nonhuman relations. Entangled with the shifting constellations of science and the public, science communication has always been a political endeavour-burdened with nation-building (colonialism as well) and marking out the path of ‘progress’ (European Science Foundation, 2013). Moreover, the status of knowledge is bound up with the status of institutions and discourses as well as with their legitimacy. The definition of knowledge, access to knowledge, and authority to disseminate knowledge influence the status of social and political actors. The emergence of new media formats in conjunction with science communication also shifts the hierarchies of discourses and knowledge and situates actors, institutions, experts, publics, and various other human or nonhuman actants. According to Wynne (1996), lay knowledge often has fundamentally different formats than scientific knowledge, which often denigrates lay knowledge and its discourses as coming from ignorance or irrationality. Lay knowledge is often based on a different epistemic order, different relations to nature, than scientifically legitimated expert knowledge. Wynne (1992) recalls a case of environmental pollution, where sheep farmers successfully contested nuclear experts. The sheep farmers initially aided the

research, but grew frustrated with the experts, and found the proposed solution (locking in the sheep) untenable. The public-expert dichotomy would not fit such a relationship, and there was not a clear epistemic hierarchy either.

Through my research focus, I investigate posthumanist practices on multiple registers: media used outside the conventional, representation-based canon, beyond the separation of art/politics, art/everyday life, and new biotechnology as a site where categories such as body/society, human/nonhuman merge as well. By posthumanism I mean the integration of the human and the nonhuman, going beyond other binary categories such as nature/culture, progress/backwardness.¹ Posthumanism within contemporary art might have been a buzzword (whatever it meant in a given context), but it was mostly confined to galleries, similar to how research has been a lab practice. I provide empirical accounts of lived, felt experiences, knowledge transmission from transnational actors to the public- a kind of really existing posthumanism.

I do not wish to formulate a hypothesis, however, I do have a premise framing the context of the research: visual and participatory media in these debates function as channels of political rhetoric. I also rely on such basic axioms of science and technology studies that technology is a social construct, and the social and the “technical” elements of science cannot be separated: scientific facts are the products of scientific inquiry (Latour 1979). STS insists on the socio-cultural embeddedness of science and technology. Similar to science, technology is also an active agent in society both embodying and perpetuating social norms and relations. The public sphere itself is a complex chain of people and technical devices. Socio-technical arrangements do political work by setting normative standards, addressing differences, and policing the boundaries of communities. Consequently, technology also embodies and perpetuates meanings. If technology “configures the user” (Woolgar 1991), this configuration also involves a certain set of meanings, a political ideology as well as it entails subjectifying practices that are inherent in “user configurations”, to quote Woolgar again.

It is a matter of fact that there are barely any social debates about technological invention in Hungary, especially compared to the scale of such debates and controversies in Western Europe. I do not aim to explain the Hungarian lack of social debates around new technology but to investigate mechanisms of how visual and participatory media is involved in such social debates.

¹ To quote Rosi Braidotti: “for me there is a necessary link between critical posthumanism and the move beyond anthropocentrism. I refer to this move as expanding the notion of Life towards the non-human or zoe.” (2013:50)

The public debates I investigate also entail scepticism regarding technologies, linked to a general distrust in science and the broad modernist notion of progress.

I am going to start my analysis with two case studies on anti-GMO and pinkified cancer awareness, to ground my research in a real-life context, and then I triangulate my research with focus groups to test my findings. 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 social debates around technologies. I gathered data from both openly available sources and interviews.

I conduct my case studies in a descriptive way, as I describe the social and political contexts of mechanisms (the involvement of visual materials in public controversies around biotechnology), and later I provide a deeper analysis through visual methods. My case selection is based on similarities with the cases featured in the literature and is also theoretically driven: I tried to find cases that show the paradigmatic features of the examples scrutinised in the literature.

To this end, 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. 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.

According to Eurobarometer 419: 'Public perceptions of science, research, and innovation' (2019), a large proportion of Europeans believe that science and technological innovation will have a positive impact on addressing most of the problems the society faces in the next 15 years. The 2014 Special Eurobarometer 340: 'Science and Technology Survey' shows that Hungarians are very interested in new scientific discoveries and technological developments (91%, among the highest EU rates). 46% of them disagree with the statement that "in my daily life it is not

important to know about science”, while 36% agree (the EU average is 48% and 33%, respectively).

On the contrary, public debates on science and technology are relatively low-key. For example, there was some media attention to GMOs (Vicsek 2014) but it was nowhere comparable in scale with the debates in the USA, the UK, or Germany. When the Hungarian media did publish about GM crops or their local introduction, it was usually from within the anti-GM threat frame (Vicsek 2014). Visual materials generally mobilise on this alleged danger and shift discourses towards populist tropes which are based on fear. There are claims in the literature according to which such visuals may have played a large role in obstructing the European introduction of GMOs.

However, the lack of public attention to GMOs is not an isolated case. The planned Hungarian acquisition of Palantir’s predictive policing technology (combining and analysing big data, including biometrics) received little to no media attention. During the 2018 Brain Bar Budapest, its founder, Peter Thiel visited Corvinus University, and no one paid attention, apart from a few ‘anarchists’ who told me about their plans to soak the event all over with pig’s blood (since Thiel is a ‘vampire’), but eventually, this plan fell through. In comparison, in the UK or the German press, Palantir was front-page news. Also, there was practically no public debate on CRISPR or the ethical issues of assisted reproductive technologies. Consequently, the countrywide implementation of a standard or that of technology is a political matter, inseparable from legislation and party politics. For example, GMO prohibition is part of the Hungarian constitution (article 20 paragraph 2) despite the scant media attention on GMOs or the relatively small popular backlash.

A factor influencing these debates (or their absence) is how they happen, where, by whom- and nowadays science communication increasingly employs novel media formats and resources (e.g. Lesen et al. 2016). 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 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. 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 an insight into these processes.

2 Science Communication

In the following chapter, I would like to explore aspects of science communication related to my research. How is contemporary science communication a site of ideological contestations and of the formation of politicised subjectivities?

2.1 New Media As A Tool For Engaging And Forming Subjectivities

My case studies are media events: complex arrays of representations, figurations, instructions, texts, images, and new media.

The new media institute (newmedia.org) defines new media as media based on the interplay of technology, images, and sound - this definition can include both digital and participatory media.

Of particular relevance is how new media came to existence in Hungary, in connection with the system change: a new contemporary art canon, artistic and institutional practices (privileging new media) were established as a result of this historical turning point. New media was supposed to create new subjectivities for the forming new nations in Europe, as new media was considered ahistorical then. Local research (Básthy forthcoming, Nagy 2014, Barkóczi 2020) about the role of new media is historically focused, but it also takes into consideration the political involvement and ideological instrumentalisation of new media.

Having mentioned the role of new media in and after 1989, I would like to showcase the practical manifestation of its political character. The Soros Foundation, which had the agenda of ‘democratising art’ at that time, was actively involved in the introduction (establishing a canon, importing technologies, training people to use them) of new media to Eastern Europe. Their first Hungarian event was called “Polifónia²” (1993) and the open call’s first lines were from a dictionary’s entry definition of art: “*One of the forms of social consciousness*”. According to Básthy (forthcoming), this event had the explicit aim to redefine the relation of art to society: art was supposed to use social context as a medium. Such a mode of contemporary art was conceptualised to be the tool of engineering social transformation aligned with different ideologies, among them the ideologically motivated (Básthy ref. Buden 2010) discipline of ‘transitology’ or ‘transition to democracy studies’ (Básthy ref. Linz on South America, 1990),

² Polyphony

which became an overarching term to designate the studies produced on the transition by social scientists, and a hegemonic discourse (Básthy ref. Esanu 2009:3). According to the technological optimism inherent in the Soros Centers for Contemporary Arts (SCCA)³, humanity had reached a new and better era with which the region had to catch up. This technological optimism was complemented with another dimension: technology also represented the way to a more favorable position in the then transforming global division of labour (Básthy ref. Barbrook 1995; Tamás 1998).

Within this both optimistic and deterministic framework, technology was a tool to change the collective consciousness of society, and engineer social change – which the SCCA was explicit about. As Lozovoy (2017) quotes from a curatorial text of an exhibition that was held at the Odesa (Ukraine) SCCA Center: *“Modern technology and electronic media render stable and concentrated thinking impossible, forming a polycentric consciousness and an unstable system of values.....In the case of new media, it could have had very practical motivations, as the skills needed to create video art (capturing and editing footage, understanding the principles of visual narration) coincide with the tools of civic journalism.”* (Lozovoy 2017). Artists were supposed to be the guardians of young democracies, through the use of new media technology. The SCCA also developed different models on how to utilize the internet - and such models also mapped the possible connections between different disciplines, organisations, and professions (Básthy ref. Lovink 1997).

According to Básthy, The 1993 Polifónia already had a presentation on politically engaged art in the USA, as it had been an established practice. The same principle (art instrumentalised to symbolically raise the value of group representations) was reflected in the general funding schemes of the Soros network: from the mid-2000s the Hungarian funds were relegated to openly identitarian agendas and civil organisations, and at the same time the focus slowly shifted from media arts (most media arts organisations funds slowly phased out).⁴

³ The contradictory role of Soros Centers for Contemporary Arts in the communist and later ex-communist states is connected in many ways to the political transformation of the region. Soros György himself made statements such as (“what used to be a Soviet empire is now a Soros empire”) concerning the Soros Foundations. I would like to provide a little history: in 1991 the Foundation merged with the Congress for Cultural Freedom (Guilhot 2006), which was funded by the CIA. In 1993 the Open Society Institution (OSI) was established in the USA. In 1994 the less known Open Media Research Institute (OMRI) was established, which was a media observer institute, producing reports about the region, now archived in the Open Society Archives (OSA) in Budapest (see Básthy, forthcoming).

⁴

<https://www.opensocietyfoundations.org/uploads/cd3509ff-8fed-4f7f-8a44-75526f668e66/highlights-over-30-years->

According to Básthy, the agenda of SCCA shows the impact of the East-West Slope (Melegh 2011) – a cognitive mechanism to structure the socio-political regimes in Eastern Europe. Básthy claims that the SCCA project was an attempt at the “colonisation of consciousness” (Básthy quotes Melegh 2011), and it was partly successful concerning the management of the discourse about social change and the control of subversibility in contemporary art (Básthy ref. Esanu 2008; 2012).

The instrumentalisation, even weaponisation of the forming Eastern European subjectivity through new media and contemporary art might have been politically driven, yet the political instrumentalisation of subjectivity through new media is a broader trend, connected to various social actors - here I need to note I have no claims that any political organisation had a deterministic role, neither in Eastern Europe nor anywhere else. Furthermore, this phenomenon does not have to happen at a nation-state level, or through institutions. It can be small-scale and ephemeral. A prime example is influencers supporting campaigns, or the phenomena of astroturfing: paid ‘activists’ catering for the appropriate mood, not unlike a mourning choir.

Such participatory formats are a legacy of different art movements, for example, that of the situationists or Joseph Beuys and Fluxus. The avant-garde was the vanguard, elitist by nature, but nowadays the utilisation of the toolkit derived from these and similar art movements is a much broader trend, in tune with the shift from a Fordist mode of production towards economies based on monetising knowledge, creativity, services, and information.

It is hard to draw a clear boundary between new media and contemporary art – what makes something art? If it was produced within the (very porous) institutional boundaries of contemporary art? Is art even a praxis or a toolkit?

In case we conceptualize it as a toolkit, contemporary art has extended way beyond the boundaries of its institutional settings. Just as novel formats of science communication have been referred to as ‘political laboratory’ (Elam 2010), or even ‘political communication’ (Scheufele 2014), contemporary science communication projects involving art all have their respective configurations of relating between institutions, experts, and the public. Technology launch events (which are inseparable from science communication, as they entail innovation) also often involve

of-open-society-in-hungary-hu-20180515.pdf, <http://www.c3.hu/c3/c3tortenete-hu.html>,
https://magyarnarancs.hu/tudomany/a_c3_atalakulasa_elefantcsonttorony-59668

participation and multimedia formats, which allow them to pass as museum or gallery workshops. Sometimes they are even held in museums or galleries or staged by artists.

For example, an art gallery event involving in vitro meat (Stephens and Ruivenkamp, 2016) is where visual media (involving the documentation of a performative event) stakes out boundaries between humans and non-humans, the living and the dead: frogs watch their own cultured meat being eaten, the in vitro meat is placed among food paraphernalia, but the eater curiously prods it with a fork. What is more, during demos of the DaVinci robot, curious students, or even random passers-by can try the gamified castration technology in shopping malls or schools. As the pro-woman hysterectomy organisation HERS Foundation comments: “Instead of explaining the damaging effects of hysterectomy, students learn that it is more like a video game than major surgery, and they look forward to it as entertainment. In high school auditoriums in Cincinnati and Northern Kentucky, gynecologist Marcia Bowling shows the students how to amputate a uterus from a woman for hard to manage bleeding and abdominal pain that they think is caused by fibroids. Bowling is sitting at a video game terminal using her fingers and a foot control.”

Subjectivity is also more directly mediated (also aided by the conflation of the private and the public, the disappearance of the public spheres and institutions). If bodies are assemblages between different materialities, imbued with power relations through discourses then subjectivity is directly mediating between the self and the public.

These are completely new notions about embodiment, the boundaries of the body, or new figurations of links between the social and the individual, the human and nonhuman, the organic and the inorganic. There is no selecting, curating, or editing, no institutional gatekeeping, just personal testimonies, experiences, feelings, which are – in some instances – instrumentalised or even weaponised. If I had to define it, it would still be new media as it is a combination of electronic media, sound, technology, however, now it permeates the skin and the body too. Also such new constellations (ranging from performative events to still images), override the classical western notion of representation.

McLuhan claimed (1964) that new media formats change how we perceive and interact with the world, the way we are subjects of this world- through new media new subjectivities emerge. The utilisation of the ‘right’ kind of subjectivity has been present from the beginning of science communication: According to Barry (2001, 1999), the word ‘demonstrator’ is used to signify the person assisting a science experiment, vouching for the ‘truth’ of a given experiment, both in a

technical and a political sense. Nowadays protesters are the ‘demonstrators’ when they show the ‘truth’ of a given investment or development. Barry’s example is a road protest, which could be viewed as a demonstration: it shows the likely upcoming environmental damage caused by the investment (Barry 1999:81).

Operating directly with subjectivity in the public sphere used to be the domain of contemporary art, which nowadays usually means either cultural production within the system of art institutions or the use of the toolkit of contemporary art. Some technology engagements involve participatory formats which could pass as museum or gallery workshops, sometimes they are even held in museums or galleries. For example, Michael et al. (2018) describe a product prototype-data collection workshop at the Geffrye Museum London. The ‘probe workshops’ are essentially exercises intended to deter usual household routines, to get outside of routine frames of thinking— participants might be asked to photograph the spiritual centre of a household, doodle while on the phone, or compose a dialogue between household appliances, fill in fictitious and real news items about energy, and add their doodles into diagrams, isometrics and other visualisations about energy, or to assign different qualities (hot, cold, stressed, relieved, ambitious, lazy) to spaces. The researchers then engage with the ‘probe returns’ aesthetically, exploring their semblamatic potential. Such visual-spatial materials and exercises (the ‘probes’) are a typical example of the ‘creative exercise’ which is a legacy of different art movements, for example, the situationists or Joseph Beuys and fluxus. The avant-garde was the vanguard, elitist by nature, but nowadays the utilisation of the toolkit derived from such art movement is a much broader trend (e.g. Fuller 2005). There is no strict boundary between science communication and contemporary art, but the same could be said about art and community engagement schemes or guerilla marketing. Within art, the ‘participatory turn’ is again a broader paradigm, connected to knowledge society policies, similarly to the shift towards broader public engagement with science and technology. Bioart is a whole new genre (privileged on the EU level), where a space is provided for engagement with hybrid sciences and technologies, on a personal and experimental register, often funded by corporate sponsors (e.g. Levy 2012). A Hungarian example is KIBU, the innovation lab of T-com, where despite the information technology profile of t-com, within a startup grant-arts funding scheme researchers work with wheat (Sensitive Wheat) or human prosthetics (SmartHand). Similar to how contemporary art and its institutions have merged with science communication, it is hard to separate such science communication

from other domains (e.g. da Costa and Philip 2008). For example, the same influencers often work for different sponsors, or scientific institutions run social media pages, produce and reference YouTube content. Besides the use of novel media formats, the merging of public and private communication changes what it means to do science communication, how the public is defined, how experts relate to the public, and what hierarchies (either epistemic or political) this entails. Communicating scientific information is itself part of the scientific work, and it means communicating to stakeholders, policymakers, and the public (e.g. de Bruin and Bostrom, 2013; Garvey, 2014). Elaborating on this idea, Gregory (2010) also claims that constructing and sharing the meaning of new or prospective technologies is itself an important form of production. Gregory cites the example of shoes: the average UK woman has 26 pairs but wears only four, so if the shoes are not worn they are not products fulfilling a purpose. Not a product is sold and bought, but meaning, so constructing and sharing meaning is an economically productive act in itself. Even technologies themselves function as metaphors: cultured meat is “a communication technology” (O’Riordan et al. 2017), nanobots are “heuristic devices” (Nerlich 2008).

2.2 The Local Context Of Science Communication

As a starting point, I need to note that I am careful to use the term ‘science communication’, because this notion itself is a particular construct since most of the discourses related to it come from Western Europe or the USA. I would like to take a brief look at how this concept applies to Hungary, which is my research site. The organizers of local science communication conference (BCE, Tudománykommunikáció konferencia, 2018) claim that:

“The research scope of science communication encompasses different perspectives and a wide range of areas: the publication of results within the scientific community; disseminating scientific results to a wider audience; explanation of methods and results; combating the spread of fake science and misinformation; informing (governmental, managerial) decision-making; obtaining support for research (Veszelszki–Cser 2018).”⁵

⁵ Original text: “A tudománykommunikáció vizsgálati körébe számos szempont és szerteágazó terület tartozik: az eredmények közzététele a tudományos közösségen belül; a tudományos eredmények megismertetése a szélesebb közönséggel; a módszerek és eredmények elmagyarázása; az áltudományok és a téves információk terjedése elleni küzdelem; a (kormányzati, vezetői) döntéshozatal informálása; támogatás elnyerése a kutatásokhoz.”

The above-declared aims and definition of science communication fit the international concept – and science communication itself is in large part a cultural import. For example, international contests and formats such as FameLab or TEDx have their respective local versions, local event organizers and researchers adopt trends, concepts, methodologies from the international literature and practice. The particular local constellations I research mediate technologies and knowledge between state-non state, laymen, and experts, and I would say that in my case the mode and the extent of the connection between the public, institutions, and actors are influenced by local, particular factors (strong state, local cultural scripts), yet it essentially remains the same phenomena as in the international literature.

2.3 The Participatory Model

Science communication has different theoretical and practical models, based on different principles such as the top-down ‘knowledge deficit’ model, or a more egalitarian approach based on initiating dialogue, or different modes of engagement and participation between the public and experts (Trench 2008). To quote Bartock et al. (2015): “Whereas the deficit model focuses on the transmission of knowledge, and whereas the dialogue model focuses on the discussion of the implications of knowledge, the participation model of science communication focuses on the co-production of knowledge by scientific experts and the lay public” (200:16).

In my view, the dialogue, or participation model applies the most to my case studies, because participatory media formats are not only about disseminating information (both ways, towards the public and from the public to the stakeholders of innovation), but they also initiate active engagement, which entails subjectifying mechanisms- they create their public. Providing a good example for this, Keith and Griffiths (2020) researched whether an immersive theatrical experience developed to engage the public with science made people feel like scientists – their result was yes. Vaughan (2020) explores how interacting with science at a convention event (anime, gamers) shapes identities. Kondo et al. (2019) talk about empowerment and ‘constructing new realities’ when evaluating community-based participatory research. Davies et al. (2019) generally see science communication as a form of storytelling or narrative, ritual, and collective meaning-making.

Thorpe (2010), Gregory and Thorpe (2010), and Elam (2004) claim that the post-Fordist mode of production led to novel relations between science experts and the public. Participation by the public becomes immaterial labor, a mode of production that contributes to the construction and dissemination of technologies. Thus, the public becomes an active participant in the construction of scientific knowledge. As Elam (2004) argues, ‘hybrid sciences’ (information science, bio-, and nanotechnology) in support of contemporary knowledge society stretch well beyond the walls of traditional laboratory environments and extend deep into society. The social reach of such science is the first reason why the public communication of science is a much more high-stakes field now than it used to be. Within contemporary knowledge society, the figure of the gentleman (a serious enough layperson capable of witnessing scientific experiments and then providing public testimony) is replaced by various professional actors (sociologists, science journalists, etc.) who have their political agendas, and the lay public is involved as well (see also Gieryn 1999). The phenomenon of witnessing has emerged at the beginning of modern science (Shapin and Schaffer 1985) involving a very particular configuration of social and political structures in seventeenth-century Britain. Since then, the generation of scientific knowledge has involved a carefully regulated system of “witnessing,” made possible by certain technologies, among them literary and visual ones.

With the advent of novel science communication formats, there are novel ‘witnessing experiments’ on offer, enabling more active participation and engagement. According to the conceptualisation of Horst and Michael (2011) when it comes to public engagement, there is no inherent wrong: ‘idiotic’ actions, (such as teenage girls giggling about a science installation) enable reflection altogether on what it means to do science communication. The role of affective interactions is emphasised – which is what such ‘idiotic’ behaviors are. Here idiot is a technical term borrowed from Isabelle Stengers, meaning the nonparticipant. The authors claim to stand on the shoulder of ‘idiots’ when they talk about members of the public interacting with a science installation in unexpected ways. If there is no real idiocy, just affective interaction “overspilling” the analytical or political framework of the event, then it affects the status of professional knowledge as well. The science communication event itself is understood as productive because it produces new political constellations through novel engagement formats.

2.4 Actual science, and “progress”

According to Eurobarometer 340: ‘Science and Technology 2014’, there is much interest in science (over 80% of respondents), but only 10% of European citizens consider themselves well informed.

It is not my wish to return to the deficit view (that the public is ignorant), but to situate this gap between the public's level of interest and their knowledge of science as part of a broader phenomenon: actual science is way beyond popularised notions about science.

Firstly, culture (a set of meaning-making practices, representations, and narratives) influences both the praxis and reception of science (Franklin 1995), but often what mass media and popular culture claim to be science are no longer scientific, (ie it is based on since falsified premises or negated evidence). Theoretical discourses expand very fast, and so does scientific and technological innovation, but the popular notion of ‘science’ (positivist, Newtonian, mechanical) is still different from the actual science which drives innovation and knowledge production.

If we look at contemporary developments within science, the core ontology and cosmology of the world has changed: considering the Earth to be a living entity (Gaia), claiming that everything material on it might have some form of consciousness (panpsychism) is now a legitimate branch of academic philosophy⁶. Consciousness has no clear definition within cognitive science (or measurable unit), but at least it is a proven fact that matter is not fully dead – matter has self-organising properties as in the case of crystals, electronic circuits, or chemical reactions. As philosopher Manuel De Landa (2000) says from a new materialist perspective: “even the humblest forms of matter and energy have the potential for self-organisation beyond the relatively simple type involved in the creation of crystals... It is from these unlimited combinations that truly novel structures are generated. When put together, all these forms of spontaneous structural generation suggest that inorganic matter is much more variable and creative than we ever imagined. And this insight into matter's inherent creativity needs to be fully incorporated into our new materialist philosophies” (200:16).

Earth or matter might have some form of consciousness, but the discipline that ‘invented’ the human psyche is in a serious credibility crisis. Besides the failure to define and measure

⁶ See for example the work of Philip Goff <https://plato.stanford.edu/entries/panpsychism/>

consciousness, academic psychology, especially social psychology, has a replication crisis (similarly to many other branches of academia). Due to failed replication experiments, we can even claim that any given finding in psychology is more likely to be fiction than fact. Out of 100 experiments published in three top-tier journals, only 36% of the replications were “successful” (i.e., produced p values $<.05$) (OSC 2015), and further experiments revealed a similarly low level of reproducibility (Klein et al., 2018, Camerer et al., 2018). One psychological phenomenon for whose existence we have replicable evidence is extrasensory perception (ESP). Daryl Bem has carried out a ten-year investigation with nine experiments, involving a thousand subjects, and, as a result, in 2015 and 2016 published a meta-analysis of all known replications conducted up to that point by thirty-three labs in fourteen countries: the overall result (albeit with a small significance) exceeded the criterion for decisive evidence.

At the time of writing the existence of ESP is more proven than the unreplicable findings of the Stanford Prison experiment (which would not even be ethical to replicate, let alone possible⁷) or many popularly known social psychology “facts”⁸. As of now, it is considered more scientific to say our (scientifically unapprehended) consciousness is part of a larger whole, than to claim each human harbours a dictator and a sadist within themselves, or ‘each to their own, or everyone is an island within themselves. We could say that the progress actually happening is more progressive (adds more to the wellbeing of every sentient being) than the past notion of ‘progress’.

The horizon of modernism was at the end a teleological axis: there used to be ‘a future’, but nowadays, besides the crises pertaining to liberal institutions, and political establishments (previously considered the endpoint of history), a climate disaster looms over any whatsoever future. There is no more ‘progress against ‘backwardness’, as this temporal axis has been lost.

Concepts such as the ‘enlightened West’ or ‘catching up’ have lost their appeal. With an economically, politically, and ecologically uncertain future, the loss of overarching visions about any future, now political mobilisation and even community engagement is overwhelmingly based on moral appeals. It all happens in the here and now (for example social media providing a site

⁷ Criticism and Zimbardo’s response: [823-839dx.doi.org/10.1037/amp0000401](https://doi.org/10.1037/amp0000401) and <https://www.prisonexp.org/response>

⁸ For example ‘power posing’ <http://pss.sagepub.com/content/21/10/1363.long>, or the ‘Macbeth effect’ -washing away guilt with hand washing <https://pubmed.ncbi.nlm.nih.gov/21568173/>

for temporary mob formation, or instant gratification), there is no need to provide a vision, just moral positions to assume.

2.5 New technology and the public sphere

Despite the new reality of technoscientific innovation (which often do not make sense within ‘common sense’ ontological-epistemological frameworks) and the theoretical and social contestations of modernist epistemological notions, the public sphere is still largely structured along binary axes (progressive-backward, right-wrong, good-bad, global-local, east-west) – as it is in itself the binary opposite of the private sphere.

Being framed through these binaries, new technologies become politicised agendas connected to major culture war domains (left-right, liberal-conservative). To elaborate this thought, I would like to explore one example: how digital, freely available, and downloadable pornography⁹ in the popular cultural landscape is framed as a matter of free speech (liberal take) vs prudery (conservative take)? Yet there are more nuanced analyses of this problem: from broadly Foucauldian perspective pornography (and the conservative’s war on it) is about regulating sexuality and through its social relations, the second wave (and Marxist) feminist analyses call attention to how it affects women, both in the sex industry and generally the female sex class. According to Cawston (2018), currently, the way feminist social scientists intervene in the public debate around pornography is either through highlighting the harm or suffering associated with pornography, characterising pornography as a violation of certain rights, or the radical feminist denouncement of pornography as sex. Relevant to my research, I would like to mention two current feminist campaigns against pornography: ‘Culture Reframed’ (founded by Marxist feminist Gail Dines) or Kathleen Richardson’s ‘Campaign Against Sex Robots’, whose position paper talks about ‘technological animism’ where the animating spirit is ignorance (2016). These interventions have to start from staking out basic ontological-epistemological premises about human-non/human as well as economic relations and the nature of mediation, way beyond

⁹ If we use the definition that biotechnology is technology which intervenes in organic structures, then digital pornography is only so far biotechnology as it affects neuroplasticity, but nonetheless, it is a good example of how ‘progress’ is staked against backwardness, yet assumed progress masks extreme exploitation.

moralising binaries (prudery-freedom, etc.). Ignoring the moralising binaries, the porn industry speaks of itself as an industry (Dines 2010: 170-200), but within the moralising binaries, often new technology connected to porn such as VR is branded as a technologised solution to humanity's problems (see for example global player Docler's startup empire¹⁰) – just as the porn industry has always been interwoven with the development of media technology (1998 Coopersmiths). Yet feminist criticism has never gone mainstream, and despite the increasing acknowledgment of the harms, and the shift in public health policy (framing porn as a public health crisis), media frames often still follow such moralising binaries as liberation-prudery.

Similarly, the abortion pill is banned in my native Hungary. It does not mean that it is unavailable. On the contrary: abortion is legal up to twelve weeks, but the protocol does not follow international best evidence. It is overregulated and overcomplicated: surgical abortion is a punishment technology, just as it used to be at the time of its implementation. Currently, in 2020, abortion induced by pill is part of telemedicine and that of official health protocol in many countries. Hungarian women could still choose the medical option (as through telemedicine it is practically easier to access than the state-provided surgical one), but many do not understand this technology. It is 'too good to be true': out of the conventional patriarchal bounds of state-subject, provider-patient relationship: it is not punitive and controlling. When I worked with an organisation providing medical abortion, women sometimes mentioned to me that even if the abortion pill was available, "they would do it the proper way". The fact that these women speak against their self-interest when they say they would have an abortion procedure performed 'properly', expresses that they do not dare to rebel against the hierarchies and ideologies contingent on reproductive medical technology. Sometimes even feminist organisations emphasize how it is not any easier or causes less suffering than the surgical way. This way they too invoke the moralising-punitive frame around abortion, taking into account the interests of other actors in lobbying networks.

A similar dynamic influences the media reports on entheogens (traditionally used psychedelics derived from natural sources)¹¹. Building on the analogy of abortion pills, empirical data on entheogens support that they are, in general, much more effective than either SSRIs or

¹⁰ <https://www.doclerholding.hu/en/about/companies/?ts=qpvb6w>

¹¹ Which is an ancient technology, but entered the western cultural imaginary only a few decades ago, becoming more known maybe a few years ago.

psychotherapy.¹² Among the growing personal accounts, some are very grateful: for example, according to a CNN reporter who acquired post-traumatic stress disorder (PTSD) in war zones, psychedelics saved her life, and later she established a foundation for supporting journalism covering natural medicine, cognition, and entheogens. American podcaster star Joe Rogan loves DMT so much that a drug-inspired tattoo covers his arm and his question became a meme: “Have you ever done DMT?” Many of the Hungarian users have similarly enthusiastic sentiments. As they write in a Facebook group Daath: “I had beautiful visions, “I was crying out of happiness”, “Mother of Earth showed me it does not matter what I do, she will always love me unconditionally. Even if nobody loves me, she will always be there for me and her love is endless.” Many times, these descriptions reflect an animist cosmology, incorporating the plant as an active actor, providing teaching, healing, and protection. Yet often media frames evoke a punitive framework around the use of psychedelics, especially ayahuasca and DMT. As psychiatrist Ede Frecska says (interview in Narancs, 2016), “It's not really suitable for recreation, because the experience is typically not pleasant, but rather gives a hard lesson, which can then be processed with the help of a therapist”. In another article (444.hu, 2020)¹³ the narrator, following the guidelines of psychologists, uses the drug as a therapeutic tool, and details how tough the integration process is, which must be aided by a psychotherapist. This article appeared on a page managed by the Hungarian liberal rights protection organisation TASZ/HCLU (‘Drogriporter’), which is one of the columns of the 444.hu news page, also financed by (neo)liberal lobbies (such as the Soros network). Péter Sárosi, who published the anonymous personal narrative, is an expert working for TASZ/HCLU. The HCLU not only offers legal aid, but is also an active participant in Hungarian drug policy debates, typically against criminalisation, taking a stand on the side of medicalisation and emphasising that consumers should not be punished, but “assisted”. As they claim: “Our goal is to replace the harmful illusion of a drug-free Hungary with a health-centered, human rights-based, professional-based and collaborative approach.”¹⁴

¹² See for example:

<https://www.scientificamerican.com/article/psychedelics-as-antidepressants/#:~:text=Compared%20to%20selective%20serotonin%20reuptake,reversal%20of%20depression%20is%20observed.>

<https://newatlas.com/health-wellbeing/psilocybin-therapy-major-depression-trial-results-johns-hopkins/>

<https://www.verywellhealth.com/psychedelic-psychotherapy-clinical-trial-depression-5179610>

¹³ <https://drogriporter.444.hu/2020/11/09/traumafeldolgozas-onismeret-pszichedelikus-szerek-segitsegevel>

¹⁴ <https://tasz.hu/drogmentes2020>

Within a medicalised framework, ‘collaborative approach’ should mean assuming the position of the patient, and accepting the authority of psychotherapists.

As it can be seen from these instances, the reality of scientific innovation and technological development is way more complex than the claim that either the liberal or conservative cultural framework is based on moralising binaries. Yet mobilisation (either political mobilisation or general community involvement) is based on emotions¹⁵, and these emotions follow an already established cognitive structure, being structured along ideologically and politically embedded axioms (eg. Lakoff 2014).

¹⁵ At this point I would like to make a distinction between affect and emotion. To quote Jenny Edbauer Rice (2008), “terms like “emotion” and “affect” are often conflated to the point of being nearly synonymous. However, several scholars, most notably Brian Massumi and Antonio Damasio have stressed important differences between these two terms. Massumi describes emotions as having a “narrativised” content that is shaped through specific cultural, social, and political contexts. Thus, my feeling of anger when witnessing the recent dismantling of the SCHIP program for insuring children is an example of an emotion. It has content that has been arguably crafted by cultural contexts and judgments, such as the valuation of healthcare as a universal right, empathy for children, a history of negative images where conservatives and healthcare are concerned, and so forth. Affect, on the other hand, does not necessarily have a narrative, and neither is it crafted through cultural contexts. According to Massumi, affect is like a degree of intensity that is prior to an indexed or articulated referent. Affect describes an energetics that does not necessarily emerge at the level of signification.”

3 Literature Review – the Mechanisms of Visual, and Participatory Media Intervening in Public Debates of Emerging Biotechnology

In the following, I review the existing literature on visual and participatory media intervening in contemporary public debates and controversies about emerging biotechnology, with a focus on stem cell research, GMOs, and robots. According to a systematic search, most of the literature concerns GMOs, which I extend to the literature on other gene technologies, such as stem cell research and lab-grown meat. For contrast, I also include the literature on robots, as they merge the human and nonhuman on the level of representation, which complements gene technologies' merging of biological boundaries.

Practice within a laboratory and the resulting technological inventions are often very different from social expectations about science and technology, and popular expectations. To symbolically cope with new technology, there has to be a new representation, which emerges in a collective manner (Wagner and Cronberger 2001). However, various novel science communication formats involving visual media and participation do more than help a given society form such a symbolic representation or inform about new technology. Compared to the conventional model of science communication (popularisation) there are a set of novel relations and hierarchies: science communication is now a core part of doing science, the public is not passively, but actively engaging with technologies, science communication is often done before, and not after a certain invention. Such new developments further entangle the relationship of experts and laypeople, and thus destabilises other established relationships and hierarchies.

Through synthesising the theoretical themes, and empirical findings of existing literature I explore how visual and participatory media in science communication function as channels of political rhetoric: how it helps to situate actors, contest their legitimacy, or aid in gaining legitimacy, and how it transmits cultural scripts, such as identity elements or coping strategies. In some cases, it creates new ideas, and in some cases, it relies on and perpetuates already existing concepts.

3.1 Images relying on ideologised binaries

Public debates around biotechnology are complex sites of hegemony struggles and contestations of knowledge regimes. For example, the rejection of GMOs is connected to the rejection of the neoliberal world order (Lewidow 2012, Schwartz 2014) as the whole GMO debate is based on the binary split of nature-culture: Corrupting nature becomes a powerful metaphor for corporate greed. Hansen (2006) claims that the public communication of biotechnology draws on already familiar images, terms, and vocabularies in order to facilitate public understanding, a simple 'metaphoric' process of taking meanings that are familiar and applying them to the new, which is unfamiliar and not understood. But the public communication of biotechnology is much more than a matter of explanation, public representation is also about the ideological management of competing discourses. Drawing upon the history of the mass communication of new technological inventions, Hansen claims nature is the most prominent ideological anchor within debates about biotechnology and genetics.

Just as monstrous animals and plants embody the threat to pure nature, natural purity discourses also frame certain forms of human embodiment and conduct as contamination, monstrosity, and pollution. Feminist, postcolonial, post-structuralist literature is a tool to investigate the relation of such discourses to technology development. As Haraway (1997:61) says, "[We] cannot help but hear in the biotechnology debates the unintended tones of fear of the alien and suspicion of the mixed." If part of the project of radical emancipatory politics has been to deconstruct and dispel the notion that there is a "natural" order that is inherently "pure", "true" and "just", then invocations of the nature-as-pure narrative run counter to that project. They reinforce the notion that there is a nature that holds the essence of truth; that governs us and dictates the contours of morality to us, and that we must accept and obey.

Shildrick (2018) in *Visual Rhetorics and the Seductions of the Monstrous: Some Precautionary Observations* links the representations of the monstrous human body with biotechnology. Here visual equal representation in its orthodox sense- making something present that is absent.

There is no mention who produces these representations of the monstrous (historical documents, medical exhibits, art, dime museums, freak shows, media content) whether proponents or opponents of biotechnology. Shildrick claims that we might think our times are beyond racism, sexism, or disablism, but this is not the case: the capacities of biotechnology to change the body

have not made morphological difference any more acceptable, on the contrary, such technologies normalize the “stable, bounded subject”. The paper suggests that the role of technoscience will be to impose conformity on bodies, as the ability to read and intervene in organic structures is becoming a commonplace property of such technologies. Schildrick operates with a different mode of ontology than liberal humanism: the undisciplined body has to be rescued from technology. Schildrick shows that representations of the monstrous (for example the Renaissance monster book gender) pertaining to spectacle and objectification have been employed to serve monitory and disciplinary functions, setting standards of normativity: what bodies or desires are allowed, what would count as a sexual transgression. Monsters themselves also showed god’s power in creating something so extraordinary, providing legitimacy for the church. Schildrick claims that in our time the eyewitness accounts (who claimed to have seen the monsters in faraway lands) are replaced by technologies of making things visible, from film to the petri dish. In all cases of visualisation “all elements of unruliness, excess, and leakiness are carefully confined to the single moment of display, ordered into a recognisable narrative that gives us what Derrida (1999) calls the ‘right of inspection’”, which becomes an exercise of power over otherness, as the gaze won’t be returned. This is a means to both designate and domesticate otherness. Such otherness overlaps with socio-economic classifications such as disability or refugee status (the ‘disgustingness’ of a refugee camp, or the monstrosity of disabled bodies for example). Schildrick’s ethical stand is to engage with monstrosity beyond visual representations fixing the normative order: monstrosity should be considered difference not abject, it should not be erased by technology. Such engagement requires us to move beyond visual representations, and welcome “the engulfing disturbances of monstrous affects in the normative order”. Here affect disrupts the normative order, here visual equals representation, based on the orthodox platonic concept: to represent is to take the place of something absent, to render it present. For Schildrick images are the products of a hegemonic order staking out normativity. Not the visual but the affective is subversive, Schildrick bases her ethical stance on engaging with affect, and the visual (equated with representation) stands in the way of such engagement. Despite talking about ‘visual rhetorics’, the paper offers no visual illustrations (visual material is assumed to be only illustrative, despite the author mentioning visual rhetorics in the title) to prevent affective responses (disgust, curiosity) deemed “prefabricated”, which I assume means conditioning by previous media exposure. In this account both representation and technology have a similar kind

of disciplinary function: representations stake out normativity, and technology imposes conformity.

S. Anker et al. (2008) provide examples of tropes through which contemporary scientific images used for communication purposes appeal to progress. These images often appropriate (even if ironically) art history, to suggest the given equipment or other technological achievement is truly 'state of the art'. Sometimes they reference the human body, showing technology 'humanised' by images that equate its capacities with those of organic beings, or show the body machine-like, with replaceable parts, thus offering the illusion of control. "The promise of complete control (of cell lines, gels, cloning techniques, or experimental organisms) that underlies many of the ad campaigns and forms the basis of the fundamental appeal, replicates science's more general expectation of controlling the body, nature, and technology. People who are out of control in these advertisements are symbolic of what is unscientific, problematic and in need of correction" (2008:299). Images of progress are also images of overcoming nature and unpredictability.

Technology itself often embodies popular notions of scientific progress, and scientists draw inspiration from popular media (eg. Franklin's 'genetic imaginary': a 'realm of imagining the future in which strange ideas gain popular appeal, 2000) and also when people make sense of a given technology they rely on already existing ideas and concepts. Wagner and Cronberger (2001) claim that the general public is not in possession of the theoretical and methodological assets of scientists, so they need a symbolic handle to understand the technology. Symbolic coping is the collective process of making the unfamiliar intelligible and communicable. Therefore members of the group form a representation, which is a collectively elaborated construct. It has to fit an aesthetic consensus, and has to connect to everyday experience and established beliefs. This is achieved through objectification by metaphor where an unfamiliar phenomenon is structurally linked to a familiar one. The authors describe this mechanism through a video spot launched by an Austrian tabloid paper in 1998. In a laboratory men in white coats inject a substance into a tomato, which then grows into a monstrous red globe, explodes, and injures the men. This complex metaphoric image mimics the common belief connection between gene manipulation, infection, and monstrosity, yet it is a new representation.

To illustrate how visual media builds on the affective energies of an already established cultural framework based on moralising binaries such as nature-culture, and how it channels public

debates towards such binaries, I would like to provide an overview of the literature concerning GMOs images.

Carroll (2018) claims that the resistance against GMOs is multilayered, but most anti-GMO activism has little in common besides seeking some mystical state of “natural purity”, in fact, both proprietors and antagonists usually employ tropes based on nature-culture essentialisms. Such activism relies heavily on metaphors about the dangers of boundary crossings, namely the boundary of ‘pure’ nature, therefore activist media uses visual tropes such as the monstrous, uncanny vegetables and animals (see also Schurman and Munro 2009). Anti-GMO media images use tropes about the boundary between nature and culture, claiming to protect nature and contest science, progress, and their connoted meanings. Similar to visual media, activist direct action stunts (‘image events’, DeLuca and Peeples, 2002:134.) showcase GMOs and biotechnology as an extension of, or symbol of corporate power and greed (e.g. Schwartz 2002 or Wall 2000). Shaw (2017) suggests that normative gender representations within Hawaiian anti-GMO activism (images of women and children, native warriors, a swimsuit calendar) downplay the threat that anti-GMO organising poses to established political and social relations. Exploring the relationship between genetic images and imagination Van Dijck (1998) observes that ‘[i]mages and imaginations, like arguments, are mobilised to affect the meaning of genetics. Popular images are sites where simultaneously the control over science and the control of representation is at stake’ (van Dijck, 1998:15). Clancy and Clancy (2016) claim that the visual culture of GMOs is instrumental in such contestations. It is not only ideological contestation (struggles over which discourses or icons circulate) but also in negotiations over the values of discourses, and through them the contestation of knowledge regimes and policy. Clancy and Clancy (2016) claim that anti-GMO images (besides the ones produced by institutions) are memetic, they have no author. They travel across contexts, spawning their local variations and adaptation, so they become local knowledge – in the form of “common-sense” stories and images – pitted against ‘rational’ scientific knowledge. Their strategy is to circumnavigate the logic of rationality of the proponents of GMOs and substitute the logic of association with a diffuse narrative of mistrust. Anti-GMO discourse is essentially visual, using enthymematic images such as Frankenfoods to undermine scientific narratives without directly engaging in rationalistic argumentation. The cumulative effect of such imagery is that GMOs are in a constant state of uncertainty and doubt – precisely the goal of the GMO opposition (Clancy and Clancy 2016).

To elaborate my points about GMO resistance and essentialisms I would like to show a case study by Bloomfield and Doolin (2012) who provide an analysis of the tactics of New Zealand campaigners MAdGE (mothers against genetic modification). MAdGE's campaign featured a billboard of a frankencow partially made of a naked woman. It successfully grabbed the media spotlight, but besides drawing attention to the transgression of the species boundary and exploitation, it violated the limits of the acceptable public representation of the female body, even drawing the ire of other anti-GMO activists. An academic study that explored public perceptions of GM among a selection of focus groups also found strong reactions to MAdGE's billboard – “a significant number of participants regarded such symbolism as objectionable, irresponsible, and verging on the pornographic” (Bloomfield and Doolin ref. Weaver, 2005). In this case, the transgression depicted on the billboard had a strong effect, only a different kind of transgression, and besides the media attention, a different kind of effect than what the creators hoped for. Bloomfield and Doolin (2012) also describe another billboard campaign when New Zealand local celebrities were posing in T-shirts sporting slogans such as “We need GE like a tomato needs a fish”, which then provoked a strong response from pro-GM groups. For example, the New Zealand Universities Science Council ran a full-page newspaper advertisement “to combat an emotional and unscientific campaign by the anti-GM advocates”. The advertisement consisted purely of text and emphasised the potential economic and health benefits of GM and the threat to New Zealand in not participating in this scientific advance. The contrast between the style and content of the pro-GM newspaper advertisement and the imagery of the anti-GM billboard fits neatly with that between the discursive and the symbolic (Bloomfield and Doolin ref. Szerszynski 2002). It also reinforced the commonplace dualism between the rational and the nonrational, between reason and emotion.

Besides the issue of the GMOs themselves (who produces or sells them, what effect they have on the human body or the environment) they become symbols circulated within an already polarised and politicised media environment, as part of much more complex signifying chains.

Such essentialisations are effective tools of mobilisation, because they are based on tropes firmly embedded in the public consciousness, but some argue that they are also counterproductive in the longer term, because they divert attention from structural causes of social injustice, and fail to address the social embeddedness of biotechnology and its political and economic context (Carroll 2018). For example, novel GMO crops divert attention from the structural causes of

famine. (Carroll 2018, Hellsten 2002). Clancy and Clancy (2016) claim that the cultural resistance to GMOs shows the ability of images to short-circuit appeals to logic. The fact of the resilience of this discourse testifies to the ability of visual discourse to dislocate scientific or logic-based epistemologies from their hegemonic position, through flexibility and sophisticated blending of visual metaphors between figurative and literal language and representation. Rational claims about technology can be contested and refuted, but such a discourse ultimately succeeds in creating doubt. This process also contributes to a broader shift away from rational, political decision-making. Bloomfield and Doolin (2012) claim that in the case of GMOs visual imagery can even be counterproductive to establishing a dialogue between the public and scientific institutions. Eaton provides a description of such fear-based activism: “Anti-GM movements usually conjure up images of radical activists, wearing biohazard suits or dressed as the grim reaper, slashing and uprooting GM crops in unsuspecting farmers’ fields. Indeed, Google image searches of “GM crop protest” and “anti-GM movement” produce a large number of Greenpeace signs, young white activists in European cities, and corn cobs wearing frightening faces.” In contrast to this, the farmer's resistance was based on discourses of democracy, accountability, and collective decision-making, grounded in a political-economic critique (Eaton 2013:12). Eaton provides a counterexample: farmers against terminator technology, who use images of suicide seeds and terminators to advance a campaign, subtly evoking concerns over suicide as a violation of the natural right to life. The Terminator embodies American militarism, corporate technoscience, death, and destruction. This visual metaphor thus encompasses critiques of structural conditions, but it is still an effective tool of mobilisation because it taps into the popular cultural imaginary (Eaton 2013:12).

Pro-GMO discourses tend to employ scientific narratives differently than anti-GMO ones. Besides rendering GMOs “invisible” and undermining the veracity of visual discourses (Clancy and Clancy 2016) they rely on the notion of science in other ways as well. One reason is that besides protecting ‘pure’ nature, the essentialist nature-technology binary also entails making scientific progress seem positive. Biotech companies highlight positive images and turn images of fear into those of hope and promise -from the negative to the positive aspect of the modernist progress narrative (Hellsten 2002). Hellsten (2002) describes how this happens through the use of partial metaphors: from a set of meanings only some are mapped onto the targets. For example, if genes are ‘the letters in the book of life’ we are able to “read instructions” to living

organisms and even modify them. The partial metaphors used in these ads try to invoke the positive connotations of the progress narrative: humankind is supposed, in one way or another, to take control of nature.

Visual media and the use of metaphors is strategically used to attach more favourable meanings to biotechnology (scientific progress) without straying from the lowest common denominators of the popular cultural imaginary, therefore not threatening the hegemonic social order, yet there are claims in the literature, that negative images have a stronger impact. Tolbert and Rutherford (2009) has conducted a Semiotic Analysis of Biotechnology and Food Safety Images, analyzing 45 photographs from Time, Newsweek, and U.S. News & World Report to evaluate differences in the quantity and nature of images used in biotechnology and food safety. The analysis of the material is based on semiotic theory. The author acknowledges the shortcomings of the semiotic method by revealing her own background: female, caucasian, at the time was completing an advanced degree, had an educational background in photography and graphic design, and was an active photographer from a southern U.S. state. This is important in the context of this study because she interpreted the signs based on her own cultural background. The images were classified based on generally-accepted notions about American culture. The researchers looked for signs that would communicate a message to the United States populace (based on their criteria establishing the commonality of codes). Each image was decoded by identifying its iconic, indexical, and symbolic meaning through the signs found in the image. The images were coded for response types: positive, negative, neutral (based on the assumptions of the researcher). There is a whole separate category for foreign images, that is images assumed to be taken in a country outside of the US. The study claims that all three publications were close to having balanced coverage of the issue, but even when a content analysis portrays balanced photographic content, additional reading of the image may present a contradictory message. Also, they repeat the claim that negative images have more impact, and even elicit a response without a reader engaging with the text. This paper showcases the limitations of the semiotic method and perfectly shows how arbitrary the results can be: they reveal the concerns of the researcher and her implicit assumptions based on her own experience and her own culture.

A study from Italy (Ventura et al. 2016) analyses the most viewed google images of GMOs, to determine whether exposure to scary images could be a factor that affects the negative perception of genetically modified organisms in Italy. It uses ordinary least-squares regression to establish

the relationship between the ‘Scary Impact Index’ and a set of variables that describes the context in which GMO images appear. The images with the scariest content belong in the “Agri-food” and “Conspiracy theorists” variables, which show a significant and positive (0.041 and 0.039 respectively) relationship. The authors suggest that this could be partially due to the Italian food industry protecting its traditional markets from GMOs. The Scary Impact Index is the author’s method to measure how much negative connotation the image carries: there are set categories of negative meanings (imaginary vegetable, drug, war, etc.), they are codified, and then their sums are added up. The results reveal that the first (and most viewed) Google result images contain the most frightful content, and this influences the public perception of GMOs. There is an argument (Bloomfield and Doolin 2012) that attempts to introduce GM foods into Europe in the 1990s stalled because of negative images such as the notion of Frankenfood, which expressed and invigorated public/consumer opinion. Clancy and Clancy (2016:1) also argue that “the uncommonly high levels of opposition to genetically modified food in both the United States and in Europe can be attributed to the overwhelming success of the online visual campaign against GMOs”, which operated with negative images.

3.2 Creating New Imaginaries

Just as the case with GMOs either embodying the threat to ‘pure’ nature or helping the betterment of humankind through progress, the media tends to portray issues as a clash between two opposing sides. As I explored above, visual media plays a role in reducing complex issues to such a binary framework: fear-mongering is just as reductive as overt enthusiasm. Yet the reality of technological innovation is much more complex than what this conventional frame of thought would allow. These technologies also often embody completely new notions about human embodiment, the boundaries of the human body, or new figurations of relating between the social, the individual, and the nonhuman.

Robots are a great example of a ‘present future’ (Luhmann 1982), the differences between the present or current state of affairs and an imagined future, a ‘present future’. They are surrounded by misconceptions: most people don’t know what they really do, and the general public greatly overestimates their abilities. There is a huge discrepancy between the public perception of robots and their real-world capabilities. Rosén et al. (2018) claim that the main culprit is mass media and sci-fi, but public presentations of robots are also to blame: they are often scripted, and the human hosts act together with a robot that seems to act in a human-like manner, capable of humor, empathy, showing a diverse range of emotions. These public presentations lack a debriefing session, where the audience would be informed about the reality: that the robots were both programmed beforehand and remote-controlled during the conversation. This negatively influences research because the public has unrealistic expectations. Thellman and Ziemke (2017) studied how anthropomorphism in robot design affects social attitudes towards robots, showing the effect of priming, partially through images (they conducted a questionnaire in 3 versions, with different cover pictures, depicting three different robots with varying degrees of human-likeness). The conclusion of the experiment is that asking people about ‘robots’ in general is going to yield questionable results, because they might have very different ideas in mind, and it is easy to manipulate results with priming. Richardson (2015) takes an argument from anthropology that human constructs of gender, class, and race are transferable to non-humans. Fantasy is not a neutral domain, but a reflection of human social relations and

values. Humans extend their lifeworlds to robots. Richardson takes the anthropological concept of “technological animism” and instead of religion, ties it to the lack of awareness of how culture is perpetuated in design, so ignorance becomes the ‘animating spirit’ (Richardson 2018). For example, the use of robots for sex is justified on the basis that robots are not real entities, they are things. This narrative is also replayed in virtual reality child sexual abuse settings (Richardson ref. Stahl 2009). Robots themselves are not sentient beings, but extending the logic of prostitution (the buyer is an active subject, the bought is a ‘thing’) to robots will further reinforce unequal power relations. Richardson has launched a campaign against sex robots (<https://campaignagainstsexrobots.org>), which features a simple design, research, and a list of popular press articles. It has no images of actual sex robots.

Nerlich (2008) analyses images of nanorobots displayed mostly to engage lay publics with biotechnology and nanotechnology. The paper is both a quantitative and qualitative study of nanorobot images at the Science Photo Library, the world’s biggest supplier of science photos. The author studied 363 images relating to ‘nanotechnology’ and 128 images specifically depicting ‘nanorobots’— almost a third of all nanotech images available on the site. The paper asks the question: “can nanobots just be regarded as a kind of rope ladder that was thrown out to the public by scientists and science popularizers to acquaint it with nanoscience and nanotechnology? Are they a heuristic device?” Nanobot images are investigated based on their usage and context, and their meaning in science and society. Besides content analysis the author also does word use analysis and word cluster analysis. Overall, the main functions that nanomachines are envisioned as carrying out in the future seem to be the following: to carry, manipulate, grab, zap, drill, attack, destroy, fight, kill, deliver, inject, administer, detect and diagnose. What these bots do mainly belong in the medical, military, manufacturing domain, yet very few images directly depict a nanobot city, a nanobot army, nano-replicators, or a nanorobotic manufacturing unit. Almost all images used for nano-illustration can be regarded as hybrids between nature, culture, science, fiction: nature is at the nano-level, culture is at the register of artistic conventions, science is nanotechnology, and fiction means the products resulting from this technology. The author states that such images are not mere illustrations or decorum, they aid people in understanding science. Imaging is both about capturing the visible, making the invisible visible, and depicting the possible. Seeing is also ‘seeing as’ – making

sense. The metaphor is a cognitive tool (Lakoff and Johnson 1980) and the visual aid of producing images of future scenarios.

Nanobot images do not just visualize what is there but invisible to the human eye (such as existing natural phenomena on a quantum level) they are artistic renderings of a future world, therefore they implicitly provide visual narratives about the future, and such promises are likely never to be fulfilled. The nanobot is in some sense indeed a heuristic device, or rather a heuristic fiction helping to make sense of what might be possible in the future. It is a bridge between popular culture and much more complex and advanced scientific developments, which might not at all include nanobots such as those analyzed in the images of the study.

Landau et al. (2008) aim to fill a gap in the literature by studying the impact of images depicting nanotechnology on lay audiences. Despite the impact of visual images on public understanding of science, and the importance of nanotechnology, so far no such study has been done, claim the authors. They conducted an experiment, using the social networks of the team members. The participants were asked more generally about nanotechnology, and then they were shown two very different images (formally and semantically) about nanotechnology and they were asked about these images: “What thoughts does this picture bring to your mind?” and “What feelings does this picture give you?”. The interviews were transcribed and then coded, allowing the identification of emergent patterns and themes. Overall 10 themes have emerged, which were either valenced positively or negatively: (1) Science, (2) (Medicinal) Machines, (3) Technology, (4) Very Small, (5) Sky, (6) Motion, (7) (Childhood) Toys, (8) Bodily Blood, (9) Injecting (Disease), and (10) Foreign (Insect). These categories were objected to further analysis. The main argument of the paper is that a specific visual domain pertaining to science images exists. The participants were referring back to this domain when making sense of the images. The existence of this fixed ‘science domain’ means people tend to perceive new technology as either much more beneficial than its capabilities or much worse, as this is the typical narrative of such images.

In the above cases people conflated the present with an imaginary future where they inserted robots at the adequate entry points, ‘making sense’ of this ‘future’, through ‘engaging with robots’, which meant consuming media about robots, or participating in mediated experiences involving robots) even ‘experiencing’ this imaginary future, and yet ignoring the reality of

technological innovation. The anthropomorphisation of robots further conceals the reality that robots have a fundamentally different kind of, much simpler 'intelligence' than humans.

Stem cell research is a similar case of the 'progress' gap- as the potential benefits (if the research succeeds at all) lie in the future, and thus images show possibilities. As Steven (2008:45) says about the impact of the biotech industry on major American art exhibitions showcasing research about genetics: "The common ground all these shows share is that they propagate supposedly scientific results that scientists themselves have not been able to obtain. These exhibits are an important venue for scientists, and especially biotech firms, to gain converts to their faith in their work on DNA, the "Book of Life," to redeem us from such sins as smoking or the fate of living in pollution. Through attracting visitors for in-person spectatorship, but perhaps more through the public relations blitzes in the towns the exhibits tour, and the print and online media that cover the exhibits, curators are creating the Genomic Age that they claim to be discovering." Even though art events have a limited audience, they exert a broader effect through media coverage. Williams and Kitzinger and Henderson (2003) analyzed a sub-sample from a comprehensive archive of reporting about all aspects of human genetic research for the year 2000 in all national UK newspapers and main TV news bulletins, and they indexed and coded the material for the main story focus, the type of visual images used, who was quoted and what potential medical or ethical, social and legal risks were raised in the reporting. They analyzed how the embryo was described and positioned, how life was defined, what metaphors were used, and what the potential benefits of the research would be. Metaphors are woven throughout the debate: new 'frontier' 'civilised' 'pioneers' on the side of the supporters, and piracy, plunder, raid, and even 'cannibalism' on the side of the opponents. These metaphors express boundary-crossing, leaving the concept of progress unquestioned. They found that visual images of stem cells (cells in tubes, clusters of cells, etc.) support the narrative of the proponents of stem cell research. They claim that the role of visual representation is a key element in stem cell debates. It does not follow the usual pattern whereby, in the abortion debate, those 'on the side' of the fetus display its image while those who are 'pro-choice' shy away from this. In the stem cell debate, the pattern is inverted: the opponents do not show the fetus (technically it is a blastocyst and then fetus at the 14 days cutoff point) but the supporters do, to show how it is not 'human' (in a conventional sense) but a bunch of cells, matter, and therefore suitable material for scientific research. The social, political, and cultural construction of the embryo and the meaning

of the embryo are contingent on interests. As the authors state, here visual images play a key role in the political debate, by supporting the notion more easily that the cells used are different from a conventional human being than the opponent's claim about the humanity of the embryo.

Often technology based on promissory narratives itself becomes a metaphor. Jönsson (2017) claims that artistic engagement is a central contribution to cultured meat. Jönsson cites three examples of artworks showing nature's potential subsumption to capital: a cookbook with fantasy rendering of the recipes, a building that utilizes sphincter muscles built from stem cells, and artists engineering cells for human consumption. Using visual semiotics and narrative analysis, Ruivenkamp and Stephens (2016) compare imagescapes (images at a given time representing a topic) with photos of a 2013 press release event of a 300,000 Euro 'cultured burger', the first in-vitro meat initiative with major funding. In vitro meat production is essentially the application of biomedical techniques developed in stem cell science and tissue engineering to food production. Relying on more general narratives about how science could benefit humanity, in-vitro meat's "promissory narratives" (see also Broad 2020) are about environmental issues, animal welfare, and food poverty. These are mostly textual: they are discussed, written down, and recorded in YouTube videos. On the other hand, images also showcase these narratives, but they are also interventions at the ontological boundary of meatness. The 2011 images (collected from Google search results, via raking and snowballing, academic publications, and stock photos) are rather consistent: they employ different strategies to intervene in ontological categorisation, either to showcase the meatness of in-vitro meat or try to show the place and order where in-vitro meat belongs. These images fell into four distinct categories: cell images, tissue images, flowcharts, and meat in a dish images. The cell images were found almost exclusively in scientific journals, intended for a specialist audience. The flowchart images, also originating in professional contexts, detail the making of in-vitro meat, and also do boundary work. The imagescapes also featured images from the work of artists and tissue engineers Oron Catts and Ionat Zurr who formed the Tissue Culture and Art project in 1996 to explore how artistic expression can be realised through tissue culturing techniques. During their event in a Nantes art gallery frog cells were grown and eaten, whilst the cell donor frogs watched the event. Here ontological ambiguity was the central theme as well. Matter is taken out of place but located into a different category: the tissue was placed alongside restaurant paraphernalia. The frogs are still alive, but also eaten, evoking the promissory narrative of

animal welfare. Some versions of the images (for example close crops of the tissue) were used as representations of in-vitro meat with no reference to their original author and the context. According to the authors, the most important ontological intervention so far was a 2013 press conference held in a London arts center, as it showed in-vitro meat as a product ready for everyday consumption. The press conference had a strict 'no photography' rule but provided a set of 24 photos, and video footage of the event with an animation presenting the method used to produce the burger. The images within the video show in-vitro meat in two distinct ways: two instances of computer-generated animations of muscle cells dividing and the revealing, cooking, and eating of the burger. The event combines elements of both foodness and scienceness: the burger is brought on a restaurant tray, under a metal dome, but placed in a petri dish, it is cooked and eaten, but the eater curiously prods it with a fork.

Appealing to the future, Elan (2004) shows the strategic use of images of suffering when appealing to a better future made possible by biotechnology. The Swedish division of the global biotechnology company Novo Nordisk uses images of children afflicted with haemophilia B. The children themselves are the public testimony, their presence demands the public to allow the development of biotechnology that might alleviate their suffering. Mobilisation of the 'ethical claim of the victim' (Elam ref. Peters, 2001) is an act of political intervention, but now it is used to simplify much more complex issues surrounding biotechnology development. Such public testimonies used to be written, now the witness testifies through subjectivity transmitted through the image. If through such interventions public approval is gained, it is not about the actual real-world capabilities of a given technology.

4.3 Contesting ontological categories

Designating the ontological status of something is a political matter – whether GMO is food or not, or whether a cluster of cells is a human being, food, or research material. The matter of scientific progress vs natural purity is also a question of resources. Visual material participates in such symbolic contestations, through either disrupting existing signifying chains or creating new associations, often through metaphors, or as part of a larger, emerging signifying codex. Even the category of biotechnology can be contested through claims articulated through visual representations and performative tools. Is infrastructure biotechnology? If based on arctic tribal cosmology land is inseparable from life (and life is something else than the western concept, based on different kinship systems involving animals and ancestors) then the logical answer is yes. The debate is not over a strip of land, but whether the tribes can retain their mode of existence, therefore the symbolic struggle over the pipelines involves staking much broader political claims, both by the government and investors (Sinclair 2017) and by the tribes (McCreary and Milligan, 2014) who want to block the investment. In order to facilitate extraction resources ‘technologies of the imagination’ are invoked, either objects or practices (presidential speeches or historical depictions of the Arctic as vast and uninhabited) that bring about imaginative, and not strictly conditioned effects, in this case, the extraction of natural resources (see also Metze 2020). The tribes protest the pipelines (McCreary and Milligan 2017) by wearing traditional costumes and traveling to engage the media and investors (as the pipelines would cut through their territory, and force them into a more western way of life). Through this performative demonstration, they publicly stake a claim to their traditional, traveling mode of indigeneity, and claim political agency by stretching the geographic responsibilities of their law, and engaging companies and governments as subject to this traditional body of law. Through such encounters, whole sets of ontological-epistemological claims are pitted against each other. Technology not only embodies and perpetuates community relations but disrupts old relations and forces new ways of coping. The struggle between the investors and the tribes involves articulating abstract and symbolic figurations about life and land, and yet it might be closer to the ‘real’ material effects of the pipeline than the pure technical description of tar sand extraction.

3.4 Literature Review Conclusions

The media I analyze draws on science, but that does not mean it always communicates exact scientific facts. Sometimes it represents things that do not exist: nano-submarines delivering blood cells, or tomatoes with sharp teeth. 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” (to borrow a concept from Latour, 1999) technologies.

What does this media communicate? It shows ontology: lab meat really allows a living animal to be eaten, or GMO plants really have genes from other species. But sometimes it stakes ontological claims which then should be accepted as truth: robots should be recognised as human-like, non-existing technologies such as nanobots swimming among plasma platelets should be accepted as existing, GMOs are a new kind of organism. The lab meat museum showcase produced by artists (Stephens and Ruivenkamp 2016) was the most truthful, in the sense that it was objective: it revealed a novel constellation between food and consumers, animals and humans. It had no value judgment, no moral propositions, it did not want to persuade the audience to act. In contrast to this, the press conference wanted to persuade: to accept in-vitro meat as a normal, edible food product. GMO-Frankenfood images do show a core ontological truth about the boundary-crossing between species, yet they overextend and simplify this threat, to condemn, incite, and stake demands. The negative affect of the frankenfood threat is then mapped onto the technology, which is hidden by the visual discourse. Instead of revealing, the visual discourse obfuscates and confuses (see also Clancy 2016).

Overall, based on my literature review, I can conclude that besides transmitting information about innovation and science, visual and participatory media in these debates function as channels of political rhetoric. Visual and participatory media in public debates about emerging biotechnology such as stem cells, GMOs and robots have both a broader ideological function and create social effects more directly on the intersubjective level. In fact, they often draw on the already existing popular cultural imaginary to generate and channel anxiety, relying on the affective energies of essentialisms such as nature—culture, purity—contamination. Either

generating fear or appealing to suffering or hope, such media circumvents scientific, rational arguments.

Visual material also aids in understanding complex concepts or phenomena, and the visual depiction of these technologies (or their imagined versions) bridges the gap between scientific innovation and reality. On the other hand, a reductionist approach relying on visuals and grounded in the modernist notion of teleological progress creates unrealistic expectations. The general public is then drawn into political debates or interactions with technology based on such distorted ideas, which undermines democratic participation and negatively impacts research.

Besides determining ontological status, e.g., whether GMOs are food or not, or whether stem cells are human or research materials, representations also situate political actors and aid in either gaining or contesting their legitimacy. Designating the ontological status of something is also a political matter – whether GMO is food or not, or whether a cluster of cells is a human being, food, or research material. The matter of scientific progress vs. natural purity is also a question of resources. Visual material participates in such symbolic contestations, through either disrupting existing signifying chains or creating new associations, often through metaphors, or as part of a larger, emerging signifying codex. Such visual material also fulfills a general disciplinary function, staking out normativity, mobilising against perceived, real, or even fabricated threats. The status of discourse also affects the status of knowledge, as privileging one discursive domain over others means contesting knowledge regimes and policy. These mechanisms are sometimes back-and-forth, sometimes dependent on each other, forming a part of a larger media apparatus whose working is dependent on the context, either on specific political interests or attributes of a given technology.

4 Research Questions

The literature describes how images and participatory media formats in public debates fulfill a more complex role than mere illustration or tools whose only task is to draw attention. I pose my research questions to investigate through empirical work these mechanisms – how these images function as channels of political rhetorics, and through what other means they function as social objects.

Within the social sciences, there has been a broader turn towards affect, the body, the somatic, and the material. To quote Roelvink and Zolkos (2020:5) on the affective turn: “the attention to sensation and experience has arisen, partly, from a fascination with “what remains” after a deconstructive reading of the body, culture or an art object. This idea of something in excess to discourse has inspired the philosophic inquiry into affects as “moments of intensity,” rather than as a “signifying practice” (Roelvink and Zolkos quotes Woodward 24; see also O’Sullivan 126). The interest in affect has thus coincided with the purported crisis of constructivist, representational and textual approaches to knowledge” (Roelvink and Zolkos 2020).

Having said that, 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, Silva Luna 2021). 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), to understand science communication as collective meaning-making (Davies et. al 2019) and Fährnich et al. (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”.

Through exploring empirical accounts (analyzing the elements of contemporary science communication not focused on fact and rationality), I aim to fill this gap concerning science communication beyond the discursive and rational. I formulated my research questions with an

explicit focus on images (and inseparable to them) on visual and participatory media. Therefore I mainly use visual methods.

I would like to emphasize how visual studies aim to identify social aspects – not aesthetics, which is a phenomenological reading of experience registered through a given subject. As Rose (2001) defines the critical approach to visual methods, it is “an approach that thinks about the visual in terms of the cultural significance, social practices and power relations in which it is embedded; and that means thinking about the power relations that produce, are articulated through, and can be challenged by, ways of seeing and imaging” (2001:3). To establish a critical mode of inquiry within visual studies, Rose (2001) introduces two modes of discourse analysis. One of them uses the notion of discourse to address the rhetorical organisation and social production of visual, written, and spoken materials, and traces the production of social difference through discursive claims to truth. The second type focuses on the intersection of power and knowledge, and how institutions produce their subjects. According to Rose, the second mode of discourse analysis has some absences in its methodology: “an uninterest in images themselves, a lack of concern for conflicts and disruptions within institutional practices, a neglect of the practices of viewing brought by visitors to those institutions, and a lack of any form of reflexivity.” (2001:186)

My research addresses this methodological issue. I present a critical reading (also using other visual methods besides visual discourse analysis), whilst taking images seriously – in fact, so seriously as to focus on the register beyond conventional, ‘rational’, ‘scientific’ knowledge transmission while investigating the political work done through it. Through such an approach, I would also like to investigate the possibility of a critical reading beyond reducing complex social phenomena (into which images are embedded) to the interplay of different modes of power.

The 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 to be also found in other public interventions?

5 Case study 1: The Mallows¹⁶

5.1 Introduction

Mályvavirág Alapítvány (the “Mallows”) claim to champion important causes (preventing cancer) but the emphasis is on narrating their own distinction. They create a fictitious world based on simple rules following “common sense” consensus, wherein their privileged status is justified.

Beneath the cute facade, their activities are connected to transnational networks with geo-political and bio-political stakes, and the representations they provide of bodies legitimate intervention (public, private, medical, either by state or non-state actors) and confers political status. The personal involvement of the activists also cements the ‘common sense’ consensus – which they protect by weaponising their subjectivity. I look at what knowledge and practice they transmit, and how the Mallows are about much more than the ‘good cause’ itself. In fact, the ‘good cause’ is a means of expanding their values and aspirations, creating their own worlds, so they become personally invested in the consensus behind the ‘good cause’.

5.2 Good vs. Bad in London and Budapest

In 2011, riots broke out in London. The morning after the ‘Battle of Mare Street’, the Riot Wombles marched down on Mare Street, in front of Hackney Town Hall. Hackney was then the center and even a symbol of gentrification. The Riot Wombles (inseparable from their own media representation) was an immediate reflection of the riots.

Originally an orange, long-nosed fantasy creature, the womble is a very positive fairy tale character that picks and recycles garbage. The Riot Wombles group, on the other hand, did not do much actual cleaning, because most of the cleaning had already been done by machines. With

¹⁶ This chapter is based on the publication Bajusz, O. (2019) A cukiság mint depolitizáló tényező: két magyar esettanulmány. *Replika* 112: 189–215.

their appearance, they represented the 'good' side of London, the hardworking, ready-to-do citizens who took care of their environment.

Many attempted to interpret the London Riots: some called it a poverty riot (Power 2011) or “defective shopping” (Bauman, 2011) in a post-political framework mass dissatisfaction broke through the constraints of representative democracy (Winlow and Hall, 2014). According to the then prime minister David Cameron it was only mindless criminality.

The moral attitude of Riot Wombles had political implications. In the jungle of the riots, their emergence as a counterpoint to the “feral rats” (to quote the BBC¹⁷), staking out positions – who is good, who is bad? The Riot Wombles made themselves known, and thus also constituted the ‘feral rioters’ as the bad way to conduct themselves: one should sweep up the street rather than break windows.

It was a convenient interpretation to accept, more convenient than those based on critical theories, which this time even reached the mass media¹⁸. The order of the world was restored, the 'good' finally ‘triumphed’. When Whyman coined the term “cupcake fascism” (2014) the Riot Wombles exemplified such a reactionary political stance: they tried to restore the old order with their passive-aggressive response to a crisis, blocking emerging opportunities and ideas.

Within this moralist interpretation, it was easier to ignore the facts that the whole riot was triggered by a murder of a black man committed by police officers¹⁹, and that the riots erupted mainly where racially marked lower and higher income groups lived together.

Here we see a perfect example of how cuteness depoliticizes: shifting media and critical focus from the material – the anger sparked by a racialised murder on a socioeconomic gradient – to the symbolic – the way the behavior of the Riot Wombles conformed to norms of bourgeois politeness and thus served as a point of comparison to the “mindless” behavior of the rioters.

¹⁷ <https://www.bbc.com/news/av/uk-england-london-14456964/london-riots-feral-rats-looted-my-business>

¹⁸ For example <https://www.theguardian.com/commentisfree/2011/aug/08/context-london-riots>

¹⁹ <https://www.bbc.co.uk/news/uk-14436499>



Ph: Rebecca Reid

Figure 5.1: cleaning after the London riotsSource: Rebecca Reid

The above story is from London, but it could have happened in Budapest, and similar stories indeed do happen. One prominent example was the tactical voting scheme, with the involvement of the “Squirrels” (Mókusok). The Squirrels (Pneuma Szöv.) are catalogued among the local alter-globalisation grassroots movements (such as Human Platform, AVM) by Kerényi’s (2013) survey of domestic civil movements. The topics they deal with, and the language and toolkit of practices (direct action, Forum Theater) they employ would fit well within any Western European city’s alter-globalisation milieu; as a German-Hungarian collective sometimes they also perform in Germany.²⁰ They are connected to the openly declared anti-government Auróra Community House, where they have an office alongside organisations such as the Budapest Pride or the School of Public Life (source: <https://pneumaszov.org/aboutus/>).

Beneath the cute facade, their activities are connected to transnational networks with geo-political and bio-political stakes, and the representations they provide of social life in Hungary legitimate intervention (public, private, medical, either by state or non-state actors) and confers political status. The personal involvement of the activists also cements the ‘common sense’ consensus – which they protect by weaponising their subjectivity. I look at what knowledge and practice they transmit, and how the Mallows are about much more than the ‘good cause’ itself. In fact, the ‘good cause’ is a means of expanding their values and aspirations, creating their own worlds, so they become personally invested in the consensus behind the ‘good cause’.

²⁰ <http://pneumaszov.org/hu/works/>

5.3 Methodology

To answer questions 1 and 2 (What are the broader ideological layers of the meanings and messages within the images involved in the public debates about emerging biotechnology? What are the political connotations of these images addressing an intersubjective register of moral axioms, identity elements, and coping strategies? How do the observed groups transmit such information through visual and participatory media?) and

focusing on the site of the image itself, I analyze the Mallows' visual and verbal discursive strategies, paying particular attention to the visual, and performative. Based on the critical visual methodologies of Rose (2001) I use visual discourse analysis (Rose 2001) and complement it with a deconstructionist reading of a video. I investigate what the meanings are that images either anticipate or exclude, and how do they create frames for interpretation. I investigate how, through the use of visual media and performative elements, the Mallows construct themselves as subjects, and besides 'facts', what kind of other cultural scripts, moral axioms, and identity elements they transmit.

I contextualize my analysis by describing the site of image's production: the funding network of the Mallows. Who organised the event, who executed it, who commissioned it, whom it promoted? What are their social identities? How are these social actors connected?

To complement my visual analysis, I was a participant-observer at Beszélő Bugyik Bisztró (Talking Panties Bistro), a participatory event organised by the Mallows (2018, Budapest, Allee Shopping Mall), where I observed the affective reactions of the audience towards the event.

5.4 The Mallows

The Mallow Foundation is loosely affiliated with the international pink ribbon movement centered on women's health. Their financial supporters include the pink ribbon movement's main actor, the Komen Foundation, pharmaceutical companies such as Roche or GlaxoSmithKline, MSD Pharma, and other European and Hungarian healthcare providers, and the media platforms these actors support or even initiated²¹. In addition, they organize joint programs²² with local governments, open "Mallowflower Points"²³ in the country²⁴ and received the Széchenyi 2020 grant²⁵ (European Union, the Government of Hungary)²⁶.

The funding network of the Mallows is embedded in larger NGO networks, receiving state, transnational, and EU grant funds, and they have their private corporate sponsors and accept private donations.

They claim to generally address Hungarian women without regard to class base or political affiliation, but I would speculate that they primarily have an actively working, urban audience. The Mallow Flower Foundation has a stable presence in public space and social media, print media, and television programmes, and it also uses women-targeted online media (WMN, NLCafé) which heavily relies on sponsored content. The Mallows are simultaneously present in different public spheres and use a plethora of media formats. There is no clear dividing line between media representation and 'reality', as they confer meaning, and create their fictive life-worlds, through constructing themselves and adapting a performative identity.

In the fiction they construct, there is a complex relationship between the extension of the self and regression into a seemingly simple, 'just', comprehensible world, where the main structuring logic is the separation of the material and symbolic, thereby perpetuating the privileging of symbolic recognition over material practice.

The Mallows may at first appear to be apolitical, 'innocent', but if we follow their network, identify their funders, we find transnational actors involved with politics and biopower. In the

²¹ <https://malyvavirag.hu/tamogatás/partnereink>

²² <https://malyvavirag.hu/kik-vagyunk/hirek/orszagszerte-programok-az-europai-mehnyakrak-megelozesi-heten>

²³ Interneten: <https://malyvavirag.hu/kik-vagyunk/malyvavirag-pontok>

²⁴ <https://malyvavirag.hu/kik-vagyunk/malyvavirag-pontok>

²⁵ <https://malyvavirag.hu/palyazatok/efop-122-15-2016-00251-ifjusagi-programok-tamogatasa-korostarcsan-es-kornyeken>

²⁶ <https://malyvavirag.hu/palyazatok/efop-122-15-2016-00251-ifjusagi-programok-tamogatasa-korostarcsan-es-kornyeken>

discussion of Foucault given in Rose and Rabinow (2016), biopolitics collectively refers to strategies and struggles in which the vital functions, bodies, vitality, morbidity, and mortality of a given population can be collectively regulated (196-197); such regulatory practices involve the regulation of the female body and the reproductive organs.

Instead of state laws and law enforcement agencies, here we find the 'soft' subjectivising effect of neoliberal 'soft power' (Rose and Rabinow 2006) at work; this is more elusive, but nonetheless belongs to the domain of biopolitics.

5.5 The Role of 'Identity'

The Mallows provide an opportunity for a seemingly apolitical identity construction: as fictional characters, distant from political struggles, part of nature (flower, plant), rather than the product of social processes. It is this “natural” stance that obscures their social and political embeddedness. The mauve flower they chose to represent them is often a photo of hibiscus or another kind of magenta or pink flower.

It is a basic statement in the relevant research literature about social movements that movement-building creates a new community identity (see, for example, Melucci 1995 or Polletta and Jasper 2001). There are several definitions of collective identity itself: Polletta and Jasper (2001) suggest that collective identity is the cognitive, moral, emotional connection of a given individual with a broader community, category, practice, institution (Polletta and Jasper 2001: 285). According to Melucci, collective identity is a network, a set of active relationships, in which activists invest emotions. These dynamics related to the incorporation of collective identity can also be applied to the operational dynamics of the Mallows – their world unfolds from the focal point of the inherently natural, elementally existing identities.

Just as a fairy-tale hero has a dog, a toy bear, enemies and friends, the Mallows have a ‘monster’ (the constantly mutating HPV) and various helpers (pharma, doctors). These representations, or rather figurations (which fit perfectly within the popular cultural imagination) provide opportunities for interactions, so the Mallows can explore and evolve their own selves within the boundaries of their fictitious world.

5.6 Claims vs Facts

Just as Mókus Maxi is far removed from the reality of homelessness and poverty, and the Riot Wombles don't do any substantial cleaning, the Mallow Flower Foundation also does not show the material reality of cervical cancer. The Mallows try to promote the widespread use of several technologies (cervical cancer screening with cytology, HPV vaccination, HPV test), but they constantly contradict the relevant scientific evidence and even their own claims.

The Talking Panties Bistro is the largest project of the Mallows so far. It opened in January 2018, at the Allee Shopping Center in Budapest. The panties (and a pair of male underpants that addressed women) were talking to each other in a literal sense; that is, they hung on the backs of chairs arranged around tables underneath a pavilion, and they each had an adjacent paper bubble giving instructions or asking questions.





Figure 5.2 Talking Panties Bistro

Source: Mallows Facebook

Hostesses wearing pink from head to toe guided the guests, and the program featured workshops by experts, who sat around the tables together with the participants. As they told me at the venue, the campaign itself was the founder's idea, while an event management company helped with the production. The Talking Panties Bistro (accompanied by the rollup banners of pharmaceutical companies such as Merck or Synlab) focuses on promoting HPV testing, cytological screening (commonly known as cervical screening or “PAP test”), and vaccination against HPV, even though the Mallows engage with a few more diseases and prevention technologies.

At this point, I would specifically address the biopolitical aspects of the Mallows as a non-governmental organisation (NGO), both at the level of the case study and in a broader context of their work. The Mallows do not question the authority of Western medicine – in fact they work with experts –, but they use “facts” or even alternative facts whenever it fits their agenda.

- “In Finland, one woman, in Hungary 400 women died last year because of cervical cancer”, claim the Mallows in a nlcfe.hu newslead²⁷. The Western good example they invoke is factually not true. According to the WHO Cancer Registry, in 2013 (the latest available data) there were 54 deaths from cervical cancer in Finland, 51 deaths in 2012, 47 in 2011 and 55 in 2010.²⁸
- “All my findings were negative but I was cancerous”, says the founder of Mallows on the front page of Kiskegyed magazine.²⁹
- “It's up to you, says a talking panty. “Everyone should go to a gynecologist, just five minutes, no excuses” – comes the imperative from the Mallows, who also promote the HPV test which can be done with a sample taken at home.³⁰
- Regarding the HPV test, they say that many unnecessary surgeries result from cytological screening. “The HPV test provides an opportunity to care more for women who are infected with the high-risk HPV virus. It also helps to reduce the unnecessarily large number of conisation surgeries (~10000/year) by eliminating high-risk HPV infection.” This data should be put into context: there are about 400 cervical cancer deaths per year in the country, with about 14000 women dying from all cancers (vs 17000 men)³¹ according to data from the Central Bureau of Statistics³² and the total number of deaths per year is around 130000. According to ÁNTSZ (National Health Service), the rate of participation in cytology (reported by screening and diagnostic codes) was 32% (2013 data). It is clear from this that there would be far more deaths from cervical cancer if all ten thousand surgeries were indeed necessary. Later for the Mallows “the unnecessarily large number of conisation surgeries (~10,000/year)” became the reason to have the test – by mentioning 10000 surgeries they imply 10000 deaths avoided, which is not at all proportionate to the statistics.

The Hungarian data is in line with international scientific and statistical evidence.

²⁷ <https://www.nlcfe.hu/egeszseg/20160126/mehnyakrak-megelozes-szures/>

²⁸ <http://www-dep.iarc.fr/WHOdb/WHOdb.htm>

²⁹ <https://www.facebook.com/malyvavirag/photos/a.515330685155879.117040.507065589315722/535999439755670/?type=3&theater>

³⁰ <http://malyvavirag.hu/ha-szeretned-megelozni/hpv-teszt/onmintaveteles-hpv-szures>

³¹ <http://www-dep.iarc.fr/WHOdb/WHOdb.htm>

³² <https://www.ksh.hu/docs/hun/xftp/idoszaki/mo/mo2016.pdf> pg10

- When a study (Raffle et al, 1995) evaluated the UK's NHS cervical screening program, they conclude from the analysis of 255,000 women's data: there were 15551 abnormal tests per screening cycle³³, but still, the effect of screening on the mortality rate is too small to be detected. The main conclusion is that no public health program should be implemented without an adequate clinical trial.
- According to the cumulative analysis of the Bristol area data (Raffle et al., 2003) for every true cancer case, there were 150 abnormal test results, more than 80 investigations, and more than fifty treatments because they use imperfect methods to seek the precursor states (which have an uncertain outcome) of a low-prevalence disease. Because the test is not standardised, neither sensitive nor non-specific, there are large laboratory-specific differences (Raffle cites Buckley et al).
- The main findings of a meta-review of 97 studies (Nanda et al., 2000) are that the estimated sensitivity (true positive tests) and specificity (true negative tests) of cervical screening vary greatly in the studies included and its values are not objective but highly biased. Sensitivity ratios for the 12 studies with the least biased values are also very different, ranging from 30% to 80%.

In order to promote the test, the Mallows claim cytology has a 70% sensitivity rate³⁴. The context of the data is lost, and the Mallows point at the data to show why the test is problematic as a reason to have the test. Instead of being presented as a tool for risk management (which itself has risks as it leads to unnecessary surgeries or misses real cases), screening is presented as the inevitable task of a responsible citizen. Using a variety of media formats, with a constantly changing media presence (after a year-round, online and print media 'outreach', comes the shopping mall, the pop-up bistro where the chairs provide the subject positions to assume and the whole bistro serves as a framework for interactions with hostesses, and experts) they channel risk management into a moral framework: self-management, self-regulation is shown as the obvious task of the 'responsible woman'.

³³ 150-200 women would be expected to develop cervical cancer during a 5-year period. Even if screening has controlled an increase in deaths in young women that otherwise would have occurred, this figure would still not exceed 220. Thus, during each screening round in Bristol, over 15000 healthy women are being incorrectly told that they are "at risk".

³⁴ <http://malyvavirag.hu/ha-szeretned-megelozni/hpv-teszt/hpv-szures>

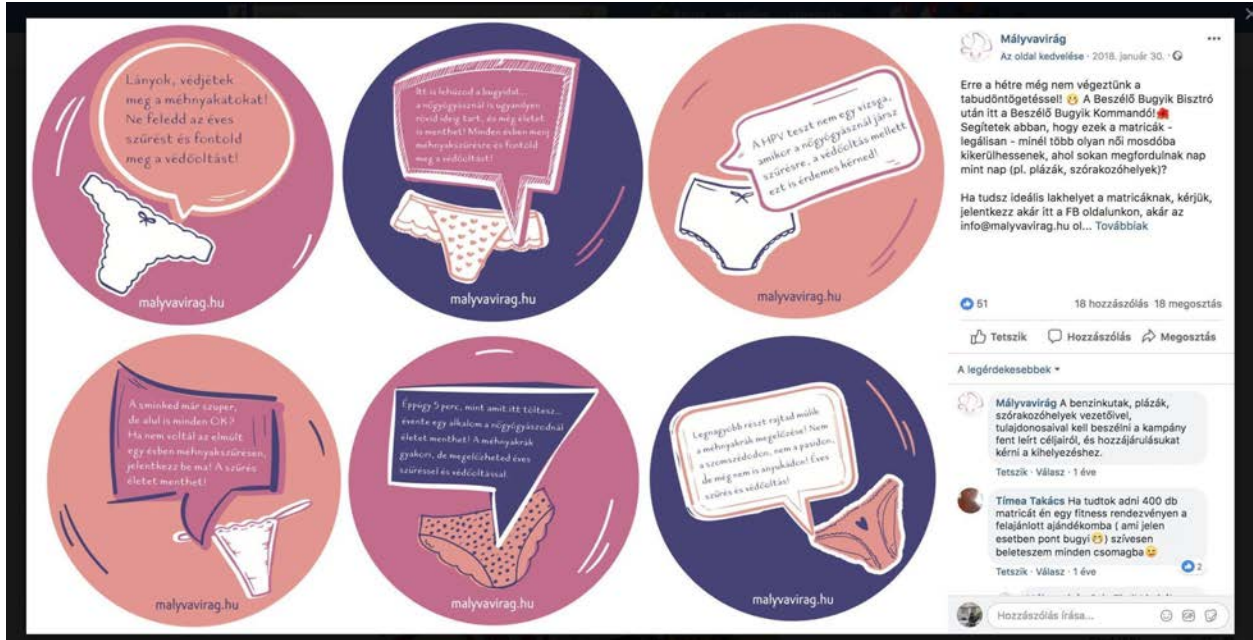


Figure 5.3 Talking Panties Bistro graphics

Source: Mallows Facebook

The sociological critiques of Dove ads (such as Johnston and Taylor 2008) could broadly fit the Mallows: a body could be ‘bigger’, freckled, within a range of variants one can be ‘individual’, but adherence to boundaries and ‘hygiene’ is not a matter of choice. The frameworks are given, which is the ideal of the liberal subject, and it refers back to the commonsense consensus about the need to manage and regulate the female body. Shildrick (1994) uses the term ‘leaky body’ to explain how the liberal subject is inherently male. The natural processes of the female body are marked as sick, frail, downright morally inferior, and the ‘man’ is the atomised individual separated from the world by sharp boundaries. The birthing, menstruating, nursing female body is the “leaky body just as water drips from a faulty tap. Shildrick states that the regulation of the female body, the medicalisation and pathologisation of the natural bodily processes, or the whole female body at all is a blind spot for liberal feminism, as the liberal subject: the atomised, self-contained individual is a core tenet of liberal thought.

Pateman's (1988) starting point is also liberal ontology: she analyzes the inability of the female body to gain integrity and autonomy within a social organisation structured along liberal logic, as the concept of liberal equality privileges the male.

Shildrick and Pateman both claim that if a woman wants to live up to the ideal of liberal subjecthood, she has to meet expectations fitting males, continuously fighting her own body.

In this case, the 'demanding woman' ("igényes nő") of the Mallows is the equivalent of the 'responsible women' in English literature who manages risk according to social expectations³⁵. The Hungarian equivalent also regulates herself, manages and discipline herself, and stakes demands against herself. It creates an identity from self-restraint, thereby concealing the social aspects, and making something seem 'natural' (continuous fight with one's own body) that would be normatively interpreted as neurosis.

Despite the clear evidence, or the reversal of international policies³⁶ or even the founder's personal experience of the test's failure, the body cannot be liberated. The "common sense" consensus of the Mallows refers to the inevitable regulation of the female body and becomes normative, omnipresent, and even a moral premise.

In the world of the Mallows, the involvement is extended to the utmost, as if everyone was a victim – "every woman is a Mallowflower"³⁷. However, not all women have the same risk profile. 'Previvors' are a real phenomenon: they are the survivors who carry only the risk (for example BRCA genes, Lynch syndrome) usually indicated by family history. The previvor survives a disease that has not yet happened; in order to prevent such an occurrence, she undergoes interventions such as removal of the breast or ovary (in the case of BRCA genes). The Mallows adapt whole cultural scripts (identity from illness) but a BRCA previvor has a totally different risk profile (for example, depending on the mutation, up to 80% risk of breast cancer)³⁸ than an average woman.

Or in the eighties, the emergence of AIDS in the life of the homosexual community was a different matter again: a common identity was based on them infecting each other, while also

³⁵ Nem csak testtel vagy fogyasztással kapcsolatos a fogalom, mint a magyar 'igényes nő'. Például Nicholls (2017) és Stanko (1996) a személyes biztonsággal kapcsolatban használja ezt a fogalmat, az önkorlátozást, az öngondoskodást személyes felelősségé válását bemutatóva.

³⁶ For example:

<http://www.parliament.uk/business/committees/committees-az/commons-select/science-and-technology-committee/news/report-health-screening>

³⁷For example: <https://infostart.hu/eletmod/2016/05/09/minden-no-malyvavirag>

³⁸ <https://www.cancer.gov/about-cancer/causes-prevention/genetics/bcr-a-fact-sheet>

caring for each other as members of a marginalised community (for example, Watkins–Hayes 2014).

On the other hand, if all women are Mallows, the otherwise low risk of cervical cancer is made an inevitable part of life (the ‘fate of women’ is suffering and weakness), which normalizes unnecessary interventions. Regarding the roughly ten thousand unnecessary interventions each year due to this screening, within this frame of reference only the inevitable trouble has been averted, just as in the patient-survivor narrative of the pink ribbon movement, breast cancer is referred to as a transformative, even normal stage of life, even as a positive experience³⁹.



Figure 5.4 Title Page of “Chemotherapy Gazette”

Source: Mallows Facebook

³⁹ For example:
<https://breastcancer-news.com/2017/06/05/breast-cancer-survivors-remembers-joy-of-her-chemo-graduation/>



Figure 5.5 Chemotherapy graduation cake

Source: Pink Ribbon News Facebook

The relevant sociological literature explores how risk management is about the state and individual relation (Rose 1999), and sociological literature about cervical screening conceptualises it through the relationship of discourse and individuals (e.g. Armstrong 2007), or as an example of connecting self-care to morality (Howson 1998, 1999; Bush 2000). Biopolitics is the domain of such relations, that is why participation in these “movements” and practices is an important matter. Rose (1999), in the context of Britain, speaks of ‘active citizenship’, meaning that nowadays being a citizen does not mean fulfilling duties and exercising rights, but participating in the socially supported modes of consumption, making the ‘right’ consumer decisions, responsible choices, i.e. it is negative participation.⁴⁰The Mallowes also refer to the ten thousand surgeries to promote the vaccine⁴¹. In their video a little girl says that the vaccination is necessary, so she can have a baby later. The proprietors of the vaccine have no such claims, and there is no vaccination against infertility. In addition, the video features the phrase: “for a woman to feel feminine and whole, she has to be able to give life” while the Mallowflower Foundation

⁴⁰ This logic, see the role of behavioral economics and nudge policy in screening (e.g., Purnell et al. 2015).

⁴¹<http://www.malyvavirag.hu/kik-vagyunk/news/vedd-meg-lanyodat-hegy-egmaz-o-is-edesanya-lehessen>

also engages with the rehabilitation of cancer survivors, who often lose their uterus to cancer complications.⁴² The dictionary of the Mallowflower Foundation says:⁴³

The purpose of the uterus is to nurture the fertilised egg so that it can develop into a fetus and then get born. The uterus, on the one hand, nourishes the developing fetus with its loose mucous membrane and the creation of the maternal part of the placenta, and on the other hand, when the fetus reaches maturity, it aids the birth by contraction of the muscle wall.

However, no information is provided on the biological changes that occur in the female body without the uterus. In fact, the function of the uterus is very complex: among other things, it controls the blood supply to the pelvis, participates in the female orgasm, it is part of the endocrine system. Some other NGOs focused on women's health take this into account: for example, the US-based HERS Foundation⁴⁴ collects adverse effects data, republishes peer-reviewed research, and produced an educational video about female anatomy. Such information is also featured on medical websites aimed at the general public⁴⁵ and also the fact that the removal of the uterus can lead to many adverse effects besides infertility.⁴⁶

I would like to provide a deconstructionist analysis of a short film by the Mallowflower Foundation to explore the Mallows' approach to body ontology. I chose to separately analyse the BBB and the flower video because the BBB has been the largest and the most complex event of the Mallows so far, and the video is a clear display of their utilisation of the leaky body trope. Also, a deconstruction analysis is at the level of representation – the Mallows use media representation to create and communicate their subject. In the film a Hungarian celebrity surprises women at the Sugarbird brand store. While the women try on clothes, he whispers flattering words: “you are very beautiful” and “that fits really well” and then he steps out from behind the mirror and gives them a flower, and then reminds them that “What is inside is also important!”, “Have a gyn look at your ovaries!”, and the women nod approvingly to the unsolicited advice. Meanwhile on their website the Mallows state that there is no preventive screening for ovarian cancer, as even diagnosing it can be difficult.⁴⁷ The film displays the

⁴² <http://www.malyvavirag.hu/ha-nem-successult-megelelni/koszontunk>

⁴³ <https://malyvavirag.hu/ha-nem-successfulprevention/sotar>

⁴⁴ <https://www.hersfoundation.org/>

⁴⁵ for example, <https://www.news-medical.net/health/What-Does-the-Uterus-Do.aspx>

⁴⁶ Online: <https://www.webmd.com/women/news/20180103/hysterectomy-may-have-long-term-health-risk> On the

⁴⁷ <http://malyvavirag.hu/a-petefeszekrakrol>

continuous transgression of boundaries. The unsuspecting subjects are observed from behind a mirror, just like espionage. Then, a disembodied, ethereal tone's flattery about dresses and so on sounds like a profound revelation, before the observer steps out and tells the observed subject she has to let a stranger penetrate into her vagina with an imaging device. The violation of the boundaries between observer and observed, the literal "rummaging in panties" perpetuates the discourse which equates the female body with public property. The background imperative is the female body's medicalisation, which, as a master narrative tells the necessity of penetrating the female body for the ultrasound examination. Science assumes the role of the "savior", increasingly gaining deeper access into the porous, incomplete, and therefore pathological female body.

The narrative logic of trespassing the bodily integrity of women and the normalisation of paternalist supervision is just as present in the video as in the Talking Panties Bistro. Following this logic, a staff member (from the event management company) at the Talking Panties Bistro told me that "*we could have stopped the first thirty women who walked by and asked when they were last seen by a gynecologist*".(Sic!) During my day at the Talking Panties Bistro, I repeatedly came across the 'wisdom' attributed to Nicollo Machiavelli, the renaissance master of political games: "the end justifies the means". The Mallowflower Foundation probably thought that promoting cervical cancer screening was unquestionably a good thing, whilst the audience unintentionally reflected that it was (bio)politics and manipulation.



Figure 5.6 Another, (figuratively) deconstructed female body on display by the table of the Mallows

Source: Mályvavirág Facebook

If we give space to the complexity of the “good cause” moving beyond the moralist framing – just as the Mallows play into the dichotomy of caring/not caring – then it becomes clear that “common sense” (“you have to catch the trouble in time!”, “Prevention is the key” etc.) is purely a social convention, bound to the collective assumptions of a given time and given social milieu, which, moreover, have long been surpassed scientifically. This is consistent with the fact that cervical cancer screening, developed by a zoologist who otherwise studied the reproductive cycles of guinea pigs, is based on outdated scientific premises, and there are complex social, political reasons why it became a public health program although it has never been standardised.⁴⁸

⁴⁸ <https://www.ncbi.nlm.nih.gov/pubmed/11620085>

5.7 Constructing a Pseudo-reality

Crosswell and Porter (2018) in *Politics, Propaganda, and Public Health* (Chapter Three – Deconstructing Merck’s Awareness Campaign) claim that pharmaceutical company Merck took multimedia propaganda to a new level, it has even “constructed a profitable pseudo-reality”. The facts about Gardasil in themselves might not be as convincing as the three-tiered campaign: cervical cancer is a rare disease, HPV is only a co-carcinogen, in most cases it is asymptomatic. Therefore the threat had to be introduced (and even the context created and the actors situated within) before moving on to the hard sell of the product. The “think-feel-do” campaign of Gardasil (vaccination against cervical cancer) had three stages: first introducing the link between HPV and cervical cancer, then encouraging the would-be consumers to spread the information, and then the hard sell. The first stage was not directly done by Merck but through financial contributions outsourced to the Cancer Research and Prevention Foundation and Step-Up Women’s Network, which raised awareness about the link between HPV and cervical cancer (“Make the Connection”). Then came the “Tell Someone” campaign, which initiated affective involvement besides the cognitive (understand that HPV is linked to cancer) preying on the mother–daughter connection and generally female bonding. The third phase was “One Less” directly selling the Gardasil vaccination, a ‘solution’ to the ‘problem’. The first phase of the campaign initially seemed like a public service announcement, or educational messaging. They showed the threat to society, a virus connected to cancer, and urged the viewers to talk with their doctors. The author’s argument is that such evasive messaging in the first campaign phase may have been intentional. This was a strategic bait, intended to create anxiety and the need for more information. Based on color psychology and scholarship on advertising and psychology research, there is an analysis of the “Make the Connection” campaign’s aesthetics: it has a “feminine undertone” to appeal to the target audience. The ads feature pink, pastels, flowing and rippling shapes, and curves. The second phase was “Tell Someone”, which conveys a sense of urgency. The role of the public is to bridge the gap between the level of threat and the level of awareness by spreading information. These ads encouraged broader audience identification, and conveyed a sense of candidness, through fast-paced editing and hidden camera angles. They also showed the

appropriate emotional reaction (shock and a sense of urgency) to the information about HPV and cancer. Social cognitive theory (Bandura) explains that the portrayal of such strong emotions will spread these affects further, shock is a contagious affects. “Make the Connection” and “Tell Someone” fabricated a health hazard from a common virus (stressing that millions have it, but ignoring the fact that those millions of carriers are mostly asymptomatic), equating risk with the virus itself, and then urged the public to join the campaign by spreading this information to the whole of society, as a matter of survival. The third phase “One Less” employed the conventional liberal feminist choice rhetoric – in the ads groups of girls were playing sports, talking about choice, and chanting o-n-e-l-e-s-s. This phase offered a preventative solution for the threat to society introduced in the previous campaigns.

The pinkified Merck ads also establish a connection with the pink ribbon movement, or rather pink-washing (Tiefer 2013, Sulik 2010) to some, and the Susan G. Komen Foundation. King (2006) describes the history of the pink ribbon movement and through it the 20th-century history of breast cancer: a shameful, private problem becoming first a cause worthy of public mobilisation then even a transformative experience. Unlike the relatively rare cervical cancer, breast cancer is an epidemic, but the awareness narrative relies heavily on imaging technology, and radiation companies were also involved in the planning and executing the pink ribbon campaign and its reliance on awareness therefore technology use (Sulik 2013, King 2006).

Thanks to awareness campaigns, people overestimate what imaging technology is capable of: mammograms are thought to be more efficient than they really are (see for example Autier 2017 or Chamot 2011).

5.8 A Mechanism: Cuteness Depoliticizes

First I would like to formulate a definition of cuteness. I think the most efficient would be to grasp the concept by its effect: cute is non-threatening, even demanding care and help. Cute is which expects a warm emotional response, or even stakes a moral imperative to adopt an accepting, supportive attitude, which turns off critical judgement, directing the discourse to the register of subjectivity. There is no agreement on whether cuteness is purely a mediated phenomenon. There are claims (Hrdy 2009) that the perception of cuteness is evolutionary: it's a sign of helplessness calling for care.

I would also speculate that maybe an image phenomenon that carries the characteristics of “cuteness” is not cute in itself, but rather it is the media representation that is cute. So, cuteness presupposes a sign object manipulated by the mass media, either in its context or content — just as there is no kitsch without media representation (for example, no sunset in itself or a flower is kitschy). Something can only become kitschy if it is portrayed in a cliché, exaggerated or sentimental way (Moles 1975; Dorfles 1986). Maybe what the popular cultural imagination would deem ‘cute’ is far removed from anything occurring in nature, and yet it elicits an evolutionary ingrained response.

At first glance, the subject matter of my case studies may seem apolitical, “innocent”, “good”. The fictitious (and dominantly pink) reality of the Mallow Foundation incorporates the cancer patient-purchasing segment, and the ideal of the demanding yet self-reliant woman perfectly fitting into the stereotypical image of patriarchal capitalism. In its aesthetics, it follows the brand of the Komen franchise, the “pink ribbon” movement. Everything is agreeable, non-offensive, “pleasant”, almost sterile, devoid of exaggeration. The hostesses of the Mallowflower events always wear pink (for example see Figure 5.2 or 5.7), conjuring a “Stepford Wives” vibe. It is all inherently domesticated, just as the female body needs to be tamed, rescued from its ‘dangerous’ nature. The “Mallows” are the neoliberal self: managerial and regulative, incorporating the Fordist ideal of submissive femininity. This is cultured, neutered nature.



Figure 5.7 “The Mallows are waiting for you!”

Source: Mályvavirág Facebook

The Mallows organize various participatory events, such as drawing competitions, knitting, and crocheting events, bake sales. Through this, they extend their own personal involvement into a collective cause, as if cervical cancer was everyone’s concern, even though only 400 of the estimated 130000 deaths per year in Hungary are from this type of cancer⁴⁹. Through their participatory activities (the given set of tools, media use) they create a kind of social interface which maps the extension of their own fictional worlds and the admission of others into them, according to predefined (adopted) cultural scripts such as identity elements, moral axioms, models of possible individual and collective actions. Activism is both an interface and methodology here: creating fictitious worlds associated with a sense of predictability, and

⁴⁹ <https://www.who.int/data/data-collection-tools/who-mortality-database>

extending these worlds into the political register but within a moralist framework consistent with the liberal consensus.

The Mallows' disease-identity scheme or the pinking of female cancers are well-known strategic tools that have a long history, intertwined with the process of constructing an identity from a disease. The first example of this is AIDS activism. King (2008) describes how the "pink ribbon" movement constructed the breast cancer cause based on AIDS activism. The "pink ribbon" movement (associated with political and market actors, including the manufacturers of the mammography machines) is both a symptom and a cause of breast cancer changing from a stigmatised, private illness into a politicised epidemic. Later, breast cancer even became a normalised life experience, similar to that of birth or menopause, and the dominant narrative of cancer prevention became awareness and an individualised model for action (King 2008). Ehrenreich's (2009) "Smile or Die" criticizes Komen for the pinkification and sugar coating of breast cancer and obscuring both human suffering and the political and social context of the disease. The infantile pinkification of cancer _ with pink chemotherapy units, pink KFC chicken, and other similar products – distracts from the fact that many treatments are ineffective and in many cases environmental factors rather than individual choices (nutrition, lifestyle) cause cancer. In the meantime, even breast cancer should be understood as a gift and even enjoyed, so the anger and despair resulting from the disease cannot be expressed.

Meanwhile, the criticism of "pinkwashing"⁵⁰ has already reached scientific forums⁵¹, and there are even counter-campaigns.⁵² For the time being, in the Hungarian civil sphere, the criticism of "pinkwashing" is still in its infancy or not present. Női Érdek, the umbrella organisation of the Hungarian women's movement, sees increasing participation in cancer screening as a strategic issue⁵³, invoking the commonsense consensus, and thus legitimising from a liberal feminist perspective the shifting of responsibility to the individual through the narrative of self-awareness and self-management.

In the bio- and cultural political practices introduced and analysed above, there is a complex balance between the extension of the self and regression into simple, predictable worlds. In the

⁵⁰ Using pink ribbon product to enhance the image of a given brand, meanwhile distracting attention from controversies.

⁵¹ For example, <https://www.bmj.com/content/351/bmj.h5399>

⁵² For example, <http://thinkbeforeyoupink.org/>

⁵³ Hungarian Women's Interest Association: The Price of Single Women in Public Policy Analysis 1989–2013: 236–239.

fictional worlds of the Mallows, the illusion of security creates the possibility of regression: they create a predictable, familiar, manageable world where “a little good intent, care” can “prevent trouble”, and the biggest problem is the lack of awareness. This perpetuates such liberal axioms that the public sphere and science is, by and large, just and good; all they require is access and participation, so the natural course of ‘truth’ will find its way. They stake political demands but depoliticize themselves and their entire praxis, whilst locally supporting the biopolitical, biopower agendas of transnational actors. Implicit positions are made performative: they infantilize (imitation games, displaying the right action, etc.), and then engage their own audience with whom they try to interact. The Mallows seem to engage with an unquestionably “good cause” – as if a problem could only be solved by following value judgments, with a total disregard for reason – based on the “common sense” consensus. The (re)presentation of the “good cause” legitimises intervention, the transgression of boundaries, but the “good cause” also diverts criticism, because through the instrumentalisation of the personal register, and through the involvement of real people, “kindness” becomes personified. The ‘cute’ subjects are personally invested in these practices and subject positions in various ways, whether emotionally, or through the labor market, social positions, personal branding, or through the struggle for symbolic recognition. At the same time, it is not worth going out of consensus at the individual, personal level: you’d rather be a responsible woman than a dupe.

5.9 Conclusions

Not much is logically coherent within the Mallows universe because they adopt different elements from different healthcare regimes. They embody the subject position of the responsible women, which they assume to be a universally meaningful and morally superior position. The content they communicate comes from various lobbies and funders, so they mix risk management, awareness narrative, identitarianism, survivor narrative, the passive docile leaky body (on the level of representation), and they introduce different technologies as well. All this comes from the West, and as the ‘morally superior’ vanguard they create their own position, themselves as the Mallows-identity, the most responsible, or just condescending and patronising. There are given “good” and “bad” things in the fictitious world as if simple mathematical formulas of the “common sense” consensus could map the moral order of the microcosm bound by the lowest common denominators. They do not distinguish between morality and ethics (professional standards) and conflate it with matters of style and taste. The events of the Mallows confer meanings on technologies that have already been targeted to audiences (e.g. HPV screening, vaccination), thus they rather generate fictitious needs than serve real ones. Like a pyramid scheme, the higher up someone is, the more they get (on the top, the pharmaceutical industry gains marketing and political actors gain support). However, 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 with his or her body and subjectivity the consensus of “common sense” (now a matter of personal truth), and thus they are rewarded with symbolic recognition and distinction. Based on the liberal consensus, through the application of “common sense”, the life-world of the Mallows is primarily a site of self-communication, 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. The factual claims in the case of the Mallow Foundation are often neither rational nor factual, nor is their discourse simply driven by a transparent causal logic. 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. In their own, fragmented realities based on the lowest common denominators, emotions have a limited range, and moral positions follow affect regimes: while the London Rioters break and smash, the Riot Wombles neatly clean, the homeless politician Mókus Maxi plays hopscotch at a protest. The tempering of anger, and in the case of Mallows, the normalisation and even exaltation of anxiety, neurosis, and self-regulation also limits potential political action.

6 Case Study 2– The Hungarian GMO ban and image events

6.1 Introduction

In this chapter, I examine the visual rhetorical and affective strategies that were used by GMO opponents in Hungary during the years 2005–2015. In particular, I analyze the ways in which the GMO opposition mobilised by playing into emotions, stressing their claim that Hungary is under attack by foreign powers that are biologically tampering with Hungarian land and Hungarian national identity. Yet, they fail to provide a clear conceptual definition of what “Hungarian land” and “Hungarian identity” mean.

First, I would like to determine what exactly a GMO is. The abbreviation stands for “genetically modified organism.” Common examples of GMOs are GM crops used in agriculture and GM model organisms applied in medical research. However, the exact definition of a genetically modified organism and the concept regarding what constitutes genetic engineering varies. In 1993 *Encyclopedia Britannica* defined genetic engineering as “any of a wide range of techniques [to genetically modify organisms]..., among them artificial insemination, in vitro fertilisation (e.g. “test-tube” babies), sperm banks, cloning, and gene manipulation”. The WHO⁵⁴ and the EU legislation⁵⁵ defines GMOs as “organisms in which the genetic material (DNA) has been altered in a way that does not occur naturally by mating or natural recombination”. Regarding the EU, a moratorium on GM products has been in place since 1999, under which legislation no new GM food products can be imported into the EU. Exemptions are GM products not for human consumption, such as GM animal feed for dairy cows. Several GM imports had been approved before the EU moratorium, yet a ban has not been placed on these ever since, and many European supermarkets stock them. The marketing and import of GMO foods and feeds

⁵⁴ <https://www.who.int/news-room/questions-and-answers/item/food-genetically-modified>

⁵⁵

[https://publications.jrc.ec.europa.eu/repository/handle/JRC57223#:~:text=Genetically%20modified%20organisms%20\(GMOs\)%20are,by%20mating%20or%20natural%20recombination](https://publications.jrc.ec.europa.eu/repository/handle/JRC57223#:~:text=Genetically%20modified%20organisms%20(GMOs)%20are,by%20mating%20or%20natural%20recombination)

produced with GMOs are regulated at the EU level, but the member states have the right to prohibit or restrict the sale or cultivation of GMOs that were approved on the EU level.

In harmony with these laws, all parliamentary parties, in complete agreement formulated Hungary's GMO-free strategy in 2006. Since then, this strategy has not been changed; moreover, the new Fundamental Law of Hungary⁵⁶, which has been in force since 1 January 2012, includes the pursuit of GMO-free agriculture.

The GMO regulation became part of the constitution without a real public debate. GM crop cultivation is not allowed in Hungary, and stores do not stock labeled GM products, but still, GMO content is present in many unlabelled food products, and it stays legal to buy and use GMO animal feed. GM experimentation requires a permit, as well as transporting GMs or growing them next to normal plants. Glyphosate, the herbicide which GMOs are genetically engineered to withstand, is still used widely, despite the environmental concerns.

⁵⁶ <https://gmo.kormany.hu/en>

6.2 Methodology

To answer questions 1 and 2 (What are the broader ideological layers of the meanings and messages within the images involved in the public debates about emerging biotechnology? What are the political connotations of these images addressing an intersubjective register of moral axioms, identity elements, and coping strategies? How do the observed groups transmit such information through visual and participatory media?), I use visual methods – content analysis (Rose, 2001:55), visual discourse analysis (Rose, 2001:164), visual framing analysis – to establish how meaning connects to ideologies at the site of the images themselves. As I elaborated previously (on page 44), I use the type of visual discourse analysis which focuses on institutional practices, on how institutions produce their subjects. I use content analysis to systematically analyze all relevant data and describe how ideologically connoted meaning emerges at the site of the images and events. As most of the images, image tropes, and elements are local variations of an international visual vocabulary (see Clancy and Clancy 2016), I investigate how the local adaptation happens. I am also going to discuss what meanings are attached to specific pictures, and to what ideologies they try to adhere to. Through content analysis, I established a semantic web, where I applied (mapped) arguments from the international literature, and explored the linking of the local and the global (Hungary-Europe) through deductively coding the topoi described in the international literature, and inductively coding their representations, such as Hungarianness (the local site) represented through costumes and symbols. The codes were: “inflatables, costumed performers, politicians, agrarian technology, human intervention into nature, representation of idealised plants, healthy-looking plants, corn (child nodes: cobs and kernels and corn plant, frankencorn), animals, critique of GMO (child nodes: product [child nodes: food product, biohazard], process, implication [child node: death], Hungarianness [child nodes: Hungarian costume, symbol, and representation of Hungary], Europe, foreign text, only HU text, HU and ENG text). Following the methodical guidance of Rose (2001:60), I used NVIVO software on the sample of 118 images. I only tagged events and brochures (which featured the source images), so a tag only features once for each event. I coded the images myself, and have no claims for replicability, which is not a problem, as

I applied content analysis to map the emergence of meaning through a semantic web, not to objectify the reading of images.

For my sample, I use images and “image events” from the green movement (social and organisational background of the green party LMP) between 2005 and 2015. For this study I have chosen this time period because it involves ten years, during which three important milestones happened relevant to GMOs: 1) the implementation of the GMO ban – in 2005 the Hungarian government announced a ban on importing and planting genetically modified maize seeds, including Monsanto’s MON18. 2) In 2015 the Ministry of Agriculture started working on a new system of GMO regulation. Also in 2015, more than half of the EU banned GM crops⁵⁷. Another reason why I selected this timeline is that the whole GMO “debate” was relatively low-key in Hungary compared to Western Europe, therefore I consider it more useful to concentrate on a long timeframe.

To be able to conduct my research, I compiled a comprehensive archive featuring 118 photos. My sources were the archives of the MTVSZ (Magyar Természetvédők Szövetsége, National Society of Conservationists) homepage and the various websites of their member organisations. I also included images from Greenpeace Hungary’s Flickr account and Greenpeace Hungary’s Facebook page. In addition, as content analysis must address all the images relevant to the research question, I Google searched for press photos of each event as well. I included in the database every single photo I was able to find but omitted those showing only the participants or the site where the given action/event took place. I also included three brochures released by Greenpeace and MTVSZ, which were the campaign materials for the roadshow events.

In order to further explore how the images in my sample do political work, I intend to analyze on which register they serve as mediator tools conveying political messages. For this reason, and to complement previous research about Hungarian GMO media frames (Vicsek 2014) I employ visual framing analysis. Generally speaking, images are less intrusive than words, so the peripheral processing is activated by them in human cognition instead of the central one, furthermore, as research has shown, audiences may be more likely to accept a visual frame without question, while a textual message is more prone to criticism. There is evidence suggesting that when the textual and visual frame’s information is in conflict, visual frames

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<https://www.newscientist.com/article/dn28283-more-than-half-of-european-union-votes-to-ban-growing-gm-crops/>

become dominant (Ferguson, 2001). There is some literature on the mechanisms working behind visual frames (Borah and Bulla, 2006 and 2007; Patridge, 2005, Griffin, 2004; Griffin and Lee, 2005), as well as about how they relate to ideology or support already existing textual narratives. Therefore I use visual framing analysis to override my analytical separation of text and image.

Rodriguez and Dimitrova (2011) provide a four-tiered model of visual framing. According to this model, the first level of visual framing is denotative and representational: directly depicted meanings, or meanings established by the titles, captions, inscriptions, or other textual descriptions that accompany the visual. The second level is of stylistic conventions and technical transformations involved in representation, which are accompanied by social meanings. The third level is connotative, in which case persons and objects shown not only denote a particular individual, thing, or place, but also the ideas or concepts attached to them, thus they often create metaphors. The fourth level refers to visuals as ideological representations: this level draws on symbolic features, but also on the previous levels to form a coherent narrative.

To inquire about the site (context) of the images' production, I would like to draw on semi-structured expert interviews with two green party ex-politicians, and an NGO coordinator who was actively involved in shaping the GMO discourse. I conducted the interviews during 2018, and each lasted about two hours. I anonymised my interview subjects. My initial inquiry was about who initiated, organised these actions, and for whom.

6.3 GMO And Its Opposition

According to GMO-Free Europe⁵⁸, the active organisations against GMOs were: MTVSZ, Ökotárs, Génpiszka Hálózat, Védegylet, Greenpeace Hungary. In the following, I would like to provide a short description of this network. Ökotárs manages re-granting programs and distributes funds to other NGOs. MTVSZ is an umbrella organisation, involving some grassroots (countryside) and some more professional NGOs and INGOs from Budapest. Génpiszka Hálózat was an offshoot of MTVSZ, and all the other organisations, including Greenpeace HU, have joined their efforts later. They also organised three GMO Kerekasztal (GMO Roundtable), initiated by biology professor Béla Darvas, who invited the ‘civilek’ (other NGOs, in commas because civil is supposed to mean civilian, but these NGOs were often run by paid professionals).

According to my ex-politician interviewee, anti-GMO mobilisation had begun even before the involvement of the green party (LMP), and the main initiator was MTVSZ. The course of action was usually the following: MTVSZ had an action, or József Ángyán with MAGOSZ organised an event (Ángyán was an organising committee member in Védegylet and later joined the governing party Fidesz) and then later the other organisations joined in. MAGOSZ is a grassroots organisation of Hungarian farmers, formerly independent of Fidesz, but later connected to the party’s network. They organised demos with tractors (see Eaton’s analogy on the materialist discourse of Canadian wheat farmers, 2013). As they are not part of the green party network, MAGOSZ is not even mentioned among the anti-GMO organisations on the GMO-free region's website. Later Greenpeace took over initiating anti-GMO actions, according to my interviewee, “mostly imported stuff”. LMP was connected to these organisations through personal connections⁵⁹.

⁵⁸ <https://www.gmo-free-regions.org/gmo-free-regions/hungary.html>

⁵⁹ For example:

Fidusz (Friedrich Róbert) the program coordinator of MTVSZ was an LMP founding member,

Vera Móra, the president of Ökotárs, was also a founding member of LMP,

Roland Csáki, CEO of Greenpeace was also an LMP member,

Anti-GMO sentiment in itself was the tool of political mobilisation, therefore it was not in a straightforward dialectical relationship with the process of introducing and legislating GMOs.

Harper (2004) studied Hungarian GMO opposition in the '90s. According to Harper, the main distinction was between nature protectors (focusing on transgenic pollution with regards to biodiversity) and environmentalists (articulating concerns on food safety and health risks)⁶⁰, who initially attracted more public attention (2004:8). Instead of local actors formulating a response to the introduction of GMOs, GMO opposition (as a set of discourses, responses, a strategic toolkit) in the West was studied and then introduced. As Harper says: “After taking an early interest in accounts of the GM wars from the global South, Hungarian environmentalists framed GM discourses in terms of a naïve Eastern European public victimised by biotechnology corporations and their naivety in the ways of public participation. This discursive strategy allowed environmentalists to participate in scientific discourses on environmental and health risks while framing their own involvement as defenders of the unsuspecting general public.” (2004:15) Here clearly the elitism of the ‘civilising’ vanguard is on display. Harper’s article is about creating publics, but through the public the vanguards position themselves.

Furthermore, Harper also recalls an anecdote (2004:10-12) about how a Hungarian activist heard about Germans growing GMO on Polish soil over the German border because the Poles had no idea what GMO is.

However, such dynamics are not specific to the environmentalist (or nature protectionist) movement. The privileging of ‘progression towards the West’ is deeply embedded in Hungarian historical traditions, and it is a major influence for activism aligning itself with issues deemed progressive (Feró and Bajusz 2017). The ‘progressive’ elite on the semi-periphery of Europe is shaped by the region’s geopolitical context, and progressivism is in a direct dialectical relationship with the ‘backward’ nationalist elite. Let’s see what exactly European and Eastern European entails in this context.

MTVSZ president, LMP founder Schmuck Erzsébet was a secretary of KISZ (youth committee of the old communist nomenclature) but as my interviewee said “she never cared about GMO”. Also, these organisations provided a recruiting base for the party.

⁶⁰ Természetvédők – környezetvédők.

Firstly, the hierarchical and morally charged West-East relation of today began with the Enlightenment – a scheme of civilisation and backwardness, a moral hierarchy projected onto geography (Wolff, 1994, Melegh 2006), the 'sliding scale of merit' of the East–West slope (Melegh 2006) as a social imaginary is not merely an accidentally false representation but a hegemonic worldview which shapes our social reality. As Kiossev (1999) further explains there was no need to colonize the elites of Eastern European countries, as they were willing to align with the notion of western progress and westernize (thus culturally colonize) themselves.

This culturally westernised 'leftliberal' elite tries to civilize the locals, whom they assume to be underneath them on the 'sliding scale of merit' of 'western' civilisation and 'eastern' backwardness, and through this, they also gain a measure of 'progressive' moral goodness in this act (Böröcz 2006, Melegh 2006).

Therefore, the GMO issue is inherently tied to the East–est axis, as GMOs are a western invention and import. Vicsek (2014) identifies two types of media frames in the investigated media content (ranging from 2007 to 2009). They entailed distinct word usage, views on moral evaluation, and ideas on who was to blame. The 'Anti-GM Threat' frame was found to be the dominant one, while the 'Pro-GM Advancements and Benefits' was the minority frame. When sources of the GMO controversy were named, they were, in general, connected to 'foreignness' – or in several cases linked to either the USA or to multinational companies, to hypermarket chains, or multinational fast-food chains – and these were then often rated negatively among others for being 'just out for profit'. As Vicsek quotes a research subject verbatim: "Then they went ahead and brought in the multi chains and everything that comes with them. Which is bad. And they can sell it all for a profit and they take the Hungarians' money out of the country." In some cases, GM food was understood in a wider sense to represent or to be associated with a negative characterisation of foods (e.g. artificial, tasteless, foreign etc.). In some cases, GM crops were explicitly equated with this negative framing (i.e. all food that had such characteristics was gene-modified). Through these examples, it can be seen that foreignness is contextualised negatively throughout the dominant anti-GMO frame.

However, this seems like a contradiction: the progressive vanguard has to protect the Hungarian land from western invaders, similarly to how international scientific literature claims that GMOs symbolize the globalist, neoliberal threat (e.g. Levidow 2015, Eaton 2009). To some extent,

mobilising against GMOs was taken up by the right-wing too in Hungary, but most of the mobilisation was done by LMP, which is broadly considered a left-liberal (maybe centrist) party. Now I would like to explore the social context of my research.

6.4 The Wider Hungarian Public

Despite the civic organisations and the political parties' efforts, the public has been mostly ignorant about GMOs. According to Harper (2004), there wasn't a grassroots base for anti-GMO (2004:13), GMO at first was largely a legislative issue pertaining to the general EU legal harmonisation. According to Vicsek (2014), when questioned in surveys, Hungarians offered negative evaluations of GM crops, but consumers did not engage in active protest against the issue. The public did not become mobilised in the GM controversy (Vicsek quotes Bánáti and Lakner, 2006; Gaskell et al., 2006, 2010; Kasza and Lakner, 2012).

These results may come as a surprise since, in contrast with this, Eurobarometer data show that Hungarians care about innovation, but relevant risk information does not necessarily shape their behavior. The 2014 Special Eurobarometer 340: Science and Technology Survey shows that Hungarians are very interested in new scientific discoveries and technological developments (91%, among the highest EU rates), and, at the same time, 46% of them disagree with the statement that "in my daily life it is not important to know about science", and 36% agrees with this statement (the EU average is 48% and 33%). Despite this, they do not seem to care about GMOs much (2019 Eurobarometer data, commissioned by the European Food Safety Authority⁶¹). According to this research, Hungarians are almost the least likely to care about food safety (26%) in whole Europe, and also the least likely to say that information on a food risk has changed their behavior (52%), furthermore, they are also among the least likely to agree with the statement that 'highly technical and complex information reduces your confidence in the source' (15%), and (36%) of them say they trust celebrities, bloggers and influencers as a source of information on the topic of food risk⁶². According to representative data gathered for this paper, from a 2018 TARKI omnibus survey, most Hungarians would rather trust 'writers, intellectuals' than NGOs ('civilek') to introduce scientific innovation.

According to the 2019 Eurobarometer data, 28% of Hungarians have heard of 'genome editing', and 50% of them have heard of genetically modified food and drinks. 32% of them say

⁶¹https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/Eurobarometer2019_Food-safety-in-the-EU_Full-report.pdf

⁶² Exact values: egyáltalán nem: 3,1%, inkább nem, 15,1% se igen, se nem 31,8%, inkább igen 30,6%, teljes mértékben 10,4% nem tudja/nem válaszol 9%

genetically modified ingredients in food and drink concerns them the most when it comes to food risks. Meanwhile, the EU average is 27%.

Another representative poll, conducted by the Ministry of Agriculture in 2016 among the Hungarian adult population reconfirmed the previous findings, as their research has shown that 66.6% of the Hungarian population have heard of GMO-free foods, 37.2% of the population consider it important and 48.5% consider it very important that the meat they buy comes from animals fed with GMO-free feed. Moreover, 38.3% of the population would probably, and 38.8% would certainly replace the food they regularly consume with assuredly GMO-free food. After all, 95.5% of the population believe it is important that foods are clearly labeled as GMO-free.

Yet it is not so certain that Hungarians know what GMO actually is. Research (Vicsek 2014) utilising lay focus group discussions⁶³ concluded that many Hungarians do not have sufficient knowledge about GMOs, but they have some ideas. All focus group respondents claimed to have heard of GM crops, and the majority of them evaluated them negatively, although there had been no real mass media coverage of them. Many focus group respondents defined GM crops as part of a trend toward mass-produced, tasteless, suspicious, artificial, ‘foreign’ food available in stores, which displaces traditional, good-tasting, healthier, Hungarian products from the domestic market (and yet genetic modification is just a technology, in theory, it could result in organic, artisan, high-quality food products). Only a few respondents presented a broad pro-GM perspective and associated GM with a procedure of plant breeding, namely hybridisation. Others did not refer to it as such or attacked this understanding stating that plant breeding and genetic modification were different (Vicsek 2014).

Similarly, in “Magyar Tudomány” (2007⁶⁴), Bánáti suggests that the gap between the public understanding of GMOs and the scientific discourse is broadening.

Bánáti cites data (Eurobarometer, 2002, 2005, 2006) to show negative attitudes and a poor social discourse on genetically modified crops and GMO-containing foods. According to Bánáti, even the available information is beyond the comprehension of the average consumer.

The advancement of biotechnology, the increase in our knowledge of molecular genetics, the growth of genetic engineering tools are faster than either the legislative efforts or the

⁶³ Eight focus groups conducted in 2009. Three research subjects came from diverse segments of Hungarian society. Heterogeneity was aimed for mainly between groups rather than within the groups. Some groups were held in the capital, some in other cities, and in a small village (Penyige).

⁶⁴ <http://www.epa.hu/00600/00691/00040/pdf/437-444.pdf>

development of new ethical standards, and both professionals and the general public struggles to catch up with such fast-paced scientific development. As a result, science and its practical application are becoming more and more distant from social perception, comprehension, and acceptance.

6.5 NGOs

Who were these “civil⁶⁵”/NGO actors, where did the environmentalist movement come from?

Monostori (2007), when examining the origins of the Hungarian environmentalist movement, claims that before the system change, such movements were driven primarily by anti-state socialism. While westerners engaged with the crisis of the advanced market economy, their eastern counterparts were pro-free market. After the system change, the number of NGOs generally have grown, but Monostori claims that from the mid 90’s it was obvious that the environmentalists had no popular base, so those who wielded political power were able to determine the activity of the movement. Also, some NGOs wanted to find political affiliations, while some others aimed for professional, institutional connections, and this led to professional specialisations. Parallely to this, from the 90s, the movement has been building its global connections and has been importing some elements from Western social utopias. From the second part of the 90s, however - following global trends-, the movement has often defined itself as one fighting against the free market and the investors (instead of fighting the state), and they deal with global topics such as energy policies and GMO.

As we can see, these “civil” environmentalists are not so easy to separate from politicians, although in Hungarian the word ‘civil’ is supposed to mean ‘non-professional’. According to Mikecz (2017), the term ‘civil’ has prestige in Hungary, while politicians and political institutions are mistrusted, hence protesters often use this label to avoid being associated with worn-out political elites. It is therefore no accident that the new ecologist party in Hungary chose the name Politics Can Be Different, which is a play on the slogan of the global justice movement: The World Can Be Different. The institutionalisation of the green movement, namely, the foundation of LMP meant that green activists moved into mainstream politics.

⁶⁵ civic, non-professional, representative of a community

6.6 The Role Of Visual And Participatory Media In The GMO Debate

There are strong claims in the literature (e.g. Lewidow, 2012) that mobilising against GMOs involves an already established cultural framework based on moralising binaries such as nature-culture. The visual material does the work of subtly channeling anxiety towards already established cultural conventions and short-circuiting scientific arguments (see also Clancy and Clancy, 2016).

It is another important fact that, besides the issue of the GMOs themselves (who produces or sells them, what effect they have on the human body or the environment), they become symbols circulated within an already polarised and politicised media environment, as part of much more complex signifying chains.

Therefore, these essentialisations are effective tools of mobilisation, because they are based on tropes firmly embedded in the public consciousness, but they might also be counterproductive in the longer term, because they divert attention from the structural causes of social injustice, and fail to address the social embeddedness of biotechnology and its political and economic context (Carroll, 2018).

In accordance with this, Clancy and Clancy (2016) claim the cultural resistance to GMOs shows the ability of images to short-circuit appeals to logic. The resilience of this discourse testifies to the ability of the visual to dislocate scientific or logic-based epistemologies from their hegemonic position through flexibility and through a sophisticated blending of visual metaphors between figurative and literal language and representation. Rational claims about technology can be contested and refuted, but such a discourse (outside rational dialectics) ultimately succeeds in creating doubt. This process also contributes to a broader shift away from rational political decision-making. Bloomfield and Doolin (2012) claim that in the case of GMOs, visual imagery can even be counterproductive in establishing a dialogue between the public and scientific institutions.

6.7 Image Event

As most of the images connected to my case study were generated through image events, I would like to introduce its conceptualisation by DeLuca (1999). According to DeLuca, “image events” are “staged acts of protest designed for media dissemination” (1999:315), and their main purpose is not to have a direct impact on those present, but to be later disseminated as media images offer fragments of argumentation, claims, and refutations of claims. Furthermore, DeLuca also argues that early Greenpeace image events were forms of tactical media⁶⁶, and bases his idea on McLuhan’s theories who called the literate man dumb when faced with mass media, and talked about defensive arrogance to justify this condescension (1999:18 DeLuca quotes 1964:175).

DeLuca quotes an interview with Paul Watson, an original member of Greenpeace and later founder of the Sea Shepherd Conservation Society: “When we set up Greenpeace it was because we wanted a small group of action-oriented people who could get into the field and, using these McLuhanist principles (for attracting media attention), make an issue controversial and publicize it and get to the root of the problem” (quoted in Scarce, 1990:10).” DeLuca says that “early Greenpeace members took to heart McLuhan’s aphorism “the medium is the message” and accepted McLuhan’s challenge not to cower in their ivory towers bemoaning change but to plunge into the vortex of electric technology in order to understand it and dictate the new environment, to “turn ivory tower into control tower” (DeLuca quotes Hunter, 1971:221). According to DeLuca the early members of Greenpeace thought of themselves as media artists and revolutionaries (1999:6), which is in line with McLuhan’s contention that the “artist is the man in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time” (DeLuca quotes 1964:71). As a logical consequence, these image events incorporated a radical anti-humanist ontology questioning the established secular-humanist worldview and questioned the very notion of progress: humans risking their lives for trees or whales challenges the understanding of animals and nature as resources, and thus it contests the linking of economic progress with nature as a storehouse of resources, thus challenging the discourse of industrialism that warrants the use of technology to exploit nature in

⁶⁶ Tactical media is a set of practices to disseminate socially and politically relevant information through media art.

the name of progress (1999:54-55). Further elaborating the concept of the image event, DeLuca and Brunner (2016) claim the use of affective images has turned Greenpeace into a global phenomenon (2016: 293).

Unlike the original image events based on direct actions, such as stopping a whaling ship or blockading a construction site by using the human body as a living shield, the Hungarian GMO image events I analyse were not dynamic actions but staged scenes in front of the parliament, or embassies and each invoked ‘Europe’ – sometimes the EU, sometimes the European commission. They still ‘faced’ a power they thought of as bigger than themselves, but as I argue later, these image events rather reinforced than questioned anthropocentric, modernist ontological notions.

When adopting the ‘image event’ as part of the anti-GMO toolkit, the educated “cultural brokers”/meme entrepreneurs from Budapest (see Bajusz and Feró 2018) followed the international trends. According to my interviewee, a Scottish woman was the main actor in importing the international anti-GMO toolkit, usually exact ideas or even pieces from Western protests. To quote him: “they just liked the way they looked, I guess. There was no concept... they wanted to draw attention.” Most obviously copied were the costumes and props, such as large inflatables, often exact replicas of the ones used in Western countries. Another interviewee recalled how he had seen at a German protest an inflatable he really liked, and then “first they borrowed that tomato, and then ordered the production of an inflatable corn”. I was also told that LMP translated European Green Party texts and later distributed them as their own anti-GMO materials.

However, this dynamic is not specific to Hungary but is happening to a much bigger extent on the scale of the international anti-GMO mobilisation efforts. For example, the inflatable tomato (which my interviewee saw in Germany) was not only a part of the Hungarian events (“Óriásparadicsommal a génmanipuláció-mentes Magyarországért”, 2005, 2006), but as part of the “Bite back: WTO hands off our food!” campaign it toured Europe⁶⁷, and the petition with the

⁶⁷ “During the six-month “Bite back” campaign the giant tomato has been on tour through Brussels, Paris, Mont de Marsan, Toulouse, Madrid, Barcelona, Namur, Arthus, Copenhagen, Warsaw, Budapest, Nyiregyhaza, Zagreb, Vienna, Tbilisi, Limassol, Dnipropetrovsk and many cities in Germany”. https://zelena-akcija.hr/en/programmes/natural_resources_protection/gmos/info/the_tomato_monster_in_zagreb

signatures collected during the campaign was also handed to European Commission in the presence of the inflatable tomato.⁶⁸



Figure 6.1 “Bite back: WTO hands off our food!” frankentomato
Source: <https://friendsoftheearth.eu/>

Later on this object has gained such a mimetic quality, that it is for sale on Aliexpress. In this case a part of the anti-GMO toolkit which has toured Europe became detached from all meanings connected to GMO, either as technology or a cultural object. It became a mass produced object “for promotional advertising” as itself, a tomato with a human face and big teeth. So due to the image events an object itself started to spread, as itself, an object.

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<https://friendsoftheearth.eu/press-release/european-commission-guilty-of-wrongly-concealing-gmo-documents-says-ombudsman/>



2018 new design funny reality red giant inflatable tomato vegetable for promotion advertising

US \$480.00 - 690.00

US \$2.00 New User Coupon Get coupons

Size:

3mH 4mH 5mH

Quantity:

1 2997 pieces available

Free Shipping

to United States via FedEx IE

Estimated Delivery on 03/05

Buy Now Add to Cart

23-Day Buyer Protection Money back guarantee



Figure 6.2 Ready-made inflatable tomato
Source: aliexpress.com

6.8 Data and Results

To start my analysis I created a semantic net to explore how ideologies emerge through a web of meaning. Using this semantic web I would like to analyse how broader ideological narratives emerge through the image events, especially connected to the local–global/Hungary–Europe axis.

Despite drawing on data overarching ten years, and using both inductively and deductively created codes, the semantic web is small and repetitive. It does not branch out, and does not reveal surprising connections, but connects basic symbols into strings of predictable associations. Clancy (2016) claims that anti-GMO activism has an international visual lexicon, which gives birth to local variations. However, I question whether the local variations are that varied. The deductive codes derived from Clancy’s international visual lexicon (critique of GMO as product, process, implication) branch out to all events, and all the other codes are either their inductively coded representations, or connect to these.

Corn has a central place:

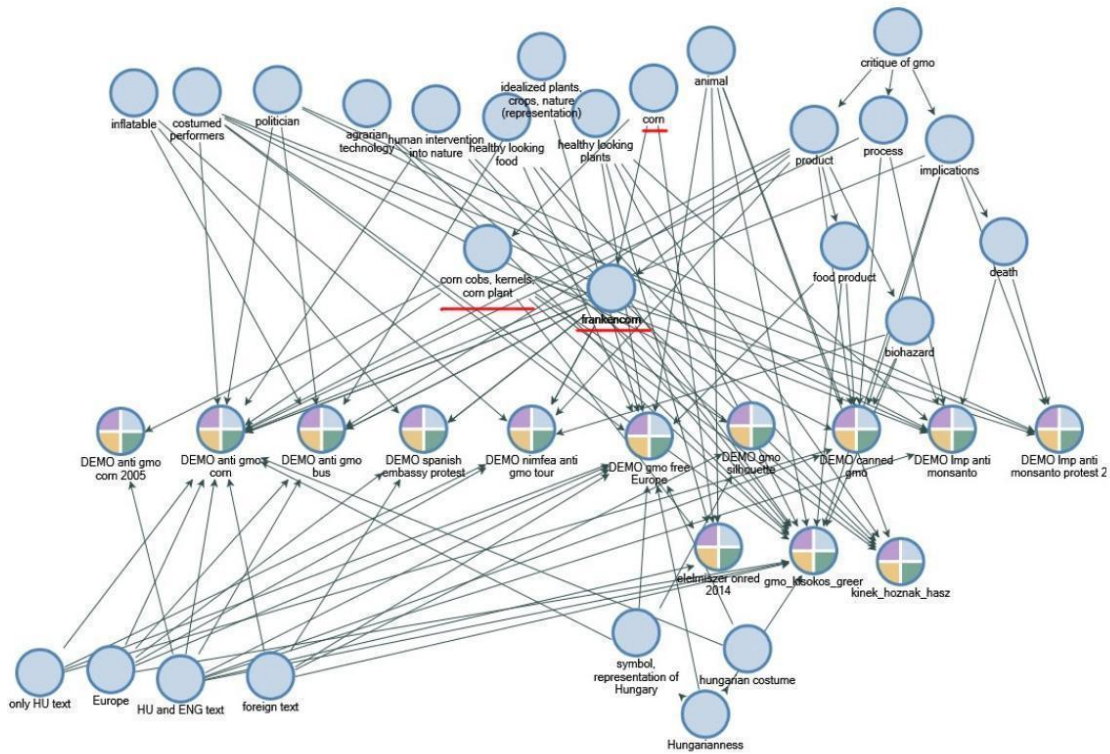


Figure 6.3 Semanti web, and corn within the semantic web

Corn, for these anti-GMO activists, is a bifurcated synecdoche – as a healthy plant or produce it symbolizes nature per se, while as ‘frankencorn’ it constitutes a synonym for GMO. It is relevant on all levels of framing, both within the anti-GMO and pro-GMO frames. Corn has a central place instead of wheat - despite the importance of wheat to Hungarian agriculture and its place in the general cultural imaginary (the wheat stalk is one of the common symbols of Hungarian land, often featured in regional coats-of-arms). Images of wheat (one image of wheat stalks, one of a field) are only featured in two brochures. This again shows how the visual discourse is not adapted locally, but functions as the extension of the international discourse.

Hungarianness (represented through people wearing traditional Hungarian costumes and the symbols of the country) features at 4 events and at 3 of them a dichotomy forms with signifiers (mostly written) related to Europe.

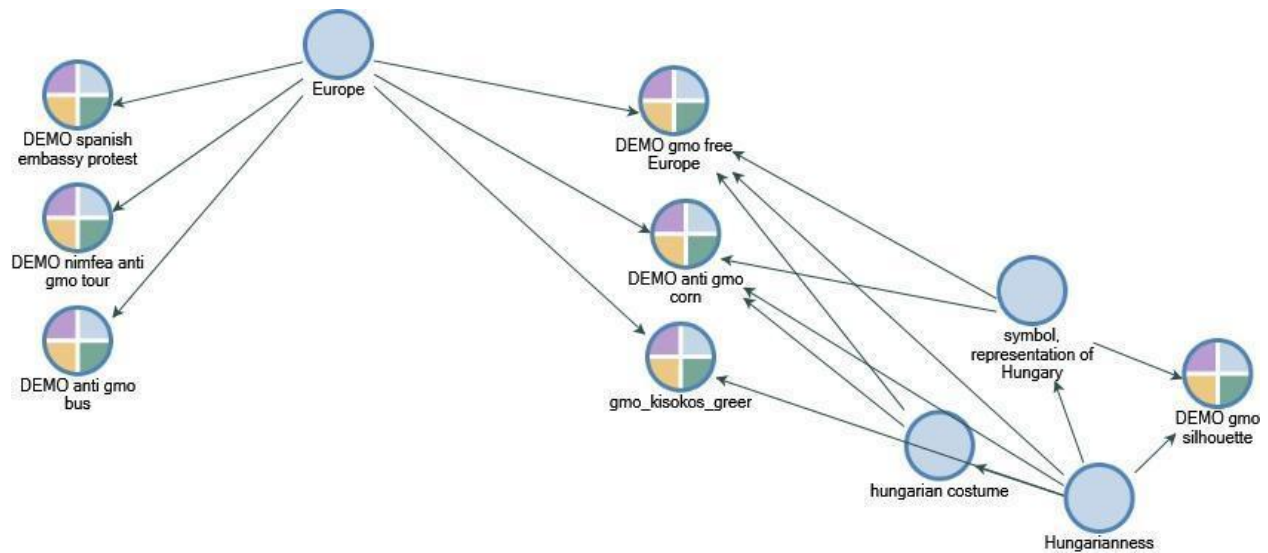


Figure 6.4
 Semantic web of Hungary–Europe connections

At only one event, at the anti-GMO demonstration held in front of the Czech Embassy to Budapest, ‘Europe’ was performatively represented beyond verbal signifiers or symbols. To do so, activists wore T-shirts with the flags of European nations (25 letters plus an exclamation mark corresponding to the 26 EU member-affiliated states). Here Europe is a synecdoche: the EU represents the whole continent. József Böröcz (2006) explores the dynamics of such synecdochic Europe- representation: in his example Hungarian intellectuals address Europe (the allegedly morally superior Western Europe), and through this act, they also define their own position aligned with Europe’s moral superiority.

Displaying this dynamic, at the Czech Embassy’s anti-GMO protest, the ‘Europe’ personified by flag-wearers stands by when a costumed performer representing Hungary (a woman wearing a male traditional folk costume, a fake mustache, a Hungarian flag, and khaki wellies) is injected with (assumedly) GMO corn. Hungary lays and suffers whilst being acted on, thus the dichotomy of ‘passive-active’ manifests here. The European Committee is shown to be a separate actor, and not Europe personified by people wearing the flags, but the European Committee injects the Hungary character with GMO corn.



Figure 6.5

Images from the Czech Embassy protest

Sources: mtvsz.hu, Greenpeace Hungary Flickr

At the “1 million European citizens for a GMO-free Europe” protest, the fertile agrarian land is represented as a carpet beneath the feet of the Hungarian costume-clad protesters who make an appeal for a GMO-free ‘Europe’.



Figure 6.6 German original, and Hungarian reproduction
Sources: versachalk.com, Greenpeace Hungary Flickr

It is an appeal toward the sky – for a “higher presence”, namely Europe. Again, ‘Hungary’ is represented as a passive entity suffering from GMOs, and a reproduced German chalk art piece is used to illustrate such claims.

As these images show, local adaptation happens through wearing schematic folk costumes (in reality, each region has its respective folk costume). Hungarianness is shown as an allegory of an abundant landscape offered for consumption and offering consumables, similarly to how the panorama painting of land has historically been a tool of nation-building through emphasising and then representing certain aspects of the homeland.



Figure 6.7 Hungary-shape made out of corn cobs

Source: Greenpeace Hungary Flickr

Another, more formally schematic representation, where the shape of the land made of corn cobs comes to stand in place for the country. There is no whatsoever local adaptation, this image could feature the shape of any country.

The images of my sample are strikingly simple visual argumentations, mostly featuring the same arguments as can be seen in generic Greenpeace actions about GMOs. In the case of the latter, these events aim to convey messages such as “your food will eat you”, “GMO is an unnatural monstrosity crossing the nature-culture binary and species boundaries”⁶⁹.

⁶⁹ <https://www.greenpeace.org/eu-unit/tag/gmos/> Quote from the website: “Genetically modified (GM) crops encourage corporate control of the food chain and pesticide-heavy industrial farming. GM plants can also contaminate other crops and lead to 'super weeds'. This technology must be strictly controlled to protect our environment, farmers and independent science.”

To investigate these campaigns, DeLuca (1999) claims that Greenpeace image events articulate a shift from human-centered ontologies. In my case study, however, this claim does not apply. Four events featured politicians (or my interviewees recognised politicians at active roles such as speakers or performers at four of them), so whether they are nature protectors or environmentalists, through the image events these movements (in some instances figuratively, ie Figure 7.6) forged a platform for emerging politicians. Putting politicians on stage is anthropocentric in a particular way: it reinforces the systemic hierarchy of the secular-humanist paradigm: the ‘expert’, a ‘serious person’ above all.

I would like to augment my reading with a visual framing analysis to see at which level of meaning these images connect to ideologies. At the level of stylistic conventions and editorial choices, the images of my sample fulfil the formal conventions of press photos since they are made to be distributed in the press, as is the case with image events. Furthermore, at the denotative level, these images are costumed performers, politicians, large inflatables, and elements of nature, mostly corn. Corn is relevant on denotative, connotative, and ideological levels. It stands for itself: corn- the produce whose GMO regulation is a legislative issue. It can connote land, food, produce, and community. Together with other signifiers, it can refer to ideologies, broader narratives, and sentiments. The presence of politicians⁷⁰ at these image events also creates a layer of connotative meaning, because they connote the Green party. Metaphors are also at the connotative level (see the work of Hellsten I. on biotechnology and metaphors, 2002, 2003, 2008). Frankenfoods, in my case, tomato and corn are the most common metaphors featured. Almost all the events featured a frankenfood, represented by either an inflatable or an image, or at least a reference to frankenfood. One could argue that the metaphor of the frankentomato and frankencorn symbolise the technology itself⁷¹, therefore it is on the fourth level. On the level of ideology, an argument is formed: the environmental movement forges a platform for politicians (denotative level) out of Hungary, Hungarian land, which is threatened by (metaphoric) monsters who are supposed to stand in for poorly understood GMO technology (at the connotative level) and corporate greed, foreign influence, neoliberal hegemony (at the ideological level). The technology itself is hidden by this discourse, thus it can

⁷⁰ My interviewee recognised Bence Tordai from LMP with Balázs Tömöri from Greenpeace, who after a brief career in party politics is now the mayor of the town of Pilisborosjenő, Márton Vay from LMP, Benedek Jávor from LMP (former member of the European Parliament).

⁷¹ see for example the argument of Wagner W., and Cronberger N., (2001) on symbolic coping.

be concluded these images constitute a partial visual argument (about the threat), and metaphoric mapping (as metaphors map meaning to feeling) which was then augmented/applied by the government to their own discourse – who then successfully subverted the mobilisation attempts of the green movement with the constitutional ban on GMOs. I would speculate these images are not yet explicitly ideological – but they aim to be, only the Green party was not very clear on ideological matters such as the liberal-protectionist rift.

After looking at how the topoi from international events feature locally, I would like to reference the international literature again. Clancy and Clancy's (2016) argument (images from the international alter glob movement influenced the local image events) applies to my research subjects, although I would say 'influenced' is maybe not the right word, as images were rather re-created. For example, the arguments with the corn were not adapted to wheat (the most important local agrarian produce), and the Hungarian aerial image was a replica of the German chalk drawing. Clancy and Clancy also claim that anti-GMO activism has an international visual lexicon, which gives birth to local variations- were the local variations really that varied? Not in the Hungarian case. Furthermore, GMO was also part of anti-TTIP mobilising, as the elements of GMO image events come back in anti-TTIP image events ('the international visual lexicon' of anti-GMO activism is maybe that of environmental activism).



Figure 6.8 Anti-TTIP protest

Source: Greenpeace Hungary Flickr

The protesters did not solve an ideological conundrum on the levels of visual rhetorics and metaphors – so by adapting the western visual lexicon, the ‘progressives’ ended up protecting the land from the corrupting Western influence! This reflects a broader tension within the party, as protectionism vs liberalism has been a broader issue for the Green Party. According to my interviewee, the Green Party has been having a rift between liberals and those initiating a protectionist-nationalist political front.⁷²

Negative images generally have a stronger impact (e.g. Casas 2018), and there is a specific argument (Bloomfield and Doolin, 2012), according to which attempts to introduce GM foods

⁷² Background information: https://mandiner.hu/cikk/20150116_kijavitana_a_foldtorveny_fo_buneit_az_lmp

into Europe in the 1990s stalled because of the negative images such as the notion of Frankenfood, which expressed and invigorated public/consumer opinion.

Clancy and Clancy (2016:1) also argue that “the uncommonly high levels of opposition to genetically modified food in both the United States and in Europe can be attributed to the overwhelming success of the online visual campaign against GMO”.

According to both of my politician interviewees, GMO opposition was in part so ‘successful’ (ie the GMO ban became part of the constitution) because the government channelled the GMO agenda into their nationalist-Christian agenda: they jumped at the chance to protect the nation from the corrupting foreign influence of the GMO threat. In 2012 the government started its own GMO propaganda – the ‘GMO roadshow’, which had no image events, but it was a lecture series (eight events, at mostly rural universities).

The fear of globalisation and the corrupting influence of the Western mega-capital is a populist trope often employed by FIDESZ. Since lay people do not know what GMOs are (Vicsek 2014) and do not care much about food safety itself (Eurobarometer 2019), GMOs have easily become a symbol for much broader and ideologically charged concepts. One of my politician interviewees told me he would not have objected to GMO technology itself, but “it is cemented in the public consciousness” as the tool of evil global elites. It was an easy associative leap: when Fidesz invoked Hungarianness/’Hungary as an entity to protect’, it was easily mapped onto images such as the grey cattle or the folk costumes, as the green movement never cared to deeply identify with nationality- they never formulated a deeply engaged Hungarian identity.

Lastly, I would like to analyse the mascot itself created by MTVSZ (which is eventually an adaptation of the frankencorn trope).



Figure 6.9 Protesting corn (“Genetically modified? No, thanks!”)

Source: mtvsz. hu

I would like to deconstruct this corn as a representation to map out how it relates to existing discourses (both anti-GMO and Hungarian politics). It is an ambiguous creature – a cutified frankencorn (as it is a corn with human facial features), but instead of monstrosity (the terror of boundary-crossing between human and plant, e.g. Douglas 1966), its human features display indignation. One could argue that it is supposed to represent the Hungarian corn that wants to stop genetic modification, but the speech bubble does not originate from the corn mascot itself. It illustrates a demand that it does not make.

As I elaborated in my previous study (Bajusz, 2018), cuteness is a tool of depoliticisation. I explained this mechanism through two case studies. The activist groups “Squirrels” and “Mallows” are both cute – the Mallows are the local branch of the Pink Ribbon (cancer awareness) movement, while the Squirrels are a participatory theatre group loosely affiliated with counter-government activism. Their cuteness depoliticises: the complexity of ‘good’ causes, the political struggles surrounding them are obscured through cuteness. Meanwhile, their activities are connected to transnational networks, have political, bio-power stakes, and the representation legitimates intervention as well as political status. The personal involvement of

the activists also prevents moving beyond consensus deemed ‘common sense’ or even ‘universal human values’.

Similarly to this, the cuteness of the frankencorn does not make sense at a conceptual level. I speculate that the corn is ‘cutified’ as GMO is the axis of green mobilisation, and precisely, here is where local adaptation happens - the frankencorn, the symbol of GMO is adapted into the locally accepted affective regime of political dissent. The affects of this mascot fits the life-world and the political tactics of the green movement. This is a human-faced corn that embodies the bourgeois-liberal subject’s formal repository of expressing political dissent. This corn displays indignation, not fear. It has a face and eye to politely object to EU legislation, not to display the horror of boundary-crossing between human and plant.

I would argue that not technology, but politicians themselves gave birth to the real monster: the passive-aggressive Eastern European frankencorn. Miklós Hadas (2020) analyses the genealogy of the Hungarian national habitus, and claims that the relationship between the subject and the state is inherently patriarchal and authoritarian, and the current political elite is masculine and domineering. Hadas lists four collective strategies: the two most common ones are submergence and obedience. These citizens avoid direct confrontation: “The submerged and the obedient think that all they can do is grumble, sulk, complain, and perform verbal acrobatics supported by high volume.” (2020:147). LMP had promised a politics different from the masculine political elite, but was it that different? Are passive-aggression and emotional blackmail such as embodied by the local adaptation of the frankencorn really that different to submergence and obedience as described above?

6.9 Conclusions

As it can be seen through my demonstrated examples, the anti-GMO campaign was never 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. This dynamic is present in other LMP public materials: the green movement's image events often follow the same choreographies and visual tropes as their Western counterparts.



Figure 6.10 Similar green hearts

Sources: left side Greenpeace⁷³, right side LMP event in 2009⁷⁴

The organisers of these Hungarian anti-GMO events staged public rituals (James Carey 1989), affirming the collective social and symbolic order – social actors and their roles. Through these events, they utilised and performed visual political rhetorics- defining and situating actors and conferring meanings primarily related to Hungarian political discourse, and not posthumanist ontologies. They imported what essentially is a tactical media toolkit and used it as large, fancy

⁷³ <https://www.greenpeace.org/hungary/cselekedj/allj-ki-te-is-batran/>

⁷⁴ <https://www.youtube.com/watch?v=HUweVI62XF8>

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.

Anti-GMO is also a site to map a broader cultural war dynamic: the Green party made their attempts at mobilisation, but then the right-wing entered the culture war, and they were able to channel the discourse into their own frames – protecting the land and national identity from sinister Western invading forces!

Using Durkheimian terminology I argue the Green Party imported a totem, rallied around it (as Durkheim explains the sentiment which unifies the clan⁷⁵), first the ruling party joined, then ended it quickly- with the total ban on GMOs. However, the ‘totem’ did not become popularly known itself. It only entered the cultural imaginary as a vague threat or a symbol of corrupting Western influence. Images had a role in cementing this meaning. I speculate that these images had a broader public effect through anchoring the discourse to certain affects (threat, anger) – similarly to how metaphors (often used to imbue biotechnological innovations with meaning) map affects to meaning.

Considering lay people’s perspectives, I further assume they would reflect on the promise of LMP abbreviated in their name *Lehet Más a Politika* (Politics Can be Different) – but is condescension and lecturing (like the passive-aggressive frankencorn or the fake peasant costumes), and mobilisation through some vague global threat (GMO) anything different than really existing Hungarian politics? The public could not have been frightened of the technology itself- as they have no clue what it is. In itself, it could not have triggered any serious objection, only the meanings attached to it.

I conclude that the political work of affiliation, identification was contained within the affective register, and possibly the public also reacted affectively to the confusion and condescension inherently. 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.

⁷⁵ “It is its flag; it is the sign by which each clan distinguishes itself from the others, the visible mark of its personality, a mark borne by everything which is a part of the clan under any title whatsoever, men, beasts, or things. So, if it is at once the symbol of the god and of the society, is that not because the god and the society are only one?” (1912:206).

7 Focus Group Study

7.1 Introduction

I used focus groups (Vicsek 2006) 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 understand the images' rhetoric, whether they relate to the topics on the affective level. The focus group method is applicable to examine attitudes and opinions. We had no idea how our research subjects felt, so we asked them, and often they began relating to a topic by talking about their feelings.

7.2 Methodology

The conversations were held on Zoom, during 2020. We had six focus groups, each with three or four people (altogether twenty) and a moderator. The respondents were recruited through personal networks and social media, which entails possible bias, but I do not intend to generalise the findings and don't claim any representativity. To avoid further bias, the author of the dissertation did not participate. Due to the topics' sensitive nature, such as denigration of the female body and illness there was a separate group for men and women with male and female moderators, respectively. The conversations were scheduled for an hour and a half, some of them lasted two and half hours but most went down according to the plan. Due to the extensive personal content (history of illnesses, family histories) and other unrelated topics (party politics, conspiracy theories) I didn't make a transcript, rather an extract of the conversations according to the guide.

I selected a homogeneous group of subjects. All of them were from Budapest or Budapest-bound, of active age with higher education or university students. This limits the research results' validity, as the examined organisations' reach is not limited to these groups, but

focus group research isn't aimed to be representative. The respondents in the focus groups more-or-less know each other, are acquaintances, or at least share some. The focus groups were organised to be homogeneous. Accordingly, there was a group of women of Transylvanian origin around the age of 25 (4 respondents), women at the age of 45–65 (3 respondents), male social scientists aged 25–35 (4 respondents), cultural workers (dance, music, installation) men aged 20–40 (3 respondents), and a male and female group of visual media professionals (creative media professionals, photographers, curators) aged 25–40 (both groups 3 respondents). The respondents' ages are estimates, we did not ask about it. The focus groups were anonymised, so the extracts will shed light on the fact whether an attitude is constant within a group, how associations are interlinked, but the source of the statements will not be revealed. Conclusions from the expert groups will be indicated. The topic was presented consistently to each participant in every group; *'The Role of Images in the Introduction of New Technologies'*. The arguments of the used images are double coded (texts and images express the arguments), so my methodology has called for analytical separation to pose questions about the images.

I don't claim that only the images themselves have an effect or uncover the role and importance of the images in that regard. I aim to describe the mechanisms and compare them to my previous research.

First, we asked them about GM plants, and after that, we had questions about the pink ribbon movement, then about the images they encountered on the subject and finally we asked them about certain images; "What do you see in the picture, what is it about, What do you think about it, How does it make you feel?"

7.3 Results

7.3.1 Anti-GMO

The first question “What kind of image pops up when you think of genetically modified plants?” revealed that when the respondents talked about the topic they used media images. The large-toothed frankencorn monster is a typical visual representation of GMO for instance. Many associated it with perfection and beauty imagining the GM plant being flawless, as companies advertising the so-called green biotechnology use images of idealised plants. Not all respondents knew what GMO stands for. As in a previous focus group research (Vicsek 2014), some people thought GMO meant cheap, mass-produced, and imported greenhouse vegetables. A participant mentioned that her grandma produced GM strawberries in her countryside garden which cannot be true as their trade is prohibited by EU regulations. However, she found them to be delicious, cultivated in a backyard farm with “village well water”. The narrative reveals that her grandma planted Honeoye or some other bigger type of strawberries which she believed to be GMO due to their size. She doesn’t know that GMO is a technology therefore GMO strawberries could come in any shape and form, she identifies GMO with a certain kind of product. The same technique is applied to anti-GMO images, where the (supposed) product of technology appears as the critique of that technology (see Clancy and Clancy 2016). In accordance with previous research (Vicsek 2014), I found that the Lidl supermarket chain is directly associated with GMOs. In another group, GMOs were associated with German green movements and with Greenpeace as well.



Figure 7.1 Focus group image 1, MTVSZ mascot

Source: mtvsz.hu

Respondents in the groups of visual professionals were confused about whether the corn is the subject or the object of the outrage. For a respondent the corn radiated fear, it evoked her fear of (as she recalled) ‘a near-death experience’. Phrases such as “commanding, forcing, oppressing, soul-devouring” were brought up, as if the corn had already passed judgement and expected everyone to bow to it. In my previous publication (Bajusz 2019) I analysed how being cute is the mechanism of depoliticisation - the agendas of international bio-political actors are personalised by Hungarian actors, typically through foundations. Subjectivity becomes a tool and instrument and through ‘cuteness’ they depoliticize their involvement. I argue the same mechanisms work here as well. The picture had an alienating effect on several people. A visual professional said that he would be much more interested in the potential risks GMO holds; “What happens if I ate this?”, but here they are just told what to think. “I don't even know what GMO is, I have mixed feelings about nuclear power as well, I was told it is bad, then again some other very smart people said it's actually ok”. The participant said that he couldn't care less about the man-faced corn ordering them about. A German anti-nuclear power campaign came up as a reference as well.

Many objected to the graphic implementation, and not only the visual professionals. A participant said that “It looked like something from the ’90s, let’s say I do this at home, then it’s OK, as serious and professional work it’s quite crappy. It has a typical word art, Hungarian advertising market in the 90’s vibe to it”. In the same group, they found another image, which depicts people in Hungarian traditional dresses in front of the parliament building (Figure 7.3) just as amateurish. The following comments were made; “If this is supposed to be a political statement of sorts, we are doomed. In France, they lead a drove of pigs into a McDonalds, I don't think everyone has to set themselves on fire or something but this is lame”.

The respondents’ impressions are connected to the affective register of the action, which is “half-hearted” like the corn logo that has, according to a participant, a “restrictive mood”. It seems clear that the respondents don’t read the images rhetorically -in correlation with what I found- these images do not work on a conceptual but on an affective level. Through these GMO image events, those mobilising with GMO adapt their imported toolkit (visual codes, symbols, coping strategies, moral axioms, identity elements) to their own affective regimes.



Figure 7.2 Focus group image 2, LMP press event

Source: Greenpeace Hungary Flickr

I found this picture rhetorically straightforward, but in one of the focus groups (where one participant said GM strawberries were grown by her grandmother in the countryside), they interpreted the picture as a tasting to decide which crop is GMO and which isn't. As it was revealed in a previous conversation, they think it can be decided based on taste and this belief got confirmed in the narrative of the image.

Every group found the syringe video (Figure 7.4) antipathic, some of the visual professionals voiced their confusion; "Why are they trying to mobilise with something as violent as a syringe?" In a different group, a participant asked why they would mobilise through fear, another participant thought that the Hungary character was a child (actually it is a grown-up) and had the impression the organisers try to engage children.



Figure 7.3 Focus group image 3, Greenpeace event

Source: Greenpeace Hungary Flickr



Figure 7.4

Focus group video detail, anti-GMO event of the green movement

Source: YouTube, https://www.youtube.com/watch?v=M2_QSBm60BQ

It has been repeatedly raised that the performers are not credible and the stories cannot be understood. Each group harshly critiqued the implementation with comments such as; “masquerade”, “school-workshop flags”, “they came from a costume rental shop, not the countryside”, “cosplayer chick”, “straight from an afterparty”, “it just made me think of Greenpeace activists going to a costume rental” and “Borbás Marcsi youtube videos⁷⁶”. Respondents in two groups asked whether the organisers had noticed the no-entry sign in the girl’s lap (Figure 7.3). It is possible that she only holds the sign in front of her hip in that particular picture, but these photos were published by the organisers (on the Greenpeace Flickr page) who did not pay attention to this detail.

⁷⁶ Cooking show.

The events had a distinctly negative impression on all the respondents. Not in contrast with the above-mentioned comments and impressions, others said that; “I have been a vegan for fifteen years but this is wrong” and “it’s embarrassing”. In two focus groups, they used the term *sekunder shame (cringe)*, they felt shame for these events as if they were taking part in them. Several groups had the impression that the details were off-putting, despite the conceptual confusion. The LMP press event image (Figure 7.2) created confusion in two groups, and in one of them, they speculated whether the building is the mayor's office at Hódmezővásárhely or the Ministry of Agriculture in Budapest. I speculate that the event’s purpose, audience, and organisers were evident, with an LMP banner in the background and an LMP politician in front of it.

One group did not understand why the performers wore folk costumes in front of the Parliament building (Figure 7.3), and one participant failed to recognise the parliament building in the background. The group with visual experts realised that the parliament building puts it into a national context and wondered whether it is about some EU regulation. In the same group respondents associated the action with trade; “As if it was an expo, they brought some cows there too”.

The general conclusion was that there was a lack of competence; “this is a mish-mash of things”, “crappy”, “the execution was crappy”, “it was not informative” and “they are not competent”, “the roles are false”. A participant speculated that the visual rhetoric was supposed to be a political speech, therefore the organisers appointed actors (peasantry, large corporations) and constructed roles (political theatre). Some other comments were that “this is the way the people in Budapest imagine rural people”, “activists acting like civilians, Budapesters play the role of a peasant” and that it is “like a theatre”. In another group, they said “it is not credible because it is faux-rural” as a reflection of the fact that GMO is opposed in the name of tradition. There was an assumption that “they lack professionalism” - that is, LMP, MTVSZ, and Greenpeace are not capable enough. The participant explained that comment by saying; “the usage of visual codes is a profession, something a green movement is not naturally capable to do per se”. Greenpeace developed the image event, which local actors learned from foreign organisations (see DeLuca 2008). The questions of financial resources were raised as well, whether the poor implementation

was caused by the lack of money and not incompetency. In the same group, another comment was, “It would be ok if the dog party⁷⁷ had done it, but LMP?”, so they expected seriousness from a press conference. The original Greenpeace method based on tactical media inspired by McLuhan’s theories would have questioned humanist ontologies (including the ontology of the subject), which clearly did not happen (DeLuca 2008). In one of the groups they emphasised the importance of the cause; “protecting our environment, health and local manufacturers is pivotal”. The anti-GMO stance itself did not generate significant debate in any of the groups. The focus group of visual professionals questioned the good intentions of Greenpeace, saying that: “their heart is far from good” and “it’s a miracle someone let this happen” wondering why they were not stopped, in another group the general proposition was that “they make fool of themselves for a good cause”. In a non-expert group, some were saying that “communication professionals working for politicians take on the role of decorators and dramaturges and it all stops to make sense”, revealing that they themselves don’t think much of the visual professions either, as they talked about decorators.

In three groups a field of political association operated around GMOs. The discussion became explicitly political in one of the group when the name, Orbán Viktor came up; “the whole problem is three letters”, meaning that the three letters (NER, Orbán’s regime) take people’s jobs away in the countryside, not Pioneer or Monsanto. Several respondents mentioned the presence of Jávör Benedek from LMP (Figure 7.2) commenting on his looks.

The dichotomy of pure nature vs. depraved capitalism came into play in several groups, establishing that “corporations and death are in the same association space while the countryside is in the opposite.” The same association came into play when they connected a crop’s taste with its origin (i.e. GMO vs. backyard cultivation). The group of visual experts had a discussion about LMP and Jobbik, linking purist nationalism with the GMO ban saying that Jobbik strongly advocated for protectionism. The same group emphasised that “no Hungarian political formation pushed for GMO”, unfolding a discussion about GMO not being thematised in Hungary at all. The group of sociologists associated the skeleton (Figure 7.2) with the (now former) mayor of Érpatak, so GM was again in the same association field with the right-wing parties. The props, costumes, locations were all under scrutiny pointing towards this association field with

⁷⁷ Local joke party.

comments like; “this is just political theatre like those idiots at the National TV headquarters”, “this is not photoshop, just Hungarian politics”.

A certain ritualistic reading emerged in the sociologist group, asking whether it is “some kind of a human sacrifice”, “the ritual killing of the peasantry”? This supports my previous observation (see also Blue, 2018 on science communication and ritual) on the ritualistic features of my case studies. However, in the group, they didn’t give into further speculation. I believe that a green movement sacrificing the peasantry (which would have been a conceptual and rhetorical reading) didn’t make much sense for them. Later in the same group, they found the portrayal of small-scale producers “dishonest”, and in a different group a participant said, “these people haven’t seen a peasant in their life”. In the sociologist group someone commented that “they idolise them yet these faux-peasants look lame” and “as if Greenpeace haven’t met the people they try to represent here.” According to Jason Stanley’s (2015) typology, this is undermining propaganda- the visual representation discredits the green ideology as the small-scale producers are portrayed through negative and condescending stereotypes.

7.3.2 Anti-GMO Conclusions

Guessing and pinpointing the intention were highly emphasised in the focus groups (hermeneutical analysis). Questioning ‘authenticity’ and ‘credibility’ was the central theme in their analysis and the shoddy execution of the actions exposed this lack of credibility. Greenpeace’s supposed incompetency (i.e.: “not taking it seriously”, “no knowledge of their audience or the field”, “mere amateurism”) was narrated focused on the execution. Some respondents rated them as they would do with a school assignment. A participant called the communication professionals behind the image events “decorators” – revealing a hierarchy of knowledges and communication formats.

Those who favoured the attention-seeking nature of the actions made remarks like “I’m sure I would go see it” but also admitted that it was “pseudo-folclore”, although in their reading if the action evoked emotions, drew attention, then “it did the job”. It seems clear that there was a political macro discourse in the sociologists’ reading of the pictures, and the failed attempt to clearly and conceptually understand the images hindered them at fully comprehending this discourse. They regarded the pictures as manipulative and a long discussion arose on the images’ incomprehensibility.

The lack of credibility and *lameness* were the visual flags (Groarke, 2002), which is not the argument itself but calls our attention to it. The visual flag does not have to be a specific pictorial element, it can be a general model of the relationship between pictorial and textual arguments. Some respondents were either incapable of reading the visual rhetoric or simply were not willing to do so. Completely disregarding the rhetoric of the images, some didn’t even notice that the Hungarian peasant characters were standing in front of the parliament, or recognize the grim reaper. They said it was “some man in a black dress with a mask... I don't know what it means”, and then they projected their conviction into the image, which was that GMOs taste different. Analysing the conversations according to the four possible levels of visual framing (Rodriguez, and Dimitrova 2011), we can assert where and how disbelief manifests itself, at what registers. On a denotative level, respondents didn’t really comprehend what they saw. In several groups, they asked about the location, who the masked man was and why they were eating corn. The

aesthetic and style of the visual elements received most of the criticism – “lame, costume-rental style” – which made the respondents question the credibility in general. At the level of connotations, political associations came into play (i.e. nationalism, economy, power issues, awareness, and *pure nature*). Without clarifying the denotative level it is still clear the ideological level was important, and many elements with ideological connotations generated conversations, like the parliament building, the town hall, and the politicians themselves. Although the images were placed in a field of political association, they were not elaborated rationally. Often the embarrassment caused by the pictures generated conversations, and even the most simple image’s readings lacked consistency across the groups. This resulted in conversations that highly diverted from the actions’ supposed original intent- raising awareness about GMOs.

7.3.3 Mallows

Except for the group of middle-aged women, the Mallows (Mályvák) and the pink ribbon movement generated significantly less conversation than GMOs, where two cancer survivors were present telling their personal narratives. In one of the groups, a girl stood up and left after five minutes into the conversation without previous indication. I would say that there is a stronger consensus around the ‘good cause’ of the Mallows (cancer prevention), than the anti-GMO stance. There is little awareness of the criticism of their screenings programs and the pink ribbon movement in general. The failure of anti-GMO actions may also play a role in this, as they have failed to establish a clear association between their agendas and good causes already embedded in the cultural imagination such as environmental protection or a healthy diet.

Just like in the Talking Panties Bistro (Beszélő Bugyik Bisztró) organised by the Mallows, where participants and observers told me that “the ends justify the means”, the same narrative emerged in several focus groups. Someone said; “I am easy to manipulate” and “I can be influenced”. Compared to the poor quality of the anti-GMO actions, respondents said that the Mallows is more clean-cut, “they were in elegant clothes”. In another group, they found a common ground between the two organisations, as both groups try to reach out and get people involved.

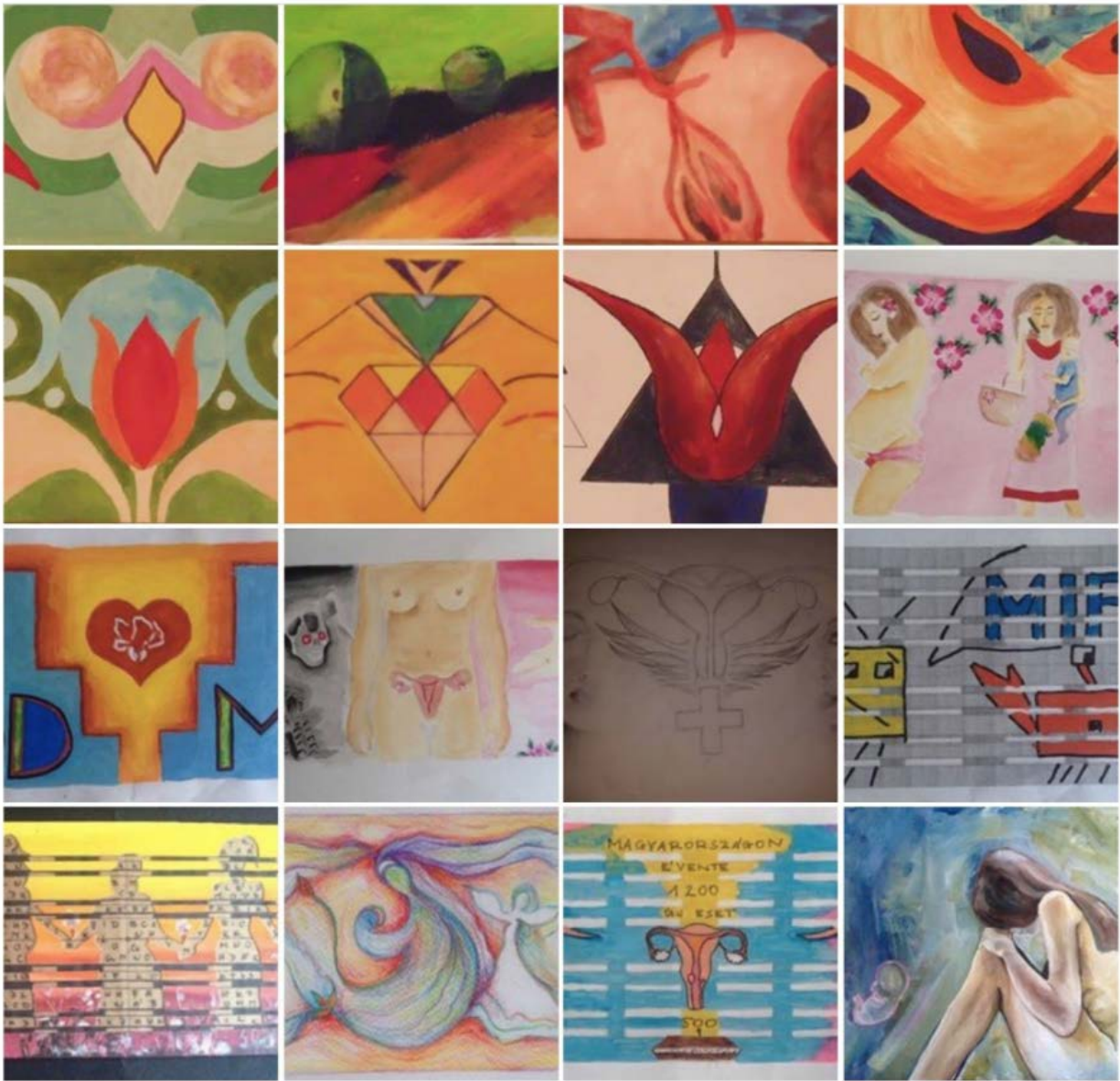


Figure 7.5 Focus group image 4, painting contest of the Mallows

Source: Greenpeace Hungary Flickr

In connection with the drawings and paintings received for the Mallows call, respondents compared them to “folk art genitals”, “kindergarten wall”, “school drawing lessons or assignments”, said it could have been a “sexual education class” or that it was “processed by the children”. In a group, they mistook the women in the lower-left corner for robots.

Regarding these pictures, people associated it with a “hair salon”, “poorly decorated flower shop” and said it could be a “beauty salon or a nursery”.



Figure 7.6 Focus group image 5, Mallows painting a wall

Source: Mallows Facebook

In a group of men, someone saw a black ghost among the flowers, for someone else it evoked Madame Butterfly – a story in which an underage Japanese girl is abandoned by her American husband for an American woman, so she kills herself with her father’s seppuku knife. “I can see the fear in her eyes behind all those flowers”, another comment from the same group. A cancer-surviving woman (Mária) from another group said; “it symbolises the beauty of the soul... just by looking at it I crave life”. From the same group, another cancer survivor (Dóra) was bothered by the picture; “This is too sentimental... this doesn’t help me at all”. It sparked a conversation between the two of them, Mária had to disagree and said that; “at least they do

something to help... well they think they do... we all need distractions after all”, as for Mária compassion is the most important human value. Dóra on the contrary found it dim: “they must be very happy about themselves painting that flower, but in the end who do they help?”. Mária emphasised personal involvement: she thinks people should be engaged through personal conversations. A third woman from the same group after their discussion asked; “would it hurt to let painters do these things?... it’s still very funny though with their basic drawing skills”. She was not impressed, saying that “the pharmaceutical companies with their scare tactics and overly aesthetic messages still earn well enough.” Mária, on the other hand, found *emotions* important and said that “human lives are at stake, drawing people’s attention is the point”. She thinks that they will learn and evolve eventually, “they could involve professional artists.” She stresses that she doesn’t know much about art. For her, the intention and not the implementation matters, as in the end, that is going to evoke emotions in her, but then she became apologetic regarding the implementation. She wasn’t happy about it either, which in her view didn’t lessen their authenticity, and still found the Mallows benevolent. For her, art in this case is a mere tool, and “the end justifies the means”. This is the same narrative I studied in my previous work (2019) regarding the ‘Talking Panties Bistro’. Mária concluded that “I see what they want me to believe”, she wouldn’t try to further research them (for example looking at their founding documents) and would only do if she wanted to join them. All in all, she gets carried away by her emotions when it comes to the Mallows. In contrast, Dóra had issues with their sentimentality and asked; “what if someone doesn’t want to go through all this with their (perfect-makeup-blondie) attitude? ...Don’t make me ashamed if I don’t want to do that.”

In another group, a respondent admitted being ‘easily manipulated’ and told the story of how she went to an ‘Extinction Rebellion die in’ protest, but didn’t like it and also found the Mallows ‘lame’.



Figure 7.7 Focus group image 6, Mallows pop-up stand
Source: Mallows Facebook

Comments about the picture: “aestheticising aggression with beads”; “they try to make a medical puppet and fail, it’s too scary, to begin with”. It was said in an expert group that; “it is daunting they think of the body this way, no head, no integrity, and one thing matters only: what is happening inside us, it makes me shiver” and that “it creates an insidious anxiety in women that men wouldn’t even understand”. A debate unfolded in the group, whether it was frightening or too incomprehensible to cause anxiety.

Regarding the cancer awareness narrative, it was said; “They try to create an identity out of it, I hope they won’t succeed” and the respondent considered it to be harmful and added, “It’s one thing to have an illness, but why would they lead themselves on like that?”

In a group, the format of the action was praised by the respondents saying that involvement is a good way to pass on information. In another group, they said, “this skipping and jumping is just tasteless and not scary, a game rather than an identity”. To quote the social scientist group: “They want someone to pay 150000 forints for that blanket?” “This is just lame ... they even lack transparency, how would they spend that money?”

7.3.4 Mallows Conclusions

To interrogate my own reading of the images, I also analyse the conversations about the Mallows and their activities according to the four levels of visual framing (Rodriguez and Dimitrova 2011). For the respondents, the level and general style of the visual elements were pivotal (according to the visual framing typology, this is the second level), as these are documentary photos of their events framed and branded by the group. The artworks are also integrated into the 'brand' and represent the Mallows on Facebook and their website. On a denotative level their representation is very intimate and personal (the group members are in the photos), but on the stylistic level, it is the opposite. The respondents didn't find their amateurism intimate, but rather 'lame', and the group's intention to manipulate was – in their consensus – the most alarming which is still connected to sentimentality and their intimate and personal representation. 'Lameness' was emphasised, and according to the respondents it manifested not only in the execution of the images, but conceptually as well.

The respondents found it generally too difficult to comprehend the images conceptually, to evaluate their ideological level (the fourth level of visual framing). The images evoked such strong emotions with their intruding and disturbing approach that "the end justifies the means" became a master narrative in one group (middle-aged women).

Only one respondent (Mária) evaluated the Mallows group's actions and activities positively. In her group (middle-aged women) the general conclusion was, that "giving cancer patients positive energy is a good idea generally, but this is bad".

In two expert groups, a discussion arose about the activity of the Mályvavirág, whether it is dangerous or not as they obscure the power relations and interests operating behind their group.

Some people said they are too 'lame' for such an elaborate plan, others said they are "sneaky and yet lame" at the same time. The aforementioned Mária in line with her previous evaluations stressed that they represent a good cause, which means they must have good intentions as well. Meanwhile, in the same group, it had been said that they strengthen false stereotypes and that their narrative weakens our bodily integrity. In the same non-expert group, they felt there was

some kind of manipulation in play. Éva Szentesi⁷⁸ and her survivor narrative were mentioned, so they drew parallels between manipulation and the highlighting of personal-intimate narratives. Mária expressed her views on identity and our humanly inherent need for it, saying that “I listen to rap and rock music, I don’t vote by party lines, people crave shared identities and need communities, so do cancer survivors”.

In another group, they had a discussion about their mentality and how they ‘steal’ the trauma of others, “they act like as if your whole life is centred around the trauma” and “for god’s sake why would anyone bring a four-year-old to something like this, indoctrination what this is”. They noticed that the Mallows aims to define and promote life guidance, concepts, ideas, and set standards of normativity – which is political activity. Fertility is objectified, “they define what is female, not who but what”. In another group, the Mallows’ political affiliations were expressed in a clear analogy saying they are “quasi-political campaign committee members in pink”.

⁷⁸ Cancer survivor turned influencer.

7.3.5 General Focus Group Conclusion

Cuteness is at play as a depoliticising mechanism (Bajusz, 2019), which in fact misfires as *cuteness* weakens their credibility and they seem ‘lame’. The respondents voiced their concerns about the group’s manipulative emotional blackmailing and sentimentality, additionally in a non-expert group they stated that cute communication is not wrong in itself, although none of the respondents spoke enthusiastically about either of my two case studies.

8 Conclusions

8.1 Summary Of Research Findings

I would like to begin by acknowledging the limitations of my research as I triangulated two case studies (built on data analysed through visual methods) with a series of focus group sessions to discover the mechanisms through which visual and participatory media intervenes in the public debates around emerging biotechnology. I pursue microsociology – the study of group dynamics and face-to-face interactions. I make no claims to representativity, but I systematically gathered my data and carried out a systematic literature review. Visual media does not have a syntax as a language, so a certain reading is always going to be subjective to some extent. Also, since the focus was on visual media, I did not explore the group dynamics inherent to my research subjects, so I can only draw limited conclusions about the political effects of visual and participatory science communication on them, such as collective identity formations.

My research questions were the following:

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?

To answer the first question “*What types of ideological messages are transmitted by visual and participatory media involved in the public debates about emerging biotechnology?*”, I would like

to refer back to the conclusion of the literature review, where I claimed 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.

Moreover, I found that the ideological layers and political connotations of the 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 would like to refer back to an account of ritualisation described in the literature review: the case of native tribes protesting against investors laying pipelines across their territories, as was reported by McCreary and Milligan in 2014. Their paper discussed the employment of elements of tribal rituals and symbols of tribal ways of life in the protests against the pipelines. The struggle between the investors and the tribes required the articulation of abstract and symbolic figurations about life and land, and yet what the tribes showcased might have been closer to the ‘real’ material effects of the pipeline than a mere technical description of tar sand extraction that is, in fact, inseparable from land use and its environmental and human effects. 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. Both ‘body’ and ‘technology’ were black boxes for them, around which the performed rituals spoke about the social order and its politically charged connotations. Almost as if they had been protesting against specific technologies (although they were funded by various lobbies and both state and non-state actors), they made it clear that these technologies are risky and inefficient. But that did not matter. What did matter was the social order and their status, their ways of life within that order – in that respect, similar to the tribal protesters in Canada. So, to summarise, through the use of novel science communication

formats, 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’, ‘rational’ scientific discourse.

Answering 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?*”

To explain how novel science communication formats exert effects as sociopolitical phenomena, I must address the ambiguous status of such media – is it science communication, art, or political propaganda? It is difficult to draw these distinctions relying on aesthetics, media formats, the publics reached, and the institutions and actors involved, but I would argue that it matters.

These movements and their representatives pose as artists. This is meant to indicate depoliticisation- they present themselves as being outside of the domain of politics. However, they belong to transnational political networks and they stake political demands. Their use of cuteness and infantilisation seemingly depoliticises them (Bajusz 2019). As I explored in my literature review, many similar movements and actions draw no boundary lines between artistic events and public engagement with emerging biotechnology. Greenpeace also began as tactical media, that is, a form of contemporary art. My research subjects did not pretend to be artists. Nevertheless, focus group respondents referred to the images as art, since the events often employed artistic media. For example, the Mallows staged painting and drawing as community events and contests.

These events and groups shared many features with contemporary art movements – aesthetic formalism, the public display of personal experience, and even the involvement with political propaganda.⁷⁹ Art offers a toolkit for the instrumentalisation of subjectivity. This led, in the case of the Mályvák, to such extremes as the subjects turning themselves into human shields when their performance staged their own tragedies, fears, helplessness, and cuteness to deter attention from rational, dialectical, and scientific engagement. Meanwhile, the effects of visual messages and participation – both the political work of depoliticisation and the transmission of ideologically connoted signs – became evident in the appeals to ‘rationality’, ‘science’, and ‘expertise’. No wonder that the focus group respondents mostly engaged with this register. In

⁷⁹ For example, the Italian futurists founded a political party and the Arts and Crafts movement (both in Britain and in the United States) had social reformist connections.

sum, I would argue that the performances prompted affective engagement but not conceptual engagement with the visual rhetoric of the images.

In the focus groups, people sensed the discrepancies between the conceptual and the formal features of the images, even if they lacked a language to express this. For example, the Transylvanian female university student group did not engage with visual rhetoric at all.

Overall, poor visual literacy is probably an issue, and the inherent affective reaction to the confusion and condescension communicated by elements or stylistic choices of the images often conflicted with the conceptual reading of the visual rhetoric. Although the images were localised in a field of political associations, when the respondents tried to read them conceptually, they could not get over the amateurish execution of the images, which generated the strongest sentiments within the groups. Often the embarrassment caused by the pictures generated conversations. The reading of even the simplest images lacked consistency across the groups.

I conclude that 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.

To answer my research question concerning the *generalisability of the mechanism of effect*, reported by the pertinent literature, I conclude that messages transmitted by images (and inseparable from the images' participatory formats), and their political and ideological connotations are context-dependent. In both cases, the empirical study found conceptual confusion and adherence to the moralising binaries permeating the public sphere. Neither of them cared to discuss the respective technology but rather focused on moral positions, political subtexts, or even explicit political messages. The Mallows presented themselves as 'responsible women', urging all women to constantly supervise their reproductive organs. They also promoted self-tests and emphasised the importance of medical visits while openly acknowledging the risks and limitations of such surveillance. The anti-GMO greens wanted to protect the homeland from corrupting Western influence, while they staged mocking representations of the homeland and constantly appealed to 'Europe'. Thus, GMO technology became cemented in the public consciousness as a symbol of corrupting corporate influence.

The activists' attitude to their prospective audiences was condescending in both groups. The monstrous GMO plants and images of suffering mobilised predominantly by evoking negative emotions. They stuck to the age-old binaries of nature and culture, backwardness and progress, East and West, and distanced themselves from the natural and the local, be that the female body or the local people and customs. The anti-GMO events literally forged a platform for emerging (male) politicians by affirming the systemic hierarchy of the secular humanist paradigm with the 'expert' and 'serious persons' on the top.

I would also stress the importance of metaphors (e.g. Clancy and Clancy 2016, or Hellsten 2002, 2011). I have found in my case studies that metaphors functioned to anchor feelings rather than aiding understanding (see Entmann on frames, 1993, and Lakoff 2010), even though neither the public nor the politicians knew, for example, what GMOs are, or what the technology of genetic modification involved precisely. *Mályvavirág* (the mallow flower) as a textual metaphor (minden nő mályvavirág, csak van, amelyiknek megsérül a szirma/every woman is a mallow flower, but the petals of some are injured) connotes vulnerability, but the representations of this flower (often hibiscuses instead of mallows) anchored the cuteness of the *Mályvák* and further instrumentalised this affect (by evoking connotations on other levels). A medical technology (cytology) that is neither specific, standardised, nor sensitive, or its known alternative (a DNA test), has its own inherent risks, thus it could not be represented by such a metaphor.

To explain how frames are unconscious structures, Lakoff (2010) cites the example of the environmental crisis: the majority of the population lacks the right frames to make sense of this crisis, since the most common (false) frame maintains that humans and nature are distinct, and environmental actions should be individual-level interventions (recycling, bikes instead of cars, etc.) rather than political investment. I have found that not even members of the self-styled 'progressive' vanguard possessed the frames necessary for understanding emerging biotechnology and the changes it might entail, nor the frames necessary for implementing new media formats. As Lakoff (2010:76) argues: "What needs to be done is to activate the progressive frames on the environment (and other issues) and inhibit the conservative frames. This can be done via language (framing the truth effectively) and experience (e.g., providing experiences of the natural world)." The groups I studied constantly tried to linguistically activate progressive frames (referencing rationality, community, science). The anti-GMO organisers explicitly evoked, both in their verbal and visual discourse, the West and Europe – synonyms for

progress in Hungarian public discourse (Melegh 2005, Böröcz 2006). Yet their image events resulted in confusion and opened up a political opportunity for the government. The Mallows appealed to common sense and responsibility, often contradicting themselves. Lakoff also claims that linguistic frames circumvent reasoning (2010:72), but visual media (and the metaphors it uses) act on a different register, i.e. an affective regime rather than through reasoning. The metaphors used in the reported cases could not aid conceptual understanding as they lacked basic information. The analysis of visual framing showed that the ideologies transported by the images concerned different levels of meaning and were unclear in themselves. Moreover, the participants in the respective movements or in the events that they staged did not care for the verbally communicated facts and reasons at all. Focus group respondents also tended to affectively engage with the images.

I have found that metaphors and other visual elements (either connotative or denotative signs, or stylistic elements) mobilised sentiments, and then mapped them to signs and representations of subject positions, and their contingent statuses, hierarchies, and possible actions. I would like to reference Protevi (2019:65) on Stanley's propaganda typology (2016), who claims that beyond cognitive elaboration, ideology functions through experiences that encode the affective tone of situations and representations of the world (the affective component of ideology). Protevi (2019:65) explores Stanley's example of racism to show how racism could function as an ideology that justified inequality on a plantation through anchoring feelings to situations and judgments. The sense of moral superiority played a crucial role in both movements I studied. They both constructed themselves as morally superior, responsible protectors of the earth. Anti-GMO activists treated all things Hungarian with condescension, the Mallows denigrated the female body and manifested this devaluation in their own morally charged self-representations. The next question should then ask whether such a 'morally superior' vanguard ought to be formed by ideological enforcers rather than science communicators. They are not explicitly punitive in their addresses but they claim superiority and they stake demands. They blatantly reject scientific or theoretical discourses while allegedly acting in the name of progress and science!

The moralised binary of East vs West/backwardness vs progress is so pervasive in the Hungarian public sphere that technology also has to be framed within this binary. Visual media support the construction of these morally superior positions by using the "responsible women" trope and an

amateurish, caricaturistic staging of Hungarianness. The technologies and media formats themselves could have deconstructed the binaries of human-nonhuman, progressive-backward, nature-culture, yet these moralised binaries re-emerged in the identities created and staged. This was especially true of Mallows events where participants became ‘human shields’ to protect these identities (and the connoted meanings and ontological constructs) through their personal involvement.

To sum up my answer, the use of metaphors is a common mechanism, and in both of my case studies, images work through affective engagement instead of a conceptual reading of visual rhetorics.

Overall, I conclude that the most obvious shared feature of the two studied groups was the lack of coherence and conceptual clarity in their discourses, whether visual or textual. The events they organised and their performance can hardly be called science communication, even if they introduced and popularised innovations and technologies that depended on scientific knowledge and technological innovation. The observed activities focused on the political impact of the applied visual rhetoric, gaining support from politicians as well as from representatives of civil society organisations who then made funds available from private and state institutions to finance the events. The anti-GMO events intervened in Hungarian political discourse. Beszélő Bugyik Bisztró, the pink ribbon event which literally offered empty chairs as sites for performative subjectivation, reinforced the customary ontological-epistemological constructions of the body, society, and the individual in the form of lived, shared, narrated experience.

8.2 Methodological Reflection On The Use Of Visual Methods

Visual methods allowed me to ground my research in a systematic manner and take images and a toolkit derived from contemporary art practice (beyond rational and factual discourse) seriously.

At this point, I want to return to Gillian Rose’s methodological critique of image-based discourse analysis addressing institutional practices. She claims that this method with its focus on institutions does not give enough emphasis to the images themselves. In this dissertation, I aimed at a critical reading that would not reduce the complexity of social processes and their embedded images to the interplay of different modes of power. However, in the course of writing, I came to realise that ‘power’ in social science discourse usually refers to various institutional, national,

and supranational (socially constructed) agents. I concluded that the problem of Rose lies in the definition of power: if power is productive, we researchers assume the ability to have knowledge of all the actants - a kind of positivism! Focusing on institutions directs the research towards social construction, and I think images exert effects beyond social construction (Latour, 2005). 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.

To quote Timothy Morton (2015): “Scratch some Marxists, and you will find a Platonist, namely someone who thinks art is a little evil because it has an effect on them, interpreted as an alien, demonic agency that conjures up all sorts of ideas and emotions without our supposed free will getting a look-in.” Although I am neither a Marxist nor a Platonist, what really mattered in my research was this “alien, demonic agency”, and the motivation to give the use of visual methods the pride of place it deserves. I can conclude that art, even if rebranded as activism, entangled with science communication, will not lose its “alien, demonic agency”. As I explored in chapter 3.1, new media (and its adjacent art canon) has been imported and introduced to Eastern Europe with explicitly political aims, and in the instances of my case studies, new media (visual and participatory media) still had a political, rather than didactic, pedagogical character.

8.3 Theorizing Novel Formats Of Science Communication

Can science communication based on images, participation, and new media be separated from the domains of art or political communication? I argue that these distinctions matter because novel science communication intervenes in politics (for example, by situating actors, conferring legitimacy), but may position itself outside the domain of politics, both through referencing technological and scientific invention and through utilising the resources of contemporary art (institutional networks, formal aesthetics, discursive strategies). Science communication expects the medium to transmit a clear message to its audience. It is intended to transmit information, educate, and raise awareness of science and technology. The observed events had a different effect, and this was by way of the traits they borrowed from the arts. To quote Wynne (1996:53), “If such familiar systems as a coal company and a dam can be seen as alien and impenetrable, how much more must be true of the complex and interconnected global systems of the modern biotechnology and information revolutions? In these the controlling of human agents and relationships are far more extensive, complex, esoteric, diffuse and socially remote. It is often impossible for anyone, let alone the ordinary public encountering them to identify or to identify with the effective causes in such socio-technological systems. Yet the pervasive and increasingly close importance of these systems requires that people construct some working rationalizations of their troubling and confusing experiences of them...”. Such haunting, spectral, sublime qualities evoke sentiments pertaining to art (and the media used draws on contemporary art’s formal aesthetics and methodological toolkit), so through featuring technologies, novel science communication can ‘feel like’ art. This aspect is highly relevant not only to event organisers but to policymakers and legislators as well. In the observed cases, the real political work took place detached from discourse; in fact, in conceptual opposition to other discourses of the organisations. For example, the Mályvák communicated that the tests they promoted were dangerous and ineffective, and the GMO events communicated no real information about GMO technology at all. Through depoliticizing and presenting themselves as being outside the domain of politics, novel formats of science communication provide the tools for political actors to stake claims and demands as civic organisations. For example, early Greenpeace used to be “a small

anti-nuclear protest group composed of Americans and Canadians, peaceniks and hippies, World War II veterans and people barely out of high school” (Zelko 2017:318). Contemporary Greenpeace is a global player in politics.

Studying NGOs and social movements, Fähnrich et al. (2020) claim that we don't know enough about alternative science communicators. Are novel science communication formats even alternative? Tactical media used to be an alternative phenomenon, not just because of its unorthodox events and images, but because it operated outside of large institutional and funding networks. For example, Greenpeace began as a group of tactical media artists utilising McLuhanist principles, and yet nowadays Greenpeace has 26 independent national/regional organisations in over 55 countries, with their respective political and institutional networks. Greenpeace regularly features in the mainstream media and participates in environmental forums. Normatively speaking, they are not alternative. According to DeLuca and Brunner (2016:293), the use of affective images made them a global phenomenon.

At this point, I will formulate a distinction between activists and artists. To this end, I put forward two definitions: art is supposed to channel and provide a form for new ideas, while activism presents a possibility and advances a set of performative ideas about how to imbue a certain future event or life experience with meaning. Based on my review, I claim that novel science communication formats often feature activist media which claims the trust afforded to both science and art, yet they do not ‘show’ science and do not ‘do’ art, but legitimise themselves through evoking both. To quote Gregory (2020), “When we think about alternative science communicators, whom do we imagine as the non-alternative science communicators, and how do we distinguish these two groups? When we think about ‘activists’, can we look beyond the inconvenience and see the issue from all sides? The potential is clear: we could tell not only the outsider’s story, but examine and learn about the insiders too”. Through novel science communication formats, the insiders can also hybridise themselves, and collapse the distinction with the outsiders, yet I would like to argue again that such a distinction matters. Artists might have created worlds and ‘private myths’, and art movements did collaborate with social movements (for example the futurists with fascism, or the arts and crafts movement with social reformers), but art movements and political committees were never the same.⁸⁰ The avant-gardes were elitist by nature, with a high entry threshold.

⁸⁰ Even though the Italian futurists founded the futurist political party.

Although the groups I studied apparently engage in activism and science communication by providing information and initiating engagement with new technologies (or rather represented themselves as doing so), at some point, I realised that I was analysing rituals that led to the emergence of a group subject. That was in a way the goal (identity creation through difference) that the participants pursued. This group identity was an actant. According to a Durkheimian analysis (or as Bruno Latour (2005) referred to it, the Tardean moment of Durkheim) the totem and the group have a reciprocal relationship. An alternative view is presented by Massumi (1995), who claims that affect is a force beyond the social. In other words, the totem and the group mutually shape each other, but ‘a force beyond the social’ also comes into play. On the basis of my field observations and my overall analysis, I tend to agree with the latter claim.

At this point I draw on a publication (Bajusz 2019) that featured the Mallows together with the Squirrels (who also operate with cuteness while doing the local footwork of transnational biopolitical actors). The article I reference describes how the Squirrels evoke their group subjectivity: they literally talk of the “mókus (squirrel) entity”, how it moves into their bodies – they invite the mókus to animate their feet and hands and tell each other how they feel the mókus. This is not ‘identity’ nor ‘collective identity’, if identity is only socially inscribed and discursively mediated. I don’t think I witnessed a series of deliberate manipulations – I don’t think these people were good enough at manipulating others for that (according to my focus groups and my participant observation at Beszélő Bugyik Bisztró, they were not). Subjectivation does not arise through ‘scientific’, ‘rational’ discourse. In fact, there was a discrepancy between the textual discourse and the mediated images. I propose instead that subjectivation happens mainly through mimesis and social contagion, but exploring in-group and in-group/audience dynamics would require more ethnographically focused research methods.

Latour (1991) claims we have never been modern: the separation of the nature-society domains has been a political tool. Modernist regimes of representation perpetuate this separation, yet nature-society hybrids such as GMOs or oil spills still exist. In the instances described in my review, hybridisation is openly represented, yet in a very controlled manner: there is no place for technical descriptions or spontaneity, no possibility of spontaneous interactions. There is also no human author. Obscuring authorship has been a common practice in tactical media art to avoid repercussions (either legal or political), but the events described in the literature were funded and supported by transnational and national political and biopolitical actors. Instead of human

charisma, creativity and visions, the drive was a certain kind of systemic logic. Posthumanism becomes transhumanism.

Blue (2018), based on the theoretical model of Carey (1989), claims that the ritual view of communication is theoretically relevant for science communication, as “it connects mundane, situated acts of conversation with scaled up efforts to order social worlds” (2018:3). I propose that most of this happens not through the text, but through the non-rational and affective register (although my research methodology, data, and analysis are not sufficient to draw such a conclusion, as I did not focus on audience effects). It would also be an impossible analytical separation to draw a boundary between image and new media formats, as nowadays images saturate our environment through digital channels, and new media also utilise images, while participatory formats are immersive, and subjectify beyond staging visual rhetorics (as is done by images). Participatory formats propose subject positions: they create worlds and also present mode of inhabiting them, whilst offering points of entry. They extend beyond an image occupying a 2d space on a printed page. The ritual view of communication proposes that communication is about more than transmitting units of information, that it is a part of symbolically constructing reality. Through participatory formats (inseparable from images) new scientific and technological inventions gain meaning in a foretold world. Demonstrator-activists present possibilities (either promises or threats) which are conflated with the present.

At this point, I would like to draw on the critiques of the participatory turn in art, whose formats such as museum workshops or public installations and performances science communicators use. There is a broader critique that the participatory turn has been co-opted as a means of soft social engineering (Rodigari (2017) references Claire Bishop, Shannon Jackson, Bojana Kunst, and Gregory Sholette), that participatory formats can be used to substitute real civic participation (Bishop 2012), that participatory art is a public ritual, creating the illusion of participation (Furedi 2006:131) or providing the illusion of democratic engagement (Foster 2015, Miessen 2017). As I explored in chapter 2.1, new media (including participatory formats) been introduced to Eastern Europe to aid in forming new subjectivities for emerging democracies. Yet this is an oxymoron: how can such a top-down cultural-political intervention be democratic?⁸¹

⁸¹ To quote Buden (2010) on infantilising Eastern Europeans and teaching them democracy: “Only yesterday, they taught the world a history lesson in courage, political autonomy and historical maturity, yet today they must assert themselves before their new self-declared masters as their obedient pupils. Only yesterday, they were the saving remedy for fatally ill societies; today, they themselves suffer from children’s illnesses, which they must survive in

Visual and participatory science communication formats also have the potential to be anti-democratic as they obfuscate power relations. They provide the illusion of engaging with science, yet they transmit politically charged symbols and messages, perpetuate power relations, and initiate an overall political mode of engagement – are the participants even engaging with science?

Overall, I would argue that instead of being a “political laboratory” (Elam 2014) or “political communication” (Scheufele 2014), in some instances visual and participatory formats of science communication constitute a kind of politicised public theatre that incorporates novel technologies. Carey and the ritual view of communication (1989) draw our attention to communication as more than a means to transmit information over distance, as being in fact “the construction and maintenance of an ordered, meaningful cultural world that can serve as a control and container for human action” (1985: 18-19). Through such a reading, focused on information beyond the register of rational, scientific facts, novel formats of science communication prescribe and (together with other subjectifying means) co-produce the subjects of the forming techno-political regime, without human creativity, without a true knowledge of technology and the potential for intervention: not consumers, but subjects. 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.

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, but this should be investigated further with empirical accounts from other research sites.⁸² As I explored in Chapter 2.4 and Chapter 2.5, a substantial amount of research and invention has moved beyond a mechanical, Newtonian worldview and modernist notions of progress, yet due to complex economic and political interests, the public sphere is still structured along modernist binaries. The modernist, teleological notion of progress used to rely on science both for legitimacy and positive sentiments and affects. I would argue

order to become capable of living. What miracle happened overnight? What wizard turned these people into children?”

⁸² I suspect cancel culture has a similar effect. See Fero and Bajusz 2021, Bajusz forthcoming.

that in some instances novel formats of science communication (as public rituals) assume these roles of science. I emphasize again how in the case of my research subjects, science communication (an assumedly constructivist and rational discipline) created emergent group subjects who wanted to extend their life-worlds to others, although more ethnographically focused research would be needed to explore such dynamics. Overall, I stress the need for comparative, empirically focused research on novel science communication formats.

To draw an overall conclusion, I would like to emphasise again that science communication is intended to transmit information, educate, and raise awareness of science and technology. The media I researched had a different effect through traits borrowed from art. This aspect is highly relevant not only to science communicators, but also to policymakers and legislators. 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. Novel formats of science communication have been referred to as a 'political laboratory' (Elam 2010), or even 'political communication' (Scheufele 2014), yet my research shows this might not be overall a positive development, and addressing policymakers and other professionals, I would argue for more autonomous science communication, especially regarding its new media based, visual and participatory formats.

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