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Editorial for Queer STS Forum #8 2023: Queer-Feminist Inclusion and Visibility – Overcoming Stories of Exclusion and Invisibility in Science, Education and Technology

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In our last Forum #7 we opened a discourse around "academic kindness" as queer-feminist intervention in contemporary violent and hierarchical working cultures and actualization of a feminist ethics of care (Jauk-Ajamie & Thaler 2022). By looking closer at different levels of application of academic kindness, in pedagogical settings and research practices, we stumbled upon the notion of inclusion, and wondered why even in equity driven settings some (non-)human actors are excluded.

Noticing practices of exclusion and making (non-)humans invisible, we find that especially now in time of multiple crises, we need to overcome traditional dichotomies and the delegitimization of certain forms of knowledges. We need to change our discourses of socio-eco-technological transformation by telling stories together and valuing situated knowledges (Haraway 2016, Rohracher 2022).

When we published our call for contributions, we had so many questions and points of discussion:

- How inclusive are participatory research projects actually?
- How can we reach out to vulnerable groups in our communities in citizen science activities?

- How can we overcome boundaries and limitations and be truly welcoming in our educational settings?
- How can we overcome learning practices, which cultivate "epistemological assimilation" and move towards "epistemic diversity" (McNeill et al. 2022)?
- How can we offer save spaces and brave spaces (Arao & Clemens 2013) for LGBTQIA+?
- Which roles play architecture, infrastructure and technologies (Boys 2022)?
- How can we engage in multispecies activities (Haraway 2016; Petitt & Brandt-Off 2022)?

In other words: How can we overcome stories of invisibility (Leyva et al. 2022)?

Of course, we realized, we were not the first ones asking these questions. We know that there is a lot of valuable knowledge and practical experience in the world already. Therefore, we invited our queer STS community, colleagues and friends to combine these questions, maybe think even further, and acknowledge previous work: What can we learn from disability studies, from critical race scholars and practitioners working inclusively for decades and helping us with our vision of a queer-inclusive science and technology? What can we learn from feminists and artists thinking and doing museums queer inclusively (Grácio et al. 2020)? What can we learn from multispecies ethnographers working on multispecies communities of social learning (Petitt & Brandt-Off 2022)? What can we learn from educators who broaden up participation in STEM fields among students minoritized by race, gender, and/or sexuality (McNeill et al. 2022)?

Beside theory and discourse based contributions, we explicitly invited practical and empirical implementations of queer-feminist inclusion and visibility. With this eighth Queer-Feminist Science & Technology Studies Forum we wanted to open our multi-media open access publication for our community in terms of content as well as format as much as possible. And we received six wonderful contributions – one of them comprising several students' works, which resulted from a seminar by Queer STS working group members Susanne Kink-Hampersberger and Lisa Scheer. We are very thankful for all of them, and we learned a lot again, not only about theories and feminist practices, we were not aware of before, but also for us as publishers of an online journal. It really needed this very issue on queer-feminist inclusion that we finally thought about adding alternative texts or descriptions to images in our journal. We will embed this in our template for future Queer-Feminist Science & Technology Studies Forums, as we also constantly think about the layout and accessibility of our open access only journal.

Eleanor Armstrong and Anna Danielsson actually sent us a separate file with ALT texts, and we blushed immediately. Why can it be that we internalised to describe images on social media, but did not think about including this practice in our own online journal. We are so glad to have these kind academics in our community who help us to grow.

Thank you Ellie and Anna, not only for this intervention, which will improve our journal in the future, but also for your article, which is queer STS through and through. We will share and quote your paper for years to come. But what is it about that makes it queer-feminist and how are the authors discussing inclusion and exclusion? First of all, Eleanor Armstrong and Anna Danielsson compose their mind-opening 'Science Butch Blues' based on existing educators' and scholars' work, who were broadening participation in STEM fields among students minoritized by race, gender, and/or sexuality. Then the authors analyse acts of epistemic diversity and ask which theoretical and methodological innovations are made possible by including female masculinities in research. With their 'butch science identities' Armstrong and Danielsson "aim to 'camp up heteronormative knowledges and institutions' (Sullivan, 2003, p.vi) of science by making visible butches and their participation in science". (Armstrong & Danielsson 2023, p.1, in this Forum). They unmask the often-heard claim of 'wanting more females in STEM fields' as a rhetoric expressed through visuals and narratives in campaigns, emphasizing the "respectable hetero-femininity (very acutely illustrated by the high criticized campaign 'Science: it's a girl thing', launched by The European Commission in 2012)" (Armstrong & Danielsson 2023, p.7, in this Forum). The notion of a queer knowledge theory of the science butch broadens the epistemology of science by a greater plurality of possible genders in science, Armstrong and Danielsson strongly argue.

Susanne Sackl-Sharif, Sonja Radkohl and Lea Dvoršak contribute an article about empirical implementation of inclusion which acts on the philosophy of participatory research to not study (young) people, but to do research with them together. The authors describe how they pursued their double goals, to research three case studies while achieving goals within the three approached youth communities: German-speaking LGBTQIA+ online spaces, Fridays for Future (FFF) activists and the skateboarding community in Graz in Austria.

Sackl-Sharif, Radkohl and Dvoršak discuss critical points in their research and recommend four crucial elements to do this kind of participatory research within and for communities:

- Enough time and financial resources – even more so than in other qualitative research projects
- Empowerment through co-determination or decision-making power – this calls for method training sessions and reflection loops
- Interdisciplinary research teams – this creates a broader understanding and range of opportunities for collaborative research
- Open research questions – broad and open research questions make it possible to address different interests and needs of participants and communities

The next article brings us to the topic of virtual communication. Sybille Reidl, Sarah Beranek, Julia Greithanner, Anke Schneider and David Sellitsch offer us a field report around the question: How to address diversity in research on and co-creation of online meetings?

Studies show that virtual communication can exacerbate existing inequalities; for example, women are more likely to be overlooked or ignored in online meetings (Armentor-Cota 2011; Connley 2020). In addition, age and education level may negatively influence receptivity to technology (NeXR 2020; Buchebner-Ferstl et al. 2020; Reidl et al. in this Forum). Therefore, the importance for the researchers was to further develop online meeting technologies to facilitate inclusion and belonging in digital spaces. Within a research project which was funded to include a gender perspective, the researchers aimed to contribute to the development of inclusive online meeting solutions – in terms of both inclusive software development and the facilitation of online meetings. The objective was to develop ideas within a participatory process and co-creatively reflect with users on how to make online meetings more inclusive through technological and social/group dynamic processes. The authors give insights in the research process and address the following questions:

- What kind of diversity and exclusion mechanisms might play a role in online communication?
- How to consider diversity dimensions in selecting a sample for the needs assessment?
- How to consider diversity dimensions in selecting participants for co-creation?

Our second half of this year's Forum are contributions from art, students of a gender seminar and a feminist intervention. Let's start with the feminist intervention. Our Queer STS working group member Susanne Kink-Hampersberger shows us the story and her thoughts of turning a semi-public space – for one afternoon – into a women*'s space, and what controversies the organizing group had to not only face in the course of the organisation. Susanne also writes very openly about the discussions within the organizing group of who should be included, who are 'socialized females'?

As we progress through the Forum, let's continue with four contributions by students which were developed in the course of a gender seminar "Equality policies from affirmative action to intersectional mainstreaming" at University of Graz in the summer term 2023 led by Susanne Kink-Hampersberger and Lisa Scheer. Both share a briefly description of the course and their observations and reflections as an introduction for the contributions of the students:

- Meike Steinberg and Stefanie Reinthaler talked to sociologist Eva Taxacher, who has been working at the WomenService Graz for ten years. They talk about defining visible queer-feminist inclusion and challenges and goals of "Gender Werkstätte", a network of experts from various professional fields.
- Moving from one interview to another one: Lea Ostendorf interviewed herself and questioned overcoming invisibility alongside a permaculture perspective. The central theme of her work is the question how we can enter into healthier relationships with ourselves, others and our environment.
- Katharina Wesselkamp and Kerstin Brysch show us a portrait "Diversity@WKO", based on an interview with a teacher of the Diversity-Working group at the Wilhelm-Kaisen-Oberschule in Bremen.
- And Jakob Fesca, Jacqu Schöttler, Carla Santasusana write about the documentary mama bears, which was made by Emmy award-winning director Daresha Kyi and followed mothers of the mama bears movement for over six years. The documentary accompanies people who have exchanged and networked via the Facebook group mama bears and have since been leading the fight for the rights of their queer children together with other members of the group.

Finally, our Queer STS working group member Daniela Jauk-Ajamie interviewed Nicole Pruckermayr, an artist, curator, scholar, and art facilitator (currently Executive Director of the Styrian Cultural Initiative) creating in public spaces in Austria. They talk about how people could participate in the art production and how people influence it. In this interview deeper experiences and insights are shared regarding the project GINA loves! A 6,5/7m large heart tattooed on a wall of a newly emerging housing development in Graz. Nicole Pruckermayr tied the 40,000 knots of the heart with about 100 people of all ages while engaging them in conversations about love.

With this Forum, we originally also wanted to explicitly address issues of multispecies justice, to include all animals, not just human animals, and nature as a whole. This topic has been in focus of the working group Queer STS for a longer time, for instance in 2015 Thomas Menzel-Berger and Magdalena Wicher discussed issues of "Queer Ecology" in a lecture series[1] at University of Klagenfurt in Austria. Anita currently reflects on the issue of multispecies justice in the frame of a project on biodiversity[2], where she worked

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[1] The original title of the series was „Que(e)rschnittsmaterie! Queer-feministische Technik- & Wissenschaftsforschung".
[2] https://planet4b.eu

on a co-created methodological approach to do biodiversity case study with an intersectional lens for a transdisciplinary group of researchers and practitioners. In a report Anita Thaler and her colleague Sandra Karner explained guiding principles of doing biodiversity research from an intersectionality viewpoint to understand power relations, especially when it comes to inclusion and exclusion processes in knowledge creation (Thaler & Karner 2023). Lea Ostendorf brought permaculture and nature into this year's Forum #8 on "Queer-Feminist Inclusion and Visibility", and we think animals, nature, biodiversity could be a very interesting topic for our queer STS community in one of the coming journals. For this year, we are happy with the huge variety in contributions and the discussions initiated by them.

Just as a reminder, this is a publication without financial support whatsoever (which is a hindering factor in terms of inclusion itself). The working group Queer STS writes, organizes, reviews, designs, publishes, networks unpaid, and also contributors receive no remuneration for their work from us (Thaler & Hofstätter 2022). So, we want to thank all colleagues and friends, who helped us publishing this open access, online journal on "Queer-Feminist Inclusion and Visibility – Overcoming Stories of Exclusion and Invisibility in Science, Education and Technology", our working group, reviewers, and especially our contributors, who gave us so much food for thought and fruitful discussions.

Speaking of food for thoughts. How can a specific – some may argue narrow – queer-feminist perspective, and like Susanne Kink-Hampersberger writes, even excluding a privileged group of people, contribute to more inclusion? This journal brought theoretical and empirical insights into the mechanisms of queer-feminist interventions (academically, artistically and from an activist's point of view). By increasing the visibility of science butch identities or limiting a (semi-)public space to a variety of women*, the ongoing informal practices of exclusion (by privileging a very limited group on the intersections of gender, *race*, sexualities, class, ability etc.) are highlighted. This is one of the examples of how queer-feminist STS – however narrow this field seems (although we interpret it very broadly ;-)) – can have an important impact to our society, if we could help contribute to this effect with our Queer-feminist STS Forum #8, we are very happy indeed.

References

Arao, Brian & Clemens, Kristi (2013). From safe spaces to brave spaces. The art of effective facilitation: *Reflections from social justice educators*, 135. Jg., S. 150.

Armentor-Cota, Janet (2011): Multiple Perspectives on the Influence of Gender in Online Interactions. *Sociology Compass* 5 (1), S. 23–36. DOI: 10.1111/j.1751-9020.2010.00341.x.

Boys, Jos. (2022). *Disability studies, neurodivergence and architecture*. 10.1016/bs.dnb.2022.08.012.

Grácio, Rita & Coutinho, Andreia & Falé, Laura & Sobreira, Maribel. (2020). The Art of Feminist-Queering the Museum: Gate-leaking. *Museum International*. 72. 200-211. 10.1080/13500775.2020.1873522.

Haraway, Donna (2016). *Staying with the Trouble. Making Kin in the Chthulucene*. Durham, NC: Duke University Press.

Jauk-Ajamie, Daniela & Thaler, Anita (eds., 2022). *Queer-Feminist Science and Technology Studies Forum "Academic Kindness"*. Open Access Online-Journal, Vol. 7, Download: https://www.researchgate.net/publication/366408525_Queer_STS_Forum_7_Academic_Kindness [10.12.2022]

Leyva, Luis & McNeill, Taylor & Balmer, B & Marshall, Brittany & King, V. & Alley, Zander. (2022). Black Queer Students' Counter-Stories of Invisibility in Undergraduate STEM as a White, Cisheteropatriarchal Space. *American Educational Research Journal*. 59. 863-904. 10.3102/00028312221096455.

McNeill, Taylor & Leyva, Luis & White, Gary & Mitchell, Nicollette. (2022). *Leveraging Queer Epistemic Subjectivity to Advance Justice through Physics Teaching*. 16-22. 10.1119/perc.2022.plenary.pr.McNeill.

NeXR (2020): *Digitale Meeting-Kultur*. Online verfügbar unter https://nexr-seminar.com/wp-content/uploads/2020/09/Studienergebnisse_NeXRSeminar.pdf.

Petitt, Andrea & Brandt-Off, Keri. (2022). Zoocialization: Learning Together, Becoming Together in a Multispecies Triad. *Society & Animals*. 1-18. 10.1163/15685306-bja10082.

Rohracher, Harald (2022). Konzepte transformativen Wandels als wissenspolitisches Terrain. In: In: Bernhard Wieser, Kirstin Mertlitsch, Arno Bammé (Hg.) *Transformationen: Sozialphilosophische Perspektiven der Veränderung*. Wiesbaden: Springer VS, 69-88.

Thaler, Anita & Hofstätter, Birgit (2022). Perspektiven verändern mit queer-feministischer Technik- und Wissenschaftsforschung. In: Bernhard Wieser, Kirstin Mertlitsch, Arno Bammé (Hg.) *Transformationen: Sozialphilosophische Perspektiven der Veränderung*. Wiesbaden: Springer VS, 217-230.

Thaler, Anita & Karner, Sandra (eds.) (2023). *Methodological framework for intersectionality analysis*. (Report No D1.3). Project 101082212 — PLANET4B. Brussels: European Research Executive Agency. https://planet4b.eu/project-documents/methodological-framework-for-intersectionality-analysis/ [31.10.2023]

Eleanor S. Armstrong & Anna T. Danielsson

Science Butch Blues

Eleanor S. Armstrong is a science and technology studies scholar. Armstrong works on the cultural dimensions of science communication about physical sciences and technology with a focus on outer space. Her research works to challenge narrow, exclusionary conceptions of outer space specifically and physical sciences more generally presented in science communication, towards socially just and equitable futures.

Anna T. Danielsson is a science education scholar. Her research is focused on gender, identity, and power in the context of teaching and learning science. She is particularly interested in process of in(ex)clusion in higher education physics, and her work seeks to illuminate and challenge exclusionary practices in this discipline.

Part 1: Visibility, Gender Identities and Sexualities

Research on science identities is in transition - from understanding men/boys and women/girls who are encouraged or supported to make identities in relation to science, to thinking about the constructions of gender through masculinities and femininities that are (or can be) aligned with science (Danielsson et al. 2023a). The move is currently partial. Femininities (or, sometimes in the literature, femininity) have not been fully decoupled from women and girls, nor masculinities (or masculinity) from men or boys. Motivated by recognition that gender is a social performance, science identity literature is working towards a queerer vision of who can participate in science and how (Fifield & Letts, 2019). Here, we extend this inclusion by making visible butch science identities and argue that attending properly to the place of queer identities in science identities research enriches the field as much as it recognises butch identities in STEM.

We respond to the call for the issue by thinking about what acts of epistemic diversity can be found in foregrounding butch science identities, as well as what kinds of theoretical and methodological innovations that are made possible by including female masculinities in science identities research. We aim to "camp up heteronormative knowledges and institutions" (Sullivan, 2003, p.vi) of science by making visible butches and their participation in science. As we show in the next section, the current constructions of genders through masculinities and femininities in science identity research work to

make butches invisible, tidying away both their role in science and ways that science makes their identities possible. We then show a selection of examples of the multiple possibilities of butch science identities from literature, film, personal memoir. The contribution then foregrounds how a research focus on butch identities opens what we describe as a queer epistemology of the science butch, and decrobe what this makes possible within science and technology studies on identities.

In this paper, we build from the work of educators and scholars who are broadening participation in STEM fields among students minoritized by race, gender, and/or sexuality (McNeill et al. 2022). We expound on how research on science identities is characterized in the following section, but we note here that research on which (gendered, racialised) identities are supported and confirmed in and through participation in science is currently a central concern of sociology of science education. Decoupling gender and bodies in relation to technoscience has allowed us to theorize about "how discourses of masculinity and femininity afford and constrain the positions available to the women [and men] students" (Danielsson & Lundin, 2014). We see call in text such as that by Lucy Avraamidou (2020), who urges greater focus on the heterogeneous performances of gender in science identities by individuals; and in Eleanor Armstrong's (2023) argument that encourages queering how we read science objects through gendered lenses, rather than projecting genders onto bodies who use scientific objects. While research on LGBTQ+ identities in science (especially focused on scholars and professionals in STEM) has some tradition, a move to think *queerly* about science identity is, in our reading, still not here (Muñoz, 2019). We are oriented, then, to the futurity of the field: we both invoke and speak to the there and then of queer science identities. We think with Swirtz and Barthelemy (2022), who advocate for a queering of methods in physics education research, and extend this into thinking about how making visible queer identities opens new methodological possibilities in science education research. Equally, we think with Marosi, Avraamidou and Lopez (2022) who identify how research on the experience of LGBTQ+ folks in professional science are multivalent: illuminating cultures of science, the experiences of queer folk in STEM, and the mechanisms individuals use to continue in these fields to think about the plurality of perspectives that a focus on butch identity might bring to science identity research. In the spirit of queer theory's call for rejecting a pragmatic approach to research in capturing what exists, we will instead, here, be *doing the future* we hope to bring into being - rejecting the heteronormative status quo and opening the cracks and fissures in the established knowledge systems as a call to action for such work in science identity research.

We write as scholars in science education and science and technology studies. We take inspiration from Stacy Holman Jones and Tony E. Adams *Autoethnography as Queer Method*, who argue that subjugated knowledges (including pleasure, intimacy, gratification), subjectivities, and the recognition of queer colleagues gives us expanded ways

into understanding the experiences of the world around us. Thus, we reflect here on our own positions and motivations in relation to both butch identities and science identities for this piece. Epistemically, the text is motivated by both authors having parallel interests in gender/queer studies and science identity research; and our desire to see these fields brought together. Each of us has worked to unite these themes in their own work and we here continue this together. Likewise, we are united as having previously been queer researchers in science, not seeing these identities as well captured or well understood in research literature. Particularly, our own experiences encourage us to think about geographies and temporalities of queer identities in this work. Our trajectories have been in transnational Euroamerican research – a geography which is certainly reflected in the literatures and ideas we have included in this piece. One of us sees butch identity as something she moves into and out of depending on the spaces they are in; the other had a tomboy childhood, which gave her a recognisable science identity growing up. Through our own trajectory through social class and moving national contexts; we note our experiences of butch identity and other queer identities are inflected by our class, scholarly professions, and geographical contexts. Throughout this text we write with a plural pronoun to represent our thinking in concert with each other, and our solidarity of ideas, that developed this text.

Before departing into the remainder of this text, we ask: *what is* and *who inhabits* a butch identity[1]? Sherrie Inness and Michele Lloyd (1996, p.14) characterize the butch as "a lesbian who adopts masculine identifiers". However, while this characterisation is seductively simple and captures important aspects of butchness, the queer potentiality of the term remains unfulfilled with this description. Jack Halberstam expounds:

> The butch is neither cis-gender nor simply transgender, the butch is a bodily catachresis. The Greek word, catachresis, means the rhetorical practice of misnaming something for which there would otherwise be no word. Butch is always a misnomer - not male, not female, masculine but not male, female but not feminine, the term serves as a placeholder for the un-assimilable, for that which remains indefinable or unspeakable within the many identifications that we make and that we claim. (2018, p. xx)

The butch, Halberstam (2018) continues to argue, may by some be assumed to be an old-fashioned form of identification, at the risk of disappearing into other transgender identities. Yet, they refuse to slip into anachronism or to be easily positioned on a cis/trans-continuum. In many wats, the queerness of the butch lies exactly here, in their refusal to be easily pinned down or defined. Hence, a butch performance of masculinity has subversive potential in how it plays with and re-creates a male masculinity, without

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[1] Throughout the text we use the pronoun they to characterize 'butch' in general as a figurative group rather than an individual in recognition that the gender performance is not inherently tied to female bodies. Where individuals have referred to themselves with a particular pronoun, we follow this self description.

simply reproducing it. As Levitt and Hiestand (2004) argue, butch lesbians take elements of masculine gender presentations, behaviors, or attitudes unevenly and do not reproduce them uniformly in all contexts. As much as any other identity, butch identity is stereotyped - elements of which are variously embraced or rejected by butches themselves. These include the expectations to be:

> "to be tough, to be a leader, to take care of and protect others, not to cry, not to date other butches, to be sexually dominant, and to take care of chores designated as men's responsibilities" (Levitt & Hiestand, 2004, p. 612)

This can be seen in literature, butchness is portrayed as played out through mannerisms and behaviors as well as clothing, appearance, interests, and desires. S. Bear Bergman (2010), in hir auto-biographical short stories, narrates a gentleman butchness, a civil and refined version of masculinity, deliberately distanced from violence and misogyny. Attributes such as white shirts and cufflinks signal a meticulously crafted gender expression. The gentleman butch is courteous and caring, always prepared to help and carries the tools to do so. Bergman is an author and a performer, but the skills of hir hands are woven through the stories, as a badge of masculinity in all its complexity:

> They are hands that capably wist jars open, twist wires around contact points, twist nails out of wood, but also hold her so gentle, soft enough to cradle a newborn between them safely against my heart, pick a dock splinter out of a smooth thigh; steady enough to make pleasure between, to hold hopes between (2010, p. 99).

The character of the protagonist in Judith Frank's (2004) novel *Cry Baby Butch*, about a complicated relationship between two butches from different generations, is braided around practical and mechanical skills. With a low level of reading ability, Chris is able to support herself and her partner through a relatively well-paid job as a plumber. This working-class version of butchness resonates with the portrayal of Jess in *Stone Butch Blues* (Feinberg, 2003), who finds comradery with fellow butches in factory work and at local bars. Butch identity has longstanding connections to working class communities, and navigating class tensions and dichotomies between blue collar and white collar work environments is a rich field of discourse and scholarship. As with many discussions about class position, this identity work is also racialised and intersects with religion and disability (see, for example, Clare, 2013; Maulod, 2021; Moore, 2006) with individualized subcultures that have different norms, expectations, and performances within them. Just as butch identity is stereotyped like many other gender identities, it is also like many other identities not-monolithic, and contains a rich plurality of possibilities.

Constructions of butch - but importantly not all butch identities - are crafted in relation to femmeness (a lesbian pronounced femininity). While some have constructed butch/femme dynamics as subversion of the heterosexual matrix (Halberstam, 2018,

Laporte, 1992), others argue that expectations about 'legitimate' pairings are carried over into queer relationships making them legible within a heterosexual matrix but also bringing with them elements of patriarchal and misogynistic social expectations. Elsewhere, queer relationships of butch/butch or femme/femme subvert quasi-heterosexual expectations in relationships in different ways, offering many possible ways of making relations (Walker et al. 2012). Finally, we note that whether butchness is expressed through a gentleman behavior, through a tough masculine appearance, through the skills of the hands, or desire there is no correct butch, 'the dapper butch engineering professor' is likely to raise fascination more than fear, while still pushing back on hegemonic notions of gender.

Part 2: Gender, Masculinities, and Science

> Boys are brought up in big trucks! And tractors! Once you drive a car, you want a big fast thing! You know. If that's your kind of THING, well, then you're actually going to be pulled in to plasma physics! 'Cause there's some REALLY HIGH POWER, SEXY, EXOTIC EQUIPMENT IN THERE! (Pettersson, 2011, p. 55)

The quote above comes from one of the scientists in Helena Pettersson's (2011) anthropological fieldwork with plasma physicists, illustrating the perceived connection between this subfield of physics and a technical masculinity, assumed to appeal to boys. Further, there is a strong passionate relationship between the physicist and the experimental equipment, one that has been nurtured since childhood. The physicist community described by Petterson (2011) and earlier in a similar environment by Sharon Traweek (1988) is one characterised by homosociality, where younger generations of researchers are inducted into a masculine scientific culture. Erika Lorraine Milam and Robert A. Nye (2015) trace such masculine scientific cultures historically and argue that the reproduction of these is also aided by men's experiences in all-male environments in sport, school, and the military. Yet, the gaze of researchers exploring science and gender has predominantly been turned towards women and women's under-representation in science.

Already in 1918 Harold Lyon was investigating how interested boys and girls were in various science related content areas. While we have come a long way in terms of theorizing both science, gender, and education since Lyon wrote his paper, the lingering uneven participation of men and women in mathematics intensive STEM-disciplines still motivates a large number of studies concerning gender and science education. A recent review by Anna Danielsson, Lucy Avraamidou, and Allison Gonsalves of such research shows that the field is still dominated by studies of sex-based differences regarding achievement, interests, attitudes, and participation (Danielsson et al., 2023b). However, there is also a growing number of studies concerned with students' identity formation and sense of belonging in the sciences, particularly highlighting the identity

negotiations necessary for many women in order to fit into masculinity connotated science disciplines such as work by Spela Godec (2018). Such studies have given valuable insights into how women negotiate gender in relation to the culture of physics, showcasing, for example, how women in physics moderate dress and appearance (Ong, 2005, Gonsalves, 2014) and how they emphasize the value of skills and characteristics typically associated with women (such communication skills or small dexterous hands (Gonsalves, 2014)). The studies also bring to the fore how the masculinity of physics is not only connected to the proportion of men in the discipline and symbolic connotations of the discipline, but sometimes also built into the actual experimental equipment, making it difficult to handle for small-framed women (and men) (Gonsalves, 2014)).

There are also several studies highlighting women in STEM positioning themselves as 'one of the boys' (Danielsson 2012, Madsen et al. 2015). Recognising the limits of work focused on girls'/womens' participation in and relation to science and acknowledging that not all boys/men, particularly those from minoritised backgrounds, experience a sense of belonging in science a growing literature is looking into the relationship between boys/men and science learning (Archer et al. 2014, Archer et al. 2016, Carlone et al. 2014, Carlone et al. 2015, Stahl et al. 2021). Among other things, this research has demonstrated how class and ethnicity play into boys' science engagement, making it easier for middle-class boys from White and South-east Asian backgrounds to identify with science. While the intersections of class, race, are beginning to be unpacked in relation to hegemonic gender identities, subversive performances (e.g. the tomboy) are often implicitly racialised as white, and nuance about class and race is absent from discussions.

In literature about masculinities in primary and secondary science schooling, the doing of masculinity holds an ambivalent position. On the one hand, the masculine connotations of science makes some boyhood masculinities easily combined with science (Carlone et al. 2015). On the other hand, there are tensions between, for example, more boisterous masculinities and schooling in general, meaning boys from working-class background and some ethnic minority backgrounds are less likely to pursue science (Archer, DeWitt & Willis 2014). As such, there is a continuity from respectable and/or geeky boyhood masculinities to adult engagement of men in STEM. A boy's childhood playful enactment of science and/or technology can also extend into adulthood: Ulf Mellström (1999) argues that technology in this way offers a world of 'eternal youth'. The tomboy - a kind of girlhood masculinity we expand on later - may also find a place in school science (Archer et al. 2012; Knaier 2019), but this is an identity a girl is largely expected to grow out of.

One of the notable appearances of masculinities not tied explicitly to men in existing science identities research literature is in a 2011 study of heteronormativity in engineering education, where in discussion about heteronormative assumptions about skill, two

respondents describe their perception that, because STEM is inherently seen as masculine, a masculine-presenting woman is more likely to fit in:

> I guess there's this assumption that, 'oh, you're a lesbian, you're kind of butch, you are definitely kind of more guy-ish, so it would make sense that you are an engineer, because guys are engineers' ... I think, for straight women, it's like, 'oh, you're pretty, you would want a social type of major.' ... Because I'm not a stereotypical female, it's ok for me to be an engineer. I'm smart enough, I'm able enough. I do think people see lesbians in engineering as more capable than straight women ... [For] gay men, I think it's the opposite. They're seen as more incapable than straight men. (Becky, lesbian woman undergrad) (participant data quoted in Cech and Waidzunas, 2011, p.12)

In this quote a chain of articulation is created where lesbianism is associated to masculinity, which in turn is associated to engineering - and thereby allows for the lesbian engineer to inhabit a position as 'one of the boys'. A very similar argument is made by another participant in the same study:

> I mean, queer women are already seen as being more masculine than straight women, in some sense they are seen as more manly, and so that squares more with the 'manly' field they're working in. (Eric) (participant data, quoted in Cech and Waidzunas, 2011, p.12)

The assumption, then, is that people who present in a more masculine way have an easier time fitting into STEM fields with masculine connotations, but still not sufficiently to get 'proper' recognition by men in STEM spaces. Where some research shows butches are more likely to see validation in Silicon Valley companies (Alfrey & Twine, 2017), other research shows masculine presenting women are more likely to experience backlash in their careers in STEM (Kersey & Voigt, 2020).

As valuable as this science identities research has been in terms of moving the conversation from a binary and static conceptualisation of men and women as two distinct groups that engage with science in different ways to a more pluralistic view of a range of different femininities and masculinities, there are a couple of things that are chafing for us. Andreas Ottemo (2015) argues there is a strong case to be made for the intimate connection in the Western world between masculinity and values that are central to science, such as objectivity, rationality, and control over nature. But, Ottemo (2015) continues, there is a danger in too quickly assuming that this symbolic gendering of science also holds for socially produced femininities and masculinities in a particular context. It is all too easy to fall into the trap that "technology [or, science, our remark] is masculine because men do it" (Wajcman, 1991, p. 24). Not only does this logic couple masculinity to science/technology, by assuming that what men do is masculinity, it also disregards the possibility of women doing masculinities (and, by extension, men doing femininities).

As such, the physicist woman who positions herself as 'one of the boys' becomes an anomaly, someone who is simultaneously failing at doing "womanhood" and doing "masculinity". It assumes that taking up a position as 'one of the boys' is something women need to do in order to fit into a man-dominated STEM-discipline (Madsen et al., 2015) or as something (some) women are passively socialized into (Gonsalves 2014). That is, women and men are assumed to neatly fit into a heterosexual matrix, desiring to be feminine and masculine, respectively. The narrative of a woman struggling to succeed in an area traditionally dominated by men such as science can be understood as a way of engaging in making visible power dynamics; and we see the same questions make visible about power and identity through the desire and actions of enacting female masculinities in science arenas.

Further, while recruitment of more women to the mathematics intense STEM-fields is an often recurring rhetoric, the desired woman in policy speech and widening participation campaigns is one that is able to present a respectable hetero-femininity (very acutely illustrated by the high criticized campaign 'Science: it's a girl thing', launched by The European Commission in 2012). Natalay Chesky and Rebecca Goldstein (2018) highlight how 'the composite nature of many images associated with girls and STEM reinforce gender-normative and hetero-patriarchal assumptions' (p. 98). As a consequence, the butch scientist may on the one hand be at the risk of not being seen as masculine enough for science, given the strength of the chain of articulation men-masculinity-STEM, but also does not fulfill the kind of 'womanhood' or femininity that programmes devoted to more women in STEM seeks. In physics in particular, the field's self-construction of 'gender neutrality' can render the butch physicist invisible. By adhering to a norm of appearance of physics that are perceived as neutral, gaining strength from how masculinity typically is perceived as non-performative - something that just is (Halberstam, 2019) - the butch may not be recognised as subverting norms of femininity or masculinity but read as someone that just puts the discipline-appropriate, minimal consideration to their dress and appearance. Ottemo et al. (2021, p. 1029) argue: 'Caring about style and appearance simultaneously signifies femininity and not caring about or being passionate enough about physics'. Thus, paying too much attention to style and corporeal aesthetics is an action that undermines the potential to be recognised as passionate about one's discipline. They further argue that the rejection of the body is central to making physics appear as a discipline where only the mind matters. As such, the butch physicist can blend into a geeky and non-sexualised physicist ideal, which is mediated as outside of sexuality and gender.

Part 3: Collaging butches in science outside of straight time.

In this section we have collaged a series of short extracts from a selection of different (but largely western) contexts, media, and periods, to give a flavor for the different ways that butch and science identities are constructed in conjunction, read as coincident, and

co-created for individuals. These are neither exhaustive nor fully representative, and are here to orient the reader to our theorizing in addition to the data included elsewhere in this text.

> "I wanted to see if the Science Museum had a souvenir shop that sold rocks and crystals. I'd never been to the Museum before. A giant stuffed buffalo stared at me as I walked in. The space felt still and quiet inside the building...I wanted to spend the day there. Each room off the huge centre hall was devoted to a different branch of science. One was named the Hall of Man--it turned out to include women, too. There were rooms that revealed the secrets of atoms, of universes.
>
> I wished I could stay and devour all that knowledge. I hoped somehow it would make sense of the world to me. But I could feel my bladder begin to ache, and the two bathrooms were in plain sight of the woman behind the souvenir counter. I just couldn't deal with it. I left the secrets of the universe behind, got back in the car, and drove to Gloria's house to use the bathroom in privacy." (Stone Butch Blues, Leslie Feinberg, p. 161)

Figure 1 Screenshot from the r/butchlesbians subreddit in a thread asking if there are butch scientists. Taken by the authors, 2 June 2023, at https://www.reddit.com/r/butch-lesbians/comments/11x6fet/any_butches_in_maledominated_fields/

"A rather masculine lesbian friend of mine, who does not identify as butch but, as she puts it, always knew she was gay, teased me one day, "If you are so butch, where is your tool belt?" When I have practical problems in my Florida home, I call her. In fact, she built the desk on which I am writing. But her father was a mechanic while mine was a psychologist who never wore a tool belt or fixed anything. Postmodern butch is not necessarily about tool belts or who is more dominant in a relationship; it is not even about what you do in bed (or elsewhere). It is about a gender expression that combines some version of the masculinity that you saw around you as a child with same-sex desire...At forty-one, then, I claimed this butch identity because it made sense of my sexual and personal experience and because, to paraphrase Stuart Hall, to claim an identity is to place oneself in a narrative of history." (My Butch Career, Esther Newton, p.4-5).

Figure 2 Animated character from *Chicken Run* (Lord and Park, 2000) of 'Mac'. In the movie she demonstrates technical skills through planning the machines and contraptions used to engineer the chickens' escape.

Lily spooned up another bite and let it dissolve slowly on her tongue before responding. "I wish there was a girls' science club or something. I suppose we could join the regular science club, but it's all boys, I wouldn't want to be the only girl."
(Last Night at the Telegraph Club, Malinda Lo, p.99)

Figure 3 Rowan, a character in the webtoon *Girls School of Knighthood*. Depicted here with a chemistry belt and glasses to protect her eyes while doing experiments, Rowans is described as "Ruthlessly committed to perfecting the ideal smoke bomb alongside her other biochemical warfare experiments as a student knight, Rowan's caustic personality and penchant for causing chaos often lands her in trouble." Image shared with permission of the creator (Mead, no date), 20 June 2023. Full cartoon available at: https://www.webtoons.com/en/challenge/girls-school-of-knighthood-gl/list?title_no=373799&page=6

Part 4: Queer epistemology of the Science Butch

What could the inclusion of butch identity in STEM practice, policy, and research do to our understanding of the richness of gender identities in STEM fields? Drawing on José Muñoz's queer horizons, we here develop a queer epistemology of the science butch. A queer epistemology acknowledges that queer theory does not simply focus on sexual or erotic spaces in our society, but rather questions about epistemology of spaces, social priorities, and possibilities. We show the potential for this to open new ideas in identity-led research on science identity and science cultures: (i) we look at the technical skill and interplays with infrastructure that characterizes butchness as an integral component of STEM identity; (ii) we think about complicating the static nature of science identities temporally through the interplay and tensions of tomboys and butches; and (iii) we show that understanding butch identity compels pluralisation of masculinities and feminities. In this section we explicate some of the practical and methodological implications and potentials of the queer epistemology of the science butch.

From the descriptions of butches in literature, media, and memoir - a selection of which we have included above - we note that butch identity is frequently co-constructed with technical skill and in interrelation with the infrastructure that surrounds them. Particularly obvious is the characterisation of technical maintenance of machines. In the examples above, elsewhere in *Stone Butch Blues* Jess' work in mechanical parts of factories and their care of motorcycles are ways of demonstrating a butch identity in fiction. Similarly,

Esther Newtons' participation in motorcycle hobbies is writ large through the memoir we have shared an extract from here. Through her development of the plane that lifts other chickens from the coup, Mac's technical skill is a central feature of the plot of *Chicken Run* - and her butch representation of a masculinity presentation (with similar accessories and arrangement of feathers on her head that echoes those of the roosters in the movie) sets her apart from other hens in the movie, all of whom are characterized as working class proletariat under the class-struggle narrative arch. Where mechanical skill has long offered potential "technology masculinities," in science identity research, we argue that the field overlooks technological female masculinities (particularly in working class mechanical contexts) - a genre of skills and techniques that open the associations of masculinities with other bodies, in particular butches. Theoretically this offers a way of pluralising the types of masculinities that are understood in relation to technology. Hegemonic technological masculinities theorizes men engaged in technology as a space of prolonged youth for boys and men, what might attention to technological masculinities of butches bring to science identity research? Our queer epistemology of the science butch identities directs attention to the spaces where technical and mechanical skill are important like the mechanical workshop, trade education, or hobby-mechanical work, but perhaps are not always conceptualized as spaces for STEM skill development. Methodologically, then, this asks science education scholars to queer where they could be looking to capture practices of STEM; as well as the kinds of research instruments that might be needed to capture STEM skills beyond those traditionally thought of as 'science'. Incorporating masculinity studies in their research, this tension around the fit of bodies and mechanical skill has been described by Allison Gonsalves, Anna Danielsson, and Helena Pettersson (2016); the research takes place in physics workspaces and laboratories. What would similar work in more expansively conceived STEM locations offer the research discourse?

Beyond this direction to look towards plural scientific contexts for science identities, we also call attention to how this epistemology argues for paying close attention to the way science (learning) infrastructures shape participation. We see this particularly in the quote from *Stone Butch Blue* where it is the need to depart to use the toilet that is a push for Jess not to engage in learning at the museum. Jess' experience is fictional, but certainly not at odds with the way queer communities have and do experience science spaces (see, for example, Armstrong & Lock, 2023). While in previous scholarship by Allison Gonsalves (2014) grapples with the ways women narrate their interactions with the scientific objects of research in their training; we suggest that the queer epistemology of the science butch asks us to take a more expansive methodological view to capture the interactions with the physical, built environments of science, the journeys and routes that are required for queer folk to access them; and their (in)hospitality to queer bodies and selves.

A queer epistemology of the science butch also opens questions about temporalities of science identities. We begin this by looking to the literature on tomboys. The tomboy in existing science identity studies, as described in Part 2, is constructed as a childhood identity. Theorized as a complex arrangement of relations to femininities and masculinities; highly situated in cultural and historical contexts; tomboys are often discursively constructed in relation to their skill and competency as much as gender presentation. The tomboy, understood as a gender identity, has an intricately formulated and not uniformly interpolated relationship with sexuality – which runs the range of being an de-sexualised childhood, to a covert heterosexuality, to a proto-queer adult. The tomboy is also primarily conceptualized as a white identity (Craig and LaCroix, 2011). Halberstam, in *Female Masculinities*, describes the tomboy as an "extended childhood period of female masculinity" (Halberstam, 1998, p. 5) – distinct from butch female masculinities but overlapping in characteristics. For Halberstam, both identities share a similar rejection of the cisheteosexualising gaze, have similar style of gender performance, and similar attributed skills.

Appearing throughout scholarship on primary schools (Paechter and Clarke, 2007; Paechter, 2010), tomboys are understood by adults and children alike in opposition to girly-girls who, it has been argued, stands in as a precursor to emphasized femininities in adulthood (Connell, 1987). In their 2011 paper *Tomboy as a protective identity* Traci Craig and Jessica LaCroix further position the tomboy as an identity that can be inhabited in ways that are cautionary for the individual - protecting sexual reputation, protecting sexual orientations, allowing interlocutors to use "a tomboy identity to explain masculine appearances and activity preferences" (2011, p. 453). While often set in opposition, it is important to note that both the girly-girl and the tomboy sit in relation to a range of other gender identities in childhood (Raey, 2010). It is common (arguably, even celebrated in the literature about science education) to see the tomboy in science identity developed in girlhood, as we have described in Part 2. Tomboys offer a way of being part of science domains which are continuously re-inscribed as highly masculinised. Thus, the presence of the tomboy in science identity literature echoes that which happens elsewhere, namely the:

> [a]cceptance of tomboys into masculine domains is to make an exception to gender binary rules but ultimately allow the binary gender system to remain intact (Craig and LaCroix, 2010, p. 462).

But, as we follow literature that grapples with primary, secondary, and higher education; we cannot follow the tomboy through into their young adolescence or early adulthoods in science identity research. What happens to these tomboys? Where are they by later secondary education, or higher education? Moreover, we find that their counterpart butches often absent in the literature for youth or higher education. Female masculinities as viable science identities seem to be dropped, dismissed and discredited as the

youth who are the subject of science identity research age out of periods of 'acceptable' childhood tomboyness.

We think with existing research on queer girlhoods beyond science identity research, and look to the ways in which this both suggests methodological shifts and theoretical reorientations to build our queer epistemology of the science butch. In her introduction to *Girlhood Studies*, Barbara Jane Brickman (2019) asks the reader to think through how rejecting heteronormative girlhood and brining the queer girl into the center of research opens the potential for "the queer girl [to effect] a redefinition of girlhood itself" in response to Marnina Gonick's (2006, p. 122) provocative question "Are queer girls, girls?" We advocate for a version of science identity research that thinks in tandem with work being done to displace "the enduring centrality of a white, able-bodied, Western heteronormative girlhood [that] continues to plague critical work on girls and girl cultures" (Brickman, 2019), and instead takes seriously queer girlhoods in and of themselves. The tensions for the queer girlhoods of the tomboy are particularly apparent. Theorizing on depictions of tomboys in literature, Shawna McDermott notes how:

> Time and time again, authors choose to give their tomboys dreams beyond what their gender will allow, and then they shatter those dreams in order to demonstrate that they were not the correct ambitions and should be replaced with the joys and benefits of traditional womanhood. The ideal of the tomboy who persists untamed is, according to this tradition, impossible, an enigma, an oxymoron, not to be realized (McDermott, 2019, p. 135)

Read in parallel with the discursive 'dropping' of the tomboy in science identity research, we see McDermott's description of the expectation that one grows out of being a tomboy in literary canon echoed in the fleeting characterisation of tomboys as a successful science identity. In *Happy Objects* Sara Ahmed (2010) argues that queer desire is in part to be oriented incorrectly to gender identities and their objects of happiness, such as marriage and family. Thus we ask, can we characterize the seemingly-misplaced happiness, joy, and benefits of being aligned with participation in science of the tomboy as yet merely another dream to be shattered, replaced with new 'correct' objects of happiness that better aligned with traditional femininities as the tomboy ages?

Seeing the tomboy in relation to butches, our framing opens new ways of challenging the expectation that one grows out of tomboyness. By embracing a queerer childhood that sees children outside of heteronormative space and time, where children can subvert expected norms and can take up other positions and ways of performing, our queer epistemology of the science butch subverts expectations of taming of queer ambition as the child grows older. We also argue that rejecting the paradigm of the tomboy as exclusively an acceptable way of making a meaningful identity in and in relation to sci-

ence in childhood can also be productive engagement in thinking with a queer episte-mology of the science butch. We look to theorizing of queer temporalities to ask: what other temporalities might there be for the tomboy? Resisting capitulating to the accept-ability of the tomboy's gender-sexuality matrix in relation to hetero-normative woman-hood as being condoned "as long as she eventually grows out of it" (Craig & LaCroix, 2010, p. 453), how might we think of tomboy adults or butches (as described and docu-mented in Halberstam, 1998) as an adulthood science identity too? These framings offer new ways of thinking about actions and theorizing towards inclusion in science identity practice and policy.

Through a queer epistemology of the science butch, and with Halberstam (1998, p. 8), we "refuse the futility of the tomboy narrative and instead [seize] on the opportunity to recognise and ratify differently gendered bodies and subjectivities." Notably, in *Last Night at the Telegraph Club*, quoted above in Part 3, the young queer character's tom-boyish adolescence strongly characterized by participation in physics and mathematics, is transmuted into a butch young womanhood which continues to be linked to working in science at the end of the book.

How, instead, might understanding the potentials of transitional moments between tem-poral female masculinities allow us to grapple with queer futurities of research partici-pants and transitional moments within the lives of young people? We can look to queer theorists of childhood to understand this. Kathryn Bond Stockton's (2009) theorizing of the queer child 'growing sideways' as a defiance of expected 'growing up' – demon-strating a rejection of reproductive subjectification – might offer science identity re-search theoretical tools to grapple with participation in science that is not towards in-strumentalist ends in an adult future.

Methodologically, this also opens questions about the mutability of (science) identities between childhood and adulthood, and how to capture this in science identity research. There is a recent turn in the field of science identity research towards longitudinal stud-ies of cohorts of students (see, e.g. Archer, 2014; Danielsson et al. 2023a) where we might see the reshaping of identity. However, the research instruments used over this period bring identity into being through their implementation. Qualitative and quantita-tive instruments used to capture identity performance in the long term frequently tie femininities-to-women, and masculinities-to-men. This often means they demonstrate the kinds of well rehearsed decline in interest in science of 'girls', without being able to capture the changeable relations of masculinities and femininities that individuals main-tain. Invoking the queer epistemology of the science butch, what does it look like - both qualitatively, quantitatively, and ethically – to trace the changing relations between girl-hood/childhood-masculinities and adulthood-masculinities? What might doing such work make visible to the research community in science identity? Developing such methodological tools is likely to open new possibilities in understanding the transitional

identities that individuals inhabit during their adolescence, show trajectories of possibilities and bricolages of performances that make possible sustained participation in science.

Our queer epistemology of the science butch also asks us, as researchers, to pluralise our conceptions of masculinities and femininities in science identity research, and further remove them from inherently tying them to sexed bodies. Rather than defaulting to masculinities mapped to male bodies and femininities to female (which, incidentally, leaves researchers in an artificial bind about how to describe the participation of non-binary folk), a focus on butch identities asks us to take seriously female masculinities and, as a consequence, ensure that the ways we describe and work with concepts of masculinities and femininities is inherently pluralised and descriptive of the specific politics of norms, recognition, and identification. We see this, for example, in asking about where the soft butch can be made visible in science identity research. Where too might we see the inverse - the male femininities of the 'sissy' for example? Thus the queer epistemology of the science butch gives us an epistemic orientation to the plurality of possible genders that are made in and in relation to science.

Conclusion

We have argued here that to date science identity research has overlooked non-conventional identities such as butches. We opened this piece making visible butch identity; and going on to describe the existing literature on science identities with specific interest in the types of genders - and particularly the construction of masculinities - that exist within the literature. We then gestured to the descriptions and media engagements with butch science identity to give the reader points of triangulation about the interplay of these two identities. In the final section, we describe our queer epistemology of the science butch, whereby we show how making visible butch identity in science identity work opens a range of theoretical, methodological, and practical implications. These ask us as researchers to take seriously questions about (i) which skills and infrastructures we see as being properly parts of STEM research, (ii) to develop theories about transitional identities and work on the temporal dimensions of minoritised identities, and finally (iii) to take seriously questions of specificities of gender in science identity research.

References:

Ahmed, S. (2010). Happy Objects. In M. Gregg & G. J. Seigworth (Eds.), *The Affect Theory Reader* (pp. 29–51). Duke University Press. https://doi.org/10.1215/9780822393047-001

Alfrey, L., & Twine, F. W. (2017). Gender-fluid geek girls: Negotiating inequality regimes in the tech industry. *Gender & society*, 31(1), 28-50.

Archer, L., DeWitt, J., Osborne, J., Dillon, J., Willis, B., & Wong, B. (2012). "Balancing acts": Elementary school girls' negotiations of femininity, achievement, and science. *Science Education*, 96(6), 967-989.

Archer, L., DeWitt, J., & Willis, B. (2014). Adolescent boys' science aspirations: Masculinity, capital, and power. *Journal of Research in Science Teaching*, 51(1), 1-30.

Archer, L., Dawson, E., Seakins, A., DeWitt, J., Godec, S., & Whitby, C. (2016). "I'm being a man here": Urban boys' performances of masculinity and engagement with science during a science museum visit. *Journal of the Learning Sciences*, 25(3), 438-485.

Armstrong, E. S. (2023). A Make-up Kit from the National Air and Space Museum. *The Gender of Things: How Epistemic and Technological Objects Become Gendered* (ed Rentetzi, M.) Routledge.

Armstrong, E. S., and Lock, S. J. (2023). Queering Science Museums, Science Centres, and Other Public Science Institutions. *Queering Science Communication*, Bristol, UK: Bristol University Press. available from: < https://doi.org/10.51952/9781529224436.ch008 > [Accessed 16 September 2023]

Avraamidou, L. (2020). "I am a young immigrant woman doing physics and on top of that I am Muslim": Identities, intersections, and negotiations. *Journal of Research in Science Teaching* 57, 311–341. https://doi.org/10.1002/tea.21593

Berg, A. J., & Lie, M. (1993). Feminism and constructivism: Do artifacts have gender? *Science, Technology and Human Values*, 20, 332–351

Bergman, S. B. (2010). *Butch is a noun.* Arsenal Pulp Press.

Brickman, B. J. (2019). Guest Editorial: Queering Girlhood. *Girlhood Studies*, 12(1), vi-xv.

Carlone, H. B., Webb, A. W., Archer, L., & Taylor, M. (2015). What kind of boy does science? A critical perspective on the science trajectories of four scientifically talented boys. *Science Education*, 99(3), 438-464.

Carlone, H. B., Scott, C. M., & Lowder, C. (2014). Becoming (less) scientific: A longitudinal study of students' identity work from elementary to middle school science. *Journal of Research in Science Teaching*, 51(7), 836-869.

Cech, E. A., & Waidzunas, T. J. (2011). Navigating the heteronormativity of engineering: The experiences of lesbian, gay, and bisexual students. *Engineering Studies*, 3(1), 1-24.

Chesky, N., & Goldstein, R. (2018). Packaging Girls for STEM or STEM for Girls? A critique on the perceived crisis of increasing female representation in STEM education. *Critical Education*, 9(16).

Clare, E. (2013). Stones in my pockets, stones in my heart. *The disability studies reader*, 5, 497-506.

Connell, R. (1987). *Gender and power: Society, the person, and sexual politics.* Stanford University Press.

Craig, T., & LaCroix, J. (2011). Tomboy as protective identity. *Journal of Lesbian Studies*, 15(4), 450-465.

Danielsson, A. T., King, H., Godec, S., & Nyström, A. S. (2023a). The identity turn in science education research: a critical review of methodologies in a consolidating field. *Cultural Studies of Science Education*, 1-60.

Danielsson, A., Avraamidou, L. & Gonsalves, A. (2023b). Gender Matters: Building on the Past, Recognizing the Present, and Looking Toward the Future. *Handbook of Research on Science Education Volume III* (eds. Lederman, N. Zeidler, D., & Lederman, J.). Taylor & Francis.

Danielsson, A.T. & Lundin, M. (2014). Gender performativity in physics. Affordances or only constraints? *Cultural Studies of Science Education*, 9(2), 523-529, DOI: 10.1007/s11422-012-9420-4

Feinberg, L. (2003). *Stone Butch Blues*. A novel. Alyson Books.

Fifield, S., & Letts, W. (2019). Queering science education without making too much sense. *STEM of Desire* (pp. 59-88). Brill.

Frank, J. (2004). *Cry baby butch*. Firebrand Books.

Godec, S. (2018). Sciencey girls: Discourses supporting working-class girls to identify with science. *Education Sciences*, 8(1), 19.

Gonick, M. (2006). Sugar and spice and something more than nice? Queer girls and transformations of social exclusion. *Girlhood: Redefining the limits*, 122-137.

Gonsalves, A. J. (2014). "Physics and the girly girl—There is a contradiction somewhere": Doctoral students' positioning around discourses of gender and competence in physics. *Cultural Studies of Science Education*, 9, 503-521.

Gonsalves, A. J., Danielsson, A., & Pettersson, H. (2016). Masculinities and experimental practices in physics: The view from three case studies. *Physical Review Physics Education Research*, 12(2), 020120. https://doi.org/10.1103/PhysRevPhysEducRes.12.020120

Halberstam, J. (1998). *Female masculinity*. Duke University Press.

Halberstam, J. (2018). *Female masculinity* (Twentieth anniversary edition with a new preface). Duke University Press.

Inness, Sherrie A., and Michele E. Lloyd. (1996) G.I. Joes in Barbie Land: Recontextualizing Butch in Twentieth-Century Lesbian Culture. *Queer Studies: A Lesbian, Gay, Bisexual, and Transgender Anthology*. By Brett Beemyn and Mickey Eliason. New York: New York UP, pp. 9-34.

Jones, S. H., & Adams, T. E. (2016). Autoethnography is a queer method. *Queer methods and methodologies* (pp. 195-214). Routledge.

Kersey, E., & Voigt, M. (2021). Finding community and overcoming barriers: experiences of queer and transgender postsecondary students in mathematics and other STEM fields. *Mathematics Education Research Journal*, 33(4), 733-756.

Knaier, M. L. (2019). What makes girls and boys so desirable?: STEM education beyond gender binaries. *STEM of Desire* (pp. 209-221). Brill.

Laporte, R. (1992). The butch-femme question. In *The persistent desire: A femme–butch reader* (ed Nestle, J.). pp. 208-219.

Levitt, H. M., & Hiestand, K. R. (2004). A quest for authenticity: Contemporary butch gender. *Sex Roles*, 50, 605-621.

Lo, M. (2021). *Last Night at the Telegraph Club*. Hodder & Stoughton.

Lord, P. & Park, N. (Directors). (2000). *Chicken Run* [Film] Pathé/Aardman Animations/DreamWorks Animation.

Lyon, H. (1918). Student interest in subject matter. *General Science Quarterly*, 2(3), 387-389.

Madsen, L. M., Holmegaard, H. T., & Ulriksen, L. (2015). Being a woman in a man's place or being a man in a woman's place: Insights into students' experiences of science and engineering at university. *Understanding student participation and choice in science and technology education* (eds. Henriksen, Dillon & Ryder), 315-330.

Marosi, N., Avraamidou, L., & Lopez, M. (2022). *Queer in STEM: A systematic literature review of the experience of LGBTQIA+ in STEM*. SEEDs International Conference 2022 - Refusing "Back to Normal": The Role of Science Education in Enacting More Just and Joyful Futures. Virtual Conference. January 28-31, 2022.

Maulod, A. (2021). Coming home to one's self: Butch Muslim masculinities and negotiations of piety, sex, and parenthood in Singapore. *Journal of homosexuality*, 68(7), 1106-1143.

McDermott, S. (2019). The Tomboy Tradition: Taming Adolescent Ambition from 1869 to 2018. *Children's Literature Association Quarterly*, 44(2), 134-155.

Mead, C. (no date) *Girls School of Knighthood*. Available at: https://www.webtoons.com/en/challenge/girls-school-of-knighthood-gl/list?title_no=373799&page=6 (Accessed: 20 June 2023).

Mellström, U. (1999). *Män och deras maskiner*. Bokförlaget Nya Doxa.

Milam, E. L., & Nye, R. A. (2015). An introduction to scientific masculinities. *Osiris*, 30(1), 1-14.

Moore, M. R. (2006). Lipstick or timberlands? Meanings of gender presentation in black lesbian communities. *Signs: Journal of Women in Culture and Society*, 32(1), 113-139.

Ong, M. (2005). Body projects of young women of color in physics: Intersections of gender, race, and science. *Social problems*, 52(4), 593-617.

Ottemo, A. (2015). *Kön, kropp, begär och teknik: passion och instrumentalitet på två tekniska högskoleprogram*. [PhD thesis, Gothenburg university)

Ottemo, A., Gonsalves, A. J., & Danielsson, A. T. (2021). (Dis) embodied masculinity and the meaning of (non) style in physics and computer engineering education. *Gender and Education*, 33(8), 1017-1032.

Newton, E. (2018). *My butch career. A memoir*. Duke University Press.

Pettersson, H. (2011). Making masculinity in plasma physics: Machines, labour and experiments. *Science & Technology Studies*, 24(1), 47-65.

Paechter, C. (2010). Tomboys and girly-girls: Embodied femininities in primary schools. *Discourse: Studies in the Cultural Politics of Education*, 31(2), 221–235. https://doi.org/10.1080/01596301003679743

Paechter, C., & Clark, S. (2007). Learning gender in primary school playgrounds: Findings from the Tomboy Identities Study. *Pedagogy, Culture & Society*, 15(3), 317–331. https://doi.org/10.1080/14681360701602224.

Reay, D. (2001). "Spice Girls", "Nice Girls", "Girlies", and "Tomboys": Gender discourses, girls' cultures and femininities in the primary classroom. *Gender and Education*, 13(2), 153–166. https://doi.org/10.1080/09540250120051178

Stahl, G., Scholes, L., McDonald, S., Mills, R., & Comber, B. (2021). Boys, science and literacy: place-based masculinities, reading practices and the 'science literate boy'. *Research Papers in Education*, 1-29.

Stockton, K. B. (2009). *The Queer Child, or Growing Sideways in the Twentieth Century*. Duke University Press.

Sullivan, N. (2003). *A Critical Introduction to Queer Theory*. Edinburgh University Press.

Swirtz, M., & Barthelemy, R. S. (2022). Queering methodologies in physics education research. *Proceedings of the Physics Education Research Conference* (PERC (pp. 457-462).

Traweek, S. (1988). *Beamtimes and Lifetimes: An Ethnography of the High Energy Physics Community in Japan and the US*. Harvard University Press.

Wajcman, J. (1991). *Feminism confronts technology*. Penn State Press.

Walker, J. N. J., Golub, S. A., Bimbi, D. S., & Parsons, J. T. (2012). Butch bottom–femme top? An exploration of lesbian stereotypes. *Journal of lesbian studies*, 16(1), 90-107.

Susanne Sackl-Sharif, Sonja Radkohl & Lea Dvoršak

Same same but different. Participatory action research on social media use with young people in Austria

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Introduction

According to the understanding of participatory action research (PAR), research should not be done *for* people or *about* them. On the contrary, research must be done together *with* people to solve social problems in a practice-based and audience-oriented sense (Chevalier and Buckles, 2019). Based on the various forms of social action and research resulting in social action (Lewin, 1946), the PAR method emphasizes the involvement of all participants in determining the research goals and promotes their engagement in a collaborative endeavour (Machin-Mastromatteo, 2012). The aim is to reconnect the knowledge-making of the academic world with the diversity of perspectives of different fields. Starting with the question of what problems members of a particular community or group face and need to explore, this research approach focuses on ways to co-create meaning and solutions (Herr and Anderson, 2005). It also discusses possibilities for future scenarios (Chevalier and Buckles, 2019).

Against this background, we discuss how social media spaces can enable (political) participation for young people in our current research project U-YouPa[1]. Inspired by the PAR approach, we do our research with young people from different fields and include them as co-researchers (see also Ollner, 2010; Fine, 2016; Eckhoff, 2020). The common aim is to tackle the challenge or social problem of what is currently missing on digital platforms to be inclusive, egalitarian, and open to as many social groups as possible. Since young people are not a homogeneous group but have a variety of perspectives on this issue, we try to engage with a wide range of young people in our research.

In this methodological paper, we will present the participatory research approach we developed in three case studies conducted in Austria. After a general overview of our research project, we will discuss the three cases in detail. We will address the problems and main characteristics of the communities, present our applied methods, and discuss methodological challenges. Furthermore, we will focus on the young people's expectations of our joint research and what benefits are central to them. In participatory projects, researchers interact even more closely with the community under study compared to other qualitative projects (von Unger, 2014). Especially in the initial phase, this is essential to develop appropriate research questions that serve both the community and academia. Since the researchers' "situated knowledge" (Haraway, 1988) and field experiences shaped our case studies, we wrote each one from the first-person perspective of the researcher who conducted it. In conclusion, we will discuss the question of how young people can actively be integrated into (social media) research as equal knowledge producers across our case studies.

Overview on the U-YouPa project and our research design

U-YouPa project

We conducted our case studies in the ongoing research project U-YouPa. One of the project's main goals is a deeper understanding of digital platforms and their potentials for intercultural dialogue and (political) participation. We involve young people with different affiliations and interests as co-researchers and co-producers in all phases of our research, including data gathering, interpretation of findings, and the creation of ethical recommendations. Thus, the project does not merely inform or listen to young people, which Wright et al. (2010) define as a pre-stage of participation. Instead, young people have a real say and decision-making power, for example, when developing research questions, selecting the best research methods, or analysing empirical data. Wherever it is feasible, we attempt empowering co-investigation as equal collaboration with

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[1] U-YouPa is the abbreviation for the project title "Understanding Youth Participation and Media Literacy in Digital Dialogue Spaces". The project is funded by The Research Council of Norway (SAMSKUL, project number 301896). It is carried out between 2020 and 2025 at Oslo Metropolitan University (Norway), Malmö University (Sweden), FH JOANNEUM – University of Applied Sciences (Austria) and University of Music and Performing Arts Graz (Austria). For more information, see https://uni.oslomet.no/u-youpa.

shared decision-making power and joint control between academic and community-based (co-)researchers (Chung and Lounsbury, 2006).

However, our experience in research practice already shows that this is not always entirely feasible, as participatory research requires patience and time on all sides (see also Far, 2018; Foss, Druin and Leigh Guha, 2013). For this reason, the project also discusses how it may be possible to motivate young people to work together on longer-lasting projects and what researchers can do to create a trusting environment for joint research. In this context, we address possible impacts and benefits for young people but also methodological challenges.

Case studies overview

The three case studies we discuss in this paper were all conducted by members of the Austrian research team[2]. The leading question of our work package was: How can social media spaces enable (political) participation, inclusion, and intercultural dialogue among young people? Following the recommendations from the European Commission (2016), we defined youth as young people between the ages of 15 and 29.

It is fundamental to the PAR approach to include people with different knowledge and perspectives to develop appropriate solutions for social problems (Chevalier and Buckles, 2019). Therefore, our research drew on three case studies that included young people with different affiliations and interests:

- Lea discussed together with German speaking LGTBQIA+ communities in Austria about identity politics,
- Sonja focused on the Fridays for Future activists in Graz as a prime example of political participation in a narrower sense,
- Susanne did her research with the skateboarding community in Graz, a group of younger (and older) people interested in the same free-time activity, sports, or lifestyle.

To make our participatory research activities comparable, we developed general leading questions that we explore in all case studies:

- How are terms such as intercultural communication, inclusion, diversity, and (political) participation defined and used in different communities?
- Which digital platforms are used for which activities?
- What is currently missing on digital platforms to be inclusive and to enable intercultural dialogue?

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[2] Besides the three authors, Eva Goldgruber, Gabriel Malli, and Robert Gutounig worked in Team Austria. As part of our project, our colleagues are looking at how media institutions try to stimulate political participation and intercultural dialogue among young people. We would like to take this opportunity to thank them for their joint discussions during the project.

- Who gets excluded from digital platforms? Who cannot participate?
- What has changed through COVID-19?

At the beginning of our joint research, we determined with the communities which research questions we discuss to what extent in the case studies and which sub-questions play a role beyond that.

Before we began our field research, we conducted (social) media analyses in each case study to get an overview of our communities. Then, we did workshops or ethnographic observations to get in contact with our communities. In this phase, we worked with young people to identify their interests, what they would like to explore with us, and how they will benefit from our joint research. The subsequent focus of each case differed depending on the communities' interests and problems. We are currently in the evaluation phase, developing solutions and recommendations for each case study.

Case 1: LGTBQIA+ (Lea)

Background

Digital spaces have been a safe harbour for LGBTQIA+ youth for decades. They are often the first spaces young people questioning their identity and sexual orientation turn to (Lucero, 2017). Although the changes in the EU human rights laws in the last decades and the increased visibility of the LGBTQIA+ individuals in media, pop culture, and in everyday society have made it safer to be a member of the community in most countries of the European Union today, the largest European Union-wide survey from 2020 still shows that over half of the people surveyed are almost never or rarely open about their identity: "Younger LGBTI respondents are even less open: only 12% of those aged 18 to 24, and 5% of those aged 15 to 17, are very open" (European Union Agency for Fundamental Rights, 2020, p. 18). While online communities have migrated from forums to social media platforms over the years, their ultimate purpose has stayed the same: Young people today "use social media as part of their everyday experiences in an attempt to safely navigate their lives through learning, participating, engaging, communicating and constructing identities in digital spaces" (Lucero, 2017, p. 117).

Against this background, I am trying to reach the members of the German-speaking LGBTQIA+ communities in Austria directly in their online spaces. I deliberately focused on communities that include the entire LGBTQIA+ population by default, and do not limit participants to specific identity or sexual orientation only. I am interested in how they communicate online, what topics are the most relevant to them, how they navigate the diversity and complexity of the group and try to make it as accessible for all participants and minimize exclusion. As these online groups live on different social media platforms, I am intrigued by how they work around the platform limitations to fulfil the participants' needs. I am also curious how the worldwide pandemic has affected the community, how they adapted and what potential for improvement they see in the community. As my

social media analyses showed, these communities are very often closed off to the public, especially as private Facebook groups. Therefore, I am also curious to know if they are taking online discussions to the public and how social media is influencing their political participation and fight for social justice.

Group description

Some German-speaking LGBTQIA+ online spaces have been born as communities accompanying in-person meetings in larger cities. In Austria, examples are the Queer Youth Vienna by HOSI Wien, the Queer Friday community by RosaLila Pantherinnen in Graz, Younited Linz by HOSI Linz, and the youth communities by HOSI Salzburg and HOSI Bregenz. But more than half of the around 30 German-speaking social media spaces I identified are designed to live exclusively online. Most of them know no national borders; they welcome and encourage intercultural dialogue organically (Sackl-Sharif et al., 2022). Offering a safe space, where anonymity and respectful conversation is guaranteed, are core values in these communities, and you can read this, for example, in the Facebook group descriptions. So, when inviting their members to participate in this case study, I needed to choose a method that ensures anonymity for successful cooperation.

Methods and participatory approach

Offering a fun and creative online space that can bring together young members of different LGBTQIA+ communities across Austria and open a neutral and safe common ground is a priority in this case study. That is why I designed an online BarCamp, a participatory conference with an open workshop character (Klemmt, 2018). In contrast to typical workshops or conferences, the participants can decide what they want to discuss at the beginning of the BarCamp and suggest the topics for the individual sessions (Marquardt and Gerhard, 2019). For communication, I chose the interactive video-calling platform Gather.town. Because you can create an avatar and decide whether to turn on your camera, this platform accommodates the need for anonymity. In addition, Gather.town's playful game-like environment has the potential to foster the incentive for participants to get involved (Alsawaier, 2017), and the participatory nature of the conference can empower participants to take what they learn back to their communities (Wagaman, 2015).

To promote my BarCamps, I created a Facebook event (see Figure 1) and a flyer (see Figure 2) that I shared in the LGTBQIA+ groups online. From the beginning, I have also been in contact with the LGTBQIA+ associations in Graz, Linz, Vienna, and Salzburg, who helped me as gatekeepers to promote my BarCamps in their institutions. Interested people from the LGTBQIA+ community could sign up for the BarCamps in a Google Forms survey (see Figure 3). In this survey, I already asked participants what name and

pronoun they would like to be addressed by and pointed out the possibility of anony-
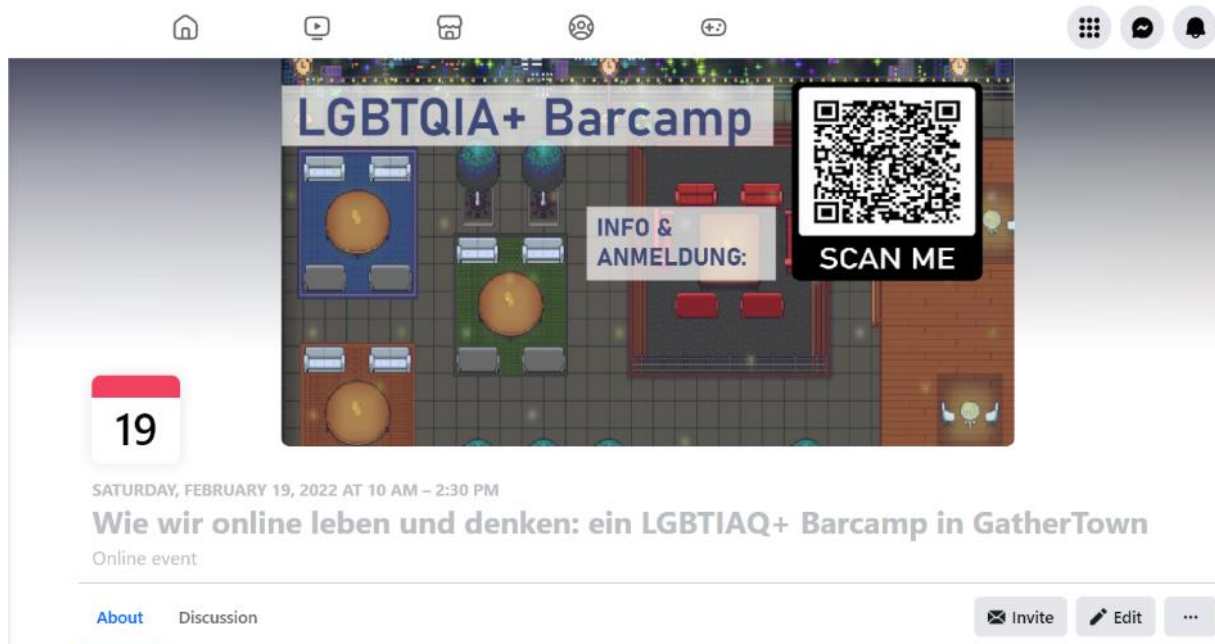mous participation (see Figure 4).

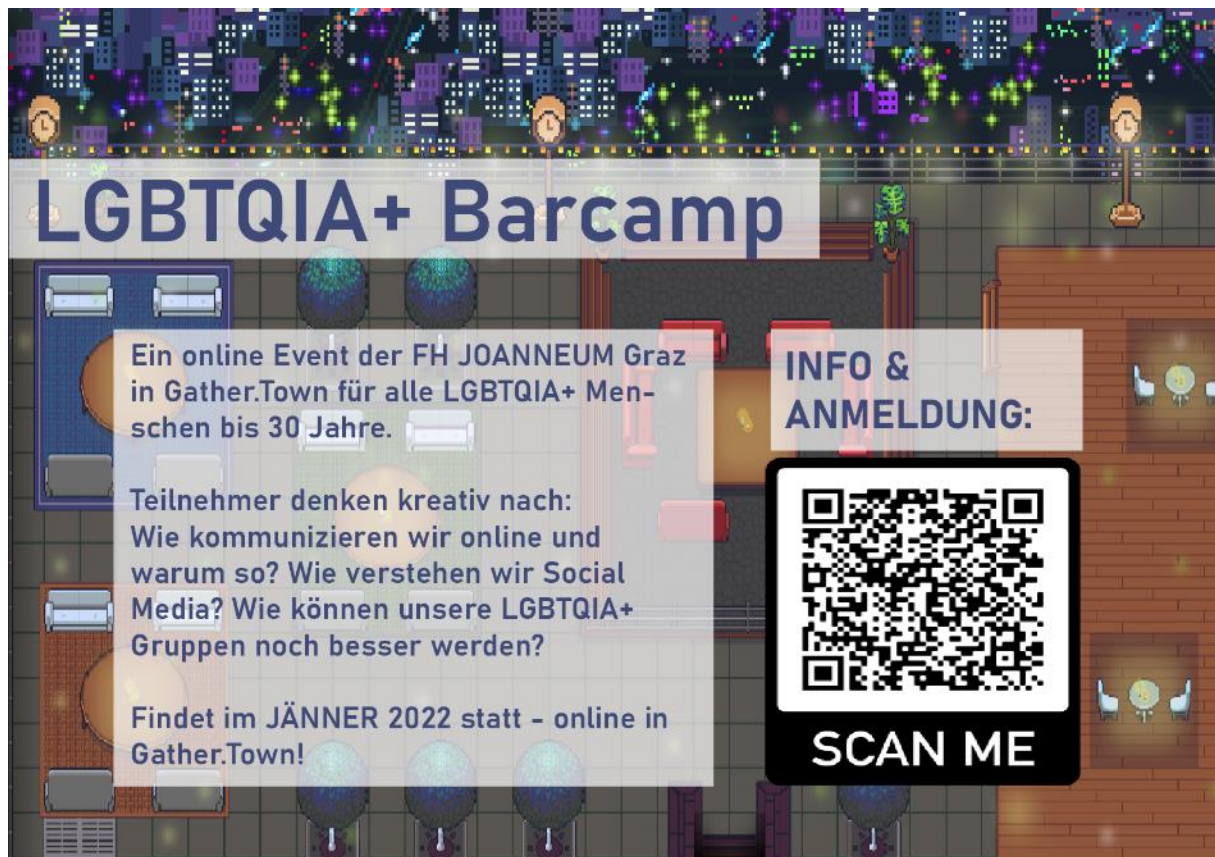Figure 1: A Facebook event for the LGBTQIA+ BarCamp on February 19, 2022.

Figure 2: A flyer to promote the BarCamp in the online LGBTQIA+ communities.

Anmeldung zum online LGBTQIA+ Barcamp in Gather.Town

In einer digitalen Welt passiert ein Teil unseres Lebens online - und als LGBTQIA+ Menschen sind wir in eigenen LGBTQIA+ online Gruppen und Communities auf Social Media unterwegs. Das LGBTQIA+ Barcamp ist eine Gelegenheit für alle deutschsprachige LGBTQIA+ Menschen um zusammenzulernen, uns kennenzulernen, gemeinsam reflektieren und kreativ sein! Wir werden uns in der pixeligen Spielwelt des Gather.Towns bewegen und in ein paar Stunden gemeinsam reden, dokumentieren oder kreative Beiträge gestalten, nebenbei Spiele spielen oder beim Lagerfeuer sitzen. Wir werden uns fragen: wie sieht unser Leben in online Communities aus, wie tun wir dort und warum? Welche Themen sind uns wichtig, was vermissen wir? Haben wir kreative Ideen, Verbesserungsvorschläge, Lösungen für unsere online Spaces? Am Barcamp werden wir sie sammeln und durchdenken - damit später die Umsetzung für unsere Communities und für die ganze LGBTQIA+ Community leichter ist!

Figure 3: The introductory part of the application form for the LGBTQIA+ BarCamp.

Name *
Das ist der Name, mit welchen du am Barcamp angesprochen werden möchtest. Es kann auch ein Spitzname sein, damit du anonym bleibst.

Your answer

Pronomen
Teile mir bitte mit, welche Pronomen du benutzt.

Your answer

Figure 4: The part of the application form where I asked the participants to choose which name and pronouns they want to be addressed with.

As a member of the LGBTQIA+ community, I was aware that stepping out of the comfort of their own trusted circle and into a new environment with unknown people to discuss topics as vulnerable as one's identity and sexuality can be an obstacle for potential participants. Therefore, I strived to reassure them every step of the way and be very clear about my intentions and aims. I conducted two BarCamps with altogether ten participants from January to March 2022. The BarCamps included four phases.

Phase 1 – Warming-up (30 minutes): We started with a presentation round, where the participants introduced themselves using three hashtags of their choice. Usually, one hashtag described their mood, for example #excited or #hungover (it was Saturday), and the other two shared something about their hobbies and interests (#potterhead, #skiing). After that, I explained the goals of the U-YouPa project, the BarCamp format, and how Gather.town works. We walked around the Gather.town and tried some games in the space, which helped us to get to know each other and connect (see Figure 5-7).

Figure 5: The main lobby with the camping area, and a greeting which was also a link to the Miro board we used for session planning.

Figure 6: The rooftop terrace of the space, where each table had a game for participants to play, such as Sudoku or Scrabble, and on the right side they could play arcade games and try to play the piano.

Figure 7: Near the main lobby in Gather.town, participants had a digital buffet area with snacks and drinks.

Phase 2 – Planning (30 minutes): Afterwards, I invited the participants to come up with the session topics for our participatory conference. In this way, they could co-determine what aspects of social media use are the most relevant for them and what they would like to discuss and potentially improve. We jotted down their suggestions in a Miro board (see Figure 8).
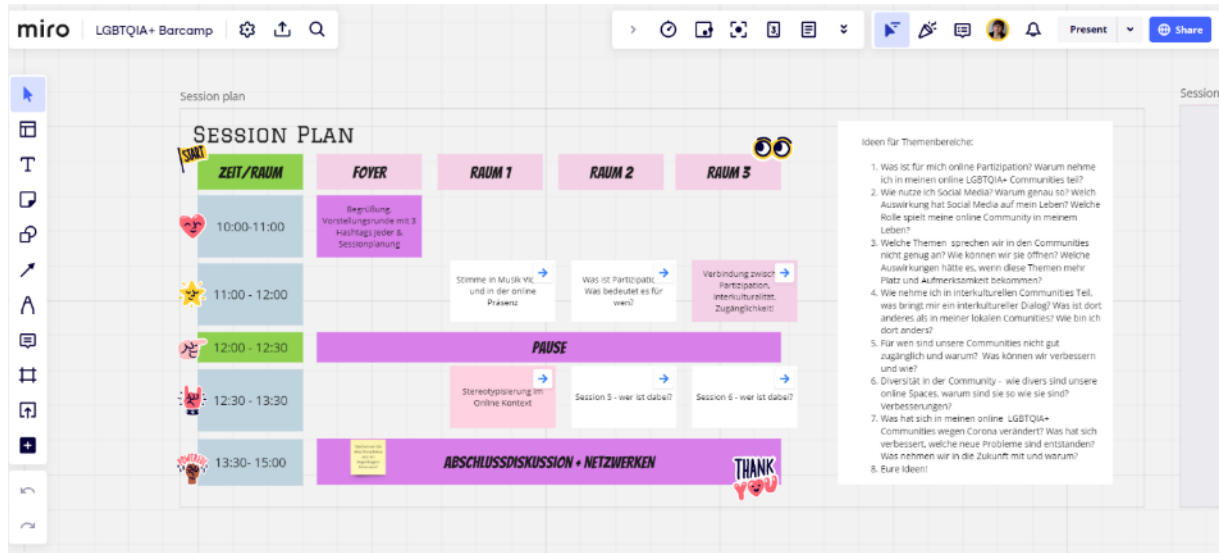

Figure 8: An example of the session plan during one of the BarCamps with the topic suggestions.

Phase 3 – Discussing (60 minutes for each session plus 30 minutes pause between them): In the BarCamps' core part, participants could deal intensively with one topic in each session. I first asked them to think individually about the topic for about 15 minutes and write their ideas on post-its in a Miro board. Since I did not record this session, these notes provide a basis for my analysis along with my own observational notes from the BarCamp. Afterwards, the participants of each session discussed each topic for 30 minutes. In the end, I asked them to record the most important findings of the group phase on the same Miro board as well. During the sessions, the participants discussed forms of political participation and how those changes and evolves in various stages of life and in different social media channels as they become more or less popular. They also opened about how LGBTQIA+ communities are treated differently, how LGTBQIA+ representations in pop culture and in politics influence that, and how difficult these deep-rooted stereotypes are to counteract. They also pointed out that there are situations in life that these online communities rarely offer any support for – for example, LGBTQIA+ communities usually don't allow any non-LGBTQIA+ members for safety reasons. But that also means that partners of transgender people or family members of people who just came out cannot connect with the communities and ask for advice, build a support network, or educate themselves directly with wisdom from within the communities, because the gates stay firmly closed to them. In case there are no in-person support groups available in their area, they may have to rely on English-speaking

online groups that are intended for partners and family members. However, in such groups, they will still be surrounded by other partners and family members and may additionally need to connect with other LGBTQIA+ people.

Phase 4 – Wrapping-up (60 minutes): At the end, we came together again to share lessons learned across all sessions and exchange opinions on how the participants could use their newly gained insights and ideas in their communities to achieve the changes and make improvements they wish to see. I recorded this phase for the analyses. The participants also had the opportunity to give general feedback on the BarCamp.

In this case study, the BarCamp phase was participatory, and participants could develop and prioritize their questions. However, due to time constraints, I have been conducting the analysis phase on my own so far.

Benefits and Challenges

The perception of the BarCamp depended on the extent to which the participants already knew each other beforehand. The participants of the first BarCamp did not know each other at all. Therefore, not only the thematic discussion was relevant to them, but also enough time to get to know each other, so we needed to extend the introductory phase until everybody felt comfortable enough to proceed. The participants of the second BarCamp already knew each other from their studies, so we jumped straight ahead into the session planning. But this was the first time they talked about their gender identities or sexual orientations with each other. This group reported that attending the BarCamp elevated and strengthened their relationship to a new level.

The participants of both BarCamps appreciated the opportunity to discuss their topics anonymously and the open character of this format. They confessed that despite finding it challenging to open to new people, they felt proud that they did it. The BarCamp left them feeling more confident about connecting with other LGBTQIA+ individuals outside their typical groups. In particular, Gather.town helped the participants to open up, as the playful environment acted as an icebreaker when they all explored the pixel-like world together. But they had to warm up a bit before they could talk about their challenges in life on a deeper level, and in that phase, they needed a lot of moderation from me as the organiser of the BarCamp. I was the person they spoke with first, and the gravitated towards me at first. I asked easy-going questions about their wellbeing and interests, reassured them as much as I could, and then the conversation among the participants started flowing.

One of the most relevant assets of a BarCamp, its open format, was also one of its biggest challenges with this group. It is difficult to recruit people for an event when you can't explain what will happen there, because the topics will be defined on the day of

the camp. The participants worried whether there will be sensitive topics and how to protect themselves.

An event outside their usual groups is an additional hurdle for many LGBTQIA+ individuals. In hindsight, reaching them in their trusted community and do a mini BarCamp in one of their usual time slots, either in person, or online, would have had a higher success rate than trying to recruit them into a new, strange environment. They feel comfortable and protected in their existing communities and have a routine. If I did this again and wanted to recruit more participants, I would probably opt for a series of smaller Bar-Camps, organised with help of the administrators in some of the larger communities. Furthermore, I would have met them in their existing framework instead of spending so much time and energy with building my own environment and trying to convince them to join me there. That way, I could have spent more time in the BarCamps, discussing and learning about their topics, and could have been in contact with more community members, although in smaller portions.

Case 2: Fridays/Students for Future (Sonja)

Background

The changing climate is affecting our lives drastically, but especially young people are confronted with this reality as the climate crisis will impact their future. They are becoming more aware of the impact of climate change and taking actions to address it. The latest Europe-wide survey concerning climate change reports that 64% of 15–24-year-olds stated they had done something to prevent climate change (European Commission, 2021). However, these actions are not 'activistic' in a narrower sense as they mostly describe low-threshold behaviour such as recycling. In this case study, I focus on these young people who describe themselves as activists fighting for climate justice.

Starting with Greta Thunberg's first school strike in 2018, Fridays for Future (FFF) has developed from a grassroots movement to a worldwide social movement that has led millions of people around the globe to march in the streets and protest for a fairer climate policy. It is exceptional in its size and capacity to motivate young people to participate in actions against climate change (e.g. Wahlström et al. 2019; Wallis and Loy, 2021). As such, it is a prime example of social movements led by young people and fits well with U-YouPa's research interests.

Group description

In my participatory research, I focus on the FFF activists in Graz, Austria. They see their approach as highly political. For example, they consider it their responsibility to encourage people to vote and elect politicians who prioritize climate justice without endorsing specific candidates. Furthermore, they describe FFF as a worldwide and interconnected movement. Intercultural dialogue and interaction are common practice, e.g., every

group worldwide has a say in deciding on the date for the global climate strike (Sackl-Sharif et al. 2022).

Although FFF motivates hundreds of people in Graz to march on the streets, the core team is much smaller. Around 20 to 30 people take care of the organization of strikes and other actions such as financing, design, mobilization, communication, etc. The FFF activists in Graz organize into smaller working groups focusing on specific activities. Due to the small group size, activists usually work not just in one but in several working groups.

Methods and participatory approach

I started this case study by analysing the FFF digital platforms (Kozinets, 2020) to become familiar with the existing structures and networks of FFF in Graz. Furthermore, I did ethnographic observations (Gobo and Molle, 2017) and had informal conversations at demonstrations (see Figure 9). Through my first interactions with FFF in Graz, I got in contact with the communication team. This team is now at the centre of my case study and operates as a gatekeeper to the FFF community in general.

Figure 9: Global climate strike in Graz on September 24, 2021 (photo credit: Sonja Radkohl)

The communication team and I worked together in two workshops. According to FFF's preferences, we had the first workshop twice (once offline in their usual meeting spot, a Café in Graz, and once online via their Discord Server) and the second workshop online (Discord). As a start, we got to know each other, and I explained our research focus and my competencies as a journalist and content strategist. To see what is relevant for FFF's communication and social media team related to our U-YouPa goals, we applied card sorting activities to specify and prioritise their current challenges (Bergold and Thomas, 2010; Best et al., 2022).

In the first workshop, participants wrote their ideas for their communication strategy and content approaches on cards. Next, they sorted them according to how important they were to them and how difficult they might be to implement. After this phase, we agreed that reaching out to new audiences is their core need because recruiting new active members for their working groups is a challenge for them.

In the second workshop, we further specified our research objective by developing questions to explore FFF's target audiences. FFF wanted to know how the public or new potential activists perceive them and how to evaluate their content on social media. They were also interested in their target audience's knowledge and concerns about the "climate catastrophe" (as FFF labels it) to develop informational content more adequately.

After these workshops, I presented various empirical methods FFF activists can use to achieve their goals. I discussed the advantages and disadvantages for each approach so FFF activists could decide what is best for them. Based on my expertise as a content strategist, I also formulated general recommendations to guide the choice of further procedures (Radkohl, *forthcoming*). I suggested planning an activity that:

1. allows them to engage with their target groups,
2. does not take up too much of their resources, and
3. enables them to either gather content for their channels while doing the method or give them feedback on their existing content at least.

Using this approach allows the communications team to gather relevant results while efficiently using their scarce time and resources.

I designed all phases of this case study to be participatory. In addition, I tried not only to understand the social world of FFF but also to change it to generate both "knowledge of understanding" and "knowledge of action" (Cornwall and Jewkes, 1995, p. 1667).

Benefits and Challenges

In this case study, I could generate a direct impact for the FFF activists in Graz through the participative approach, which at the same time fits the research interests of the U-

YouPa project. In the spirit of participatory research, the focus was on co-learning processes and empowerment processes (von Unger, 2014) that will allow the participating FFF activists to better align their communication activities with their goals in the future. They reflected their communication activities creatively via card sorting. This procedure allowed them to take on a new perspective and cluster and rank topics and issues. It gave them time and an outlet to reflect while not having to think about the next pending communication activity or the upcoming social media post.

At the same time, the participatory approach was challenging for me as a researcher. Data collection was more time-consuming compared to other research projects, and finding a suitable time frame to work with the FFF was challenging. I designed my methods to be adaptable to their preferences and habits and offered options for offline and online workshops and methods. Despite my best efforts to remain flexible, I was only able to conduct two workshops and formulate recommendations for action. Initially, I had planned to collaborate with them more extensively and guide them through a well-structured process.

Case 3: Skateboarding scene
Background

The skateboarding community in Graz has been affected by a skateboard trick ban since April 2021 (Sackl-Sharif, 2022). From that time on, it was only allowed to perform skateboard tricks in skateparks, but not in other spots of public space such as squares or on the sidewalk. Authorities introduced the skateboard trick ban following complaints from residents of Kaiser-Josef-Platz, a market square in the city centre of Graz hosting a daily farmer's market from Monday to Saturday until noon. In recent years, the previously vacant market square has become home to numerous gastronomy businesses, many of which are open after-market hours. This development has led to a conflict of interest between business owners and the original purpose of the square as a space with its freedom of consumption (ibid.). The right-wing populist and national-conservative party *FPÖ – Freiheitliche Partei Österreich*s ('Freedom Party of Austria') took up and intensified complaints about noise pollution and littering on a new website with the title skaterlaerm.at ('skater noise').[3] Consequently, the ban was enacted based on a reinterpretation of the road traffic regulations. Any violation is punishable by a fine of 15 euros (Müller, 2021).

The skateboard trick ban evoked a lot of protest actions in digital and public spaces and the development of an urban social movement (Lebuhn, 2008) as various allies from the fields of science, art, culture, sports, politics, and other social movements joined the protest of the skateboarders. The protests included art installations, demonstrations,

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[3] The website skaterlaerm.at is offline but can be accessed at the following web.archive link:
https://web.archive.org/web/20210506141635/https://skaterlaerm.at/ .

and concerts in public spaces, an online protest song contest jointly organised by the local skateboard club *GRÄB – Grazer Rollbrett Ästheten Bund* ('the Graz roller board aesthetes federation') and the music association *Graz Connected*, commentaries in local newspapers, and protest letters to the City Government (Sackl-Sharif and Maric, *forthcoming*). Especially the digital platforms of GRÄB were relevant hubs for networking, information dissemination and protest actions (see Figure 10). Therefore, I got in contact with members of GRÄB very early in this case study, and they became relevant gatekeepers to the general skateboarding community in Graz.

Figure 10: GRÄB posting about the skateboard trick ban on Instagram (GRÄB, 2021) (photo credit: GRÄB).

Group description and sampling strategies

The skateboarding community in Graz is diverse and meets in various public spaces, including Lendplatz and Kaiser-Josef-Platz, marketplaces with a long tradition of open space free of consumption in the afternoons. Additionally, there are several skateparks, such as Grünanger in the south and Kirschenallee in the north. It is not one large, constant group, but many smaller groups and circles of friends exist side by side. To reflect the diversity of the skateboarding community, I tried to avoid including just one circle of friends into my research. Therefore, it was relevant for me to be in contact with different actors in the community, and I worked not only with members of the local skateboarding club GRÄB but also with non-institutionalised skateboarders.

My most intensive collaboration was with Miran, a non-institutionalised skateboarder and filmmaker, who I met during a public event that I organized to discuss the skateboarding trick ban with the public in the summer of 2022. At that moment, he started a film documentary about the ban to convince the City of Graz of the importance of skateboarding in public spaces. Our joint research also ended in a conference paper with the title "The importance of the plaza. Political participation of young skateboarders in a digital society" that will also be published in the conference proceedings (Sackl-Sharif and Maric, *forthcoming*). In this paper, we describe our perception of the skateboard trick ban from his insider and my scholarly-informed outsider perspective, and we make our voices visible in the text by indicating the author/s per section.

Methods and participatory approach

To develop background knowledge and to establish a timeline of events, I conducted (social) media analyses on three levels from March 2021 to September 2022. First, the media coverage about the ban was an important starting point to identify the most relevant events and actors. All in all, I analysed 118 articles from local, regional, national, and international media. In addition, I analysed all published content of GRÄB: 16 blog posts, 22 Facebook posts and 24 Instagram posts, including reactions, comments, shared videos, and photos. Furthermore, I analysed the online platforms of the political party FPÖ, which were essential in advancing the ban, and the minutes of municipal council meetings in which the city council discussed about the ban. As I designed these analyses to provide an overview, I applied a summarizing qualitative content analysis (Mayring, 2021) and used the software MAXQDA22.

In addition, I did ethnographic research (Gobo and Molle, 2017) at demonstrations against the skateboarding trick ban and Kaiser-Josef-Platz in 2021 and 2022 (Sackl-Sharif, 2022). I also participated in the off_Gallery's photo competition "Asphalt" with the photo "Invisible Tricks on Urban Asphalt" (see Figure 11). Furthermore, I conducted some expert interviews (Bogner, Littig and Menz, 2009): two with members of the skateboard club GRÄB and one with a lawyer specialised in public space regulations. In addition, I organized two public events to discuss the skateboard trick ban with the public in the summer of 2022. I met Miran at one of these events and invited him to do participatory research with me.

Miran and I discussed in the first phase which topics and questions around the skateboard trick ban and the protest actions are interesting to research. I also introduced him to possible empirical research methods, and we decided together on the method of individual interviews. From my perspective, workshops with young skateboarders would have been interesting for capturing both explicit and tacit knowledge (Sanders and Stappers, 2012). However, Miran's experience with the skateboarding community indicated that it might be difficult to address our questions in a group setting, as many

skateboarders are more likely to be reached individually. By the end, he had the power to decide because he knows the community better than me.

Figure 11: Invisible Tricks on Urban Asphalt, off_Gallery Graz 2021 (photo credit: Susanne Sackl-Sharif).

In the next step, we developed an interview guideline with questions that are interesting for the U-YouPa project and his documentary. Miran conducted ten problem-centred interviews (Witzel and Reiter, 2012) between December 2022 and February 2023. He was paid for this task and for writing the joint conference paper. We jointly analysed the anonymized transcripts. Since Miran had already conducted many interviews as a filmmaker and had to select suitable passages for scripts, dealing with the interviews and analysing them was not difficult for him. However, due to time constraints, I took on the responsibility for the analysis. As every detail of the interviews is relevant to our interpretation, we applied a structuring qualitative content analysis (Kuckartz and Rädiker, 2021) based on an inductive categorization, and we used the software MAXQDA22.

In this case study, the second part was participatory in all phases, from the specification of the questions to the selection of the method to the analysis to the publication of the

results. Through this approach, I could trace a manifold picture of the skateboarding community and explore various understandings of political participation together with Miran.

Benefits and Challenges

Through this participatory case study, I was able to generate multiple benefits and impacts for the skateboard community. One of the main objectives was to raise awareness about the skateboard trick ban, which was a concern expressed by members of GRÄB and other skateboarders. To achieve this, I organized two science-to-public events where I discussed the issue with the public. These events were also covered in local newspapers and on social media, generating more attention to the cause. Additionally, Miran found it interesting to collaborate with me since my research project aligned well with his documentary film project. We plan to work together on his documentary, where he will interview me as a sociologist.

Working with Miran was a rewarding experience for me, both in terms of the empirical results and me as a researcher. I have strongly felt as an outsider from the beginning, which shaped my research design in all phases. In many of my (ethnographic) research projects, I had a close relationship with my research subject. For example, in my dissertation I studied gender issues in the metal communities to which I belong. In the skateboarding case, I felt I had to acquire lots of knowledge before contacting the skateboarding community to compensate a little for my outsider status. Therefore, the phase of media analyses lasted longer than planned, as I wanted to inform myself comprehensively for safety reasons.

The feeling of being an outsider also intensified during my first contact with non-institutionalized skateboarders. While the collaboration with GRÄB worked well from the beginning, non-institutionalized skateboarders were not very interested in me and my research. Upon reflection, I now realize that my insecurities played a part in my reluctance to present myself as a researcher without any skateboarding experience. When I was studying the skateboarding community, I did not want to be perceived as someone disconnected from their reality – as a researcher sitting in the ivory tower. If I had not collaborated with Miran, my interactions with non-institutionalized skateboarders would have been superficial. Thanks to his involvement, I gained a deeper understanding of the group's perspectives and was able to examine the skateboard trick ban from different angles.

Conclusion and recommendations

Inspired by the ideas of PAR, we tried in our research not to study young people but to work with them on problems they face in their communities. We pursued a dual objective: in addition to our research interests (scholarly goals), we also asked what should be achieved or changed in the respective community (community goals) (von Unger,

2014). Furthermore, we tried to include young people with different affiliations and interests to reflect the diversity of this group. Consequently, every case study had differing starting points, actors, benefits, and challenges, and we used a range of empirical methods (see Table 1).

Cases	Background	Methods	Benefits	Challenges
LGTBQIA+ communities	online spaces as safe spaces	online Bar-Camps on Gather.town / social media analysis	empowerment / discussing challenges anonymously	recruitment / building trust / BarCamps' open format
Fridays for Future	climate change	ethnography / card sorting activities / workshops / social media analysis	empowerment and co-learning / improvement of communication skills	time and coordination problems
Skateboarding community and its allies	skateboarding trick ban	ethnography / media analysis / interviews / public events	empowerment / generating public awareness	feeling as / being an outsider

Table 1: Case studies overview

From comparing our three case studies, shared insights emerged on the question of how it is possible to engage young people as co-researchers in research projects. On this basis, we developed four recommendations for participatory (social media) research with young people that partly build on established participatory practices (von Unger, 2014).

Enough time and financial resources: Even more crucial than in other qualitative research projects is having enough time to plan and carry out participatory projects. Comprehensive and time-consuming media analyses and ethnographic research were central to our efforts to learn about the communities before initial outreach and to identify the main actors. Through this approach, we met guides who helped us build trust with the communities and shared important information in each case study. After the start of joint research, it was necessary to have enough time for a warming-up phase to get to know each other and decide on shared interests (ibid.). Doing so also required generous funding for the project so that we could spend more time on research but also to pay some of our co-researchers.

Empowerment through co-determination or decision-making power: In our case studies, we have also seen that co-researchers can only be empowered if they have a say

or can make independent decisions at significant stages (Wright, 2010). That also takes time, as co-researchers often do not have research skills. Researchers must teach them first in method training sessions (von Unger, 2014), and we had to spend more time in the planning, implementation, and evaluation phases to include reflective loops for discussing methodological challenges.

Interdisciplinary research teams: Our research team included various disciplines and competencies from the fields of media and communication studies, journalism, sociology, content strategy, and interaction design. We introduced these backgrounds in the getting-to-know-you phase of each case study, and our co-researchers also learned about who we are. It was important for us to introduce not only the case's principal investigator but the whole project and project team to create a broader understanding and range of possibilities. With this approach, they could better identify the opportunities they could draw from our collaborative research.

Open research questions: The benefits desired by youth varied in each case study, ranging from gaining media attention to improving their social media spheres. They emerged from intensive discussions with the principal investigators, and their competencies and profiles also influenced the co-researchers' choices. Since our main research questions were broad, it was possible to address these different interests and needs. In addition, a flexible research strategy was essential to address young people's interests as openly as possible. In our case studies, we tried different methods in this context, e.g., the online BarCamp on Gather.town or card sorting workshops. In preparation, we held regular meetings to discuss our theoretical approaches, opportunities for empirical methods, and challenges to benefit from the interdisciplinary scope of the team across the case studies.

References

Alsawaier, Raed S. (2017). The Effect of Gamification on Motivation and Engagement. *International Journal of Information and Learning Technology*, 35(1), pp. 56-79.

Best, Paul et al. (2022). Participatory Theme Elicitation: Open Card Sorting for User Led Qualitative Data Analysis. *International Journal of Social Research Methodology*, 25(2), 1-19.

Bergold, Jarg; Thomas, Stefan (2010). Partizipative Forschung. In G. Mey & K. Mruck (Eds). *Handbuch Qualitative Forschung in der Psychologie* (pp. 333-344). VS Verlag für Sozialwissenschaften.

Bogner, Alexander; Littig, Beate; Menz, Wolfgang (Eds.). (2009). *Interviewing Experts*. Palgrave Macmillan.

Chevalier, Jacques M.; Buckles, Daniel (2019). *Participatory Action Research Theory and Methods for Engaged Inquiry*. Routledge.

Chung Kimberley; Lounsbury David (2006). The Role of Power, Process, and Relationships in Participatory Research for Statewide HIV/AIDS Programming. *Soc Sci Med*, 63(8), 2129-2140.

Cornwall, Andrea; Jewkes, Rachel (1995). What is participatory research? *Social Science & Medicine*, 41(12), 1667-1676.

Crowley, Ann; Moxon, Dan (2017). *New and Innovative Forms of Youth Participation in Decision-Making Processes.* Council of Europe.

Eckhoff, Angela (Ed.) (2020). *Participatory Research with Young Children.* Springer.

European Commission (2021). *Commission Kick-Starts Work to Make 2022 the European Year of Youth.* European Union.

European Commission (2016). *EU Youth Report 2015.* European Union.

European Union Agency for Fundamental Rights (2020). *A Long Way to Go for LGBTI Equality.* European Union.

Far, Parisa K. (2018). Challenges of Recruitment and Retention of University Students as Research Participants: Lessons Learned from a Pilot Study. *Journal of the Australian Library and Information Association*, 67(3), 278-292.

Fine, Michelle (2016). Just Methods in Revolting Times. *Qualitative Research in Psychology*, 13(4), 347-365.

Foss, Elizabeth; Druin, Allison; Leigh Guha, Mona (2013). Recruiting and Retaining Young Participants: Strategies from Five Years of Field Research. *Proceedings of the 12th International Conference on Interaction Design and Children*, 313-316.

GRÄB (2021). Trickverbot, echt jetzt? Instagram, https://www.instagram.com/p/COAYsewtH6V/

Gobo, Giampietro; Molle, Andrea (2017). *Doing Ethnography*, 2nd ed. Sage.

Haraway, Donna (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective, *Feminist Studies*, 14(3), 575-599.

Herr, Kathryn; Anderson, Garry L. (2005). *The Action Research Dissertation: A Guide for Students and Faculty.* Sage.

Klemmt, Janine (2018). BarCamps und frühere partizipatorische Konferenzformate: Gruppe. Interaktion. Organisation, *Zeitschrift für Angewandte Organisationspsychologie*, 49(1), 93-96.

Kozinets, Robert V. (2020). *Netnography: The Essential Guide to Qualitative Social Media Research.* Sage.

Kuckartz, Udo; Rädiker, Stefan (2021). *Qualitative Content Analysis: Methods, Practice and Software.* Sage.

Lebuhn, Henrik (2008). *Stadt in Bewegung: Mikrokonflikte um den öffentlichen Raum in Berlin und Los Angeles.* Springer.

Lewin, Kurt (1946). Action Research and Minority Problems, *Journal of Social Issues*, 2(4), 34-46.

Lucero, Leanna (2017). Safe Spaces in Online Places: Social Media and LGBTQ Youth. *Multicultural Education Review*, 9(2), 117-128.

Machin-Mastromatteo, Juan D. (2012). Participatory Action Research in the Age of Social Media: Literacies, Affinity Spaces and Learning. *New Library World*, 113(11/12), 571-585.

Marquardt, Editha; Gerhard, Ulrike (2019). "Barcamp adapted": Gemeinsam zu neuem Wissen. In R. Defila & A. Di Giulio (Eds.). *Transdisziplinär und transformativ forschen, Band 2: Eine Methodensammlung* (pp. 237-257). Springer Fachmedien.

Mayring, Phillip (2014). *Qualitative Content Analysis: Theoretical Foundation, Basic Procedures and Software Solution*. University of Klagenfurt.

Müller, Walter (2021). Graz verhängt ein Skateverbot auf Plätzen. In derstandard.at, https://www.derstandard.at/story/2000126420746/graz-verhaengt-ein-skateverbot-auf-plaetzen (Accessed 18 May 2023).

Ollner, Annika (2010). A Guide to Literature on Participatory Research with Youth. York University.

Radkohl, Sonja (forthcoming). Supporting the Political Participation of Young People Using Content Strategy Methods: A Fridays for Future Case Study. *Conference Proceedings of the STS Conference Graz 2023*.

Sackl-Sharif, Susanne (2022). Erschöpfte Räume? Über den Kampf um öffentlichen Raum am Beispiel der Grazer Skater:innen. *Kuckuck. Notizen zur Alltagskultur*, 22(1), 30-33.

Sackl-Sharif, Susanne et al. (2022). Youth Participation and Social Media. Potentials and Barriers. *Proceedings of the 9th European Conference on Social Media*, 280-283.

Sackl-Sharif, Susanne; Maric, Miran (forthcoming) On the Importance of the Plaza: Political Participation of Young Skateboarders in a Digital Society. *Conference Proceedings of the STS Conference Graz 2023*.

Sanders, Elizabeth; Stappers, Pieter J. (2008). Co-Creation and the New Landscapes of Design. *CoDesign*, 4(1), 5-18.

von Unger, Hella (2014). *Partizipative Forschung: Einführung in die Forschungspraxis*. Springer VS.

Wagaman, M. Alex (2015). Changing Ourselves, Changing the World: Assessing the Value of Participatory Action Research as an Empowerment-Based Research and Service Approach with LGBTQ Young People. *Child & Youth Services*, 36(2), 12-149.

Wahlström, Mattias et al. (2019). *Protest for Future: Composition, Mobilization and Motives of the Participants in Fridays for Future Climate Protests on 15 March, 2019 in 13 European Cities*. Keele University.

Wallis, Hannah; Loy, Laura S. (2021). What Drives Pro-Environmental Activism of Young People? A Survey Study on the Fridays for Future Movement. Journal of Environmental Psychology, 74, 101581. https://doi.org/10.1016/j.jenvp.2021.101581

Witzel, Andreas; Reiter, Herwig (2012). *The Problem-Centred Interview*. Sage Publications.

Wright, Michael T. (Ed.) (2010). *Partizipative Qualitätsentwicklung in der Gesundheitsförderung und Prävention*. Huber.

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How to address diversity in research on and co-creation of online meetings? – A field report

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1. Introduction

The climate crisis and mobility constraints caused by the COVID-19 pandemic have led to a boom in online meetings, which should be maintained for sustainability and environmental reasons. However, studies show, that virtual communication can exacerbate existing inequalities; for example, women are more likely to be overlooked or ignored in online meetings (Armentor-Cota 2011; Connley 2020). In addition, age and education level may negatively influence receptivity to technology (NeXR 2020; Buchebner-Ferstl et al. 2020). In this respect, it is important to further develop online meeting technologies to facilitate inclusion and belonging in digital spaces.

For this purpose, within the FEMtech research project FairCom, we aimed to contribute to the development of inclusive online meeting solutions - in terms of both inclusive software development and the facilitation of online meetings. Our objective was to develop ideas within a participatory process and co-creatively reflect with users on how to make online meetings more inclusive through technological and social/group dynamic processes. Our goal was to develop first prototypes of solutions. Furthermore, when planning FairCom, we aimed to consider gender beyond the binary concept.

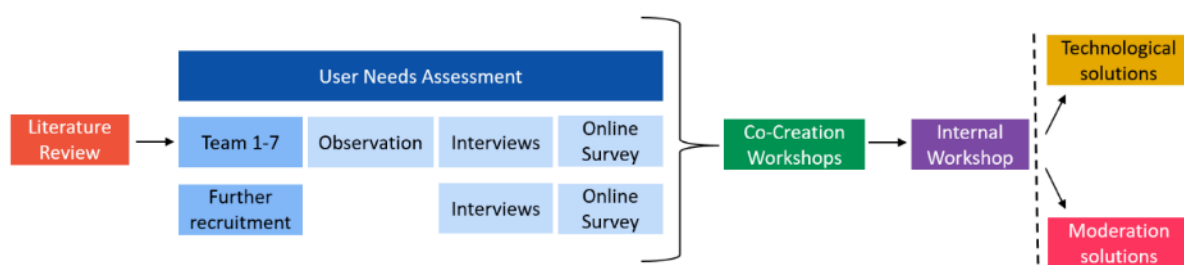To achieve these objectives, we structured the project as follows (see Figure 1)[1]:

Figure 1: Research process

First, we conducted a literature review to identify relevant diversity dimensions and exclusion mechanisms to be considered in the subsequent research process. The results of the literature review were used throughout the research process (e.g. in the creation of the survey instruments). Then, we recruited seven teams from different contexts (work, education, leisure) to observe their regular meetings and conducted interviews and an online survey about experiences of online-meetings, exclusion mechanisms and needs for improvement. As we were not able to attract another team specialising in advocacy for trans- inter and non-binary people for our project, we recruited additional trans- inter and non-binary people for the interviews and the online survey. Building on

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[1] The technological and moderation solutions are not part of this paper as they are still in progress, which is why they are shown behind a dashed line in Figure 1.

the results of this user needs assessment, personas and user scenarios were developed, which were used in the subsequent co-creation workshops. In a participatory process, diverse user groups developed ideas for technological solutions and ideas for interaction concepts. Topics that participants brought forward but for which no ideas emerged in the workshops were further worked on in an internal workshop with the project team. Table 1 shows an overview of the methods used in FairCom:

Method	Purpose	Participants	Description
Literature Review	Identify relevant diversity dimensions and exclusion mechanisms	NA	- Literature about (online) communication and online meetings that considers diversity dimensions was included.
Observations	Observe real communication culture and potentially exclusionary communication patterns (outsider perspective)	7 Teams from different contexts (work, education, leisure time) with 5-10 participants per team → in total n=53	- Two observants from the FairCom team monitored real online team meetings - In some teams more than one meeting was observed - Documented via observation protocol and if agreed recorded
Guideline-based Interviews	Qualitatively capture the experience of the users (insider perspective) and needs/ideas of improvement	Recruitment from the 7 teams, moderation experts and further individual recruitment → In total n=27	- Interviews were held online after the observations - Interviews were recorded, transcribed in summary and analysed
Online survey	Quantitatively capture the experiences of a larger user group with online meetings and their usage behaviour (insider perspective)	Recruitment from the 7 teams and further individual recruitment → In total n=60	- Implemented in SoSci Survey - Carried out after the observation and interviews
Personas and user scenarios	Fictional user profiles that help visualise typical users	NA	- Starting to develop in a coordinate system with the dimensions technology affinity and extraversion - Further enriched by incorporating the findings from the preceding needs assessments
Co-Creation workshops	Collaborate with users to develop creative ideas for technology features that facilitate inclusive online meetings	Recruitment from a panel and further recruitment from the 7 teams → In total n=23	- For the hurdles described in the scenarios, solution ideas and ideas for possible interaction concepts were developed. - Online setting with a Miro board and selected SAP Scenes

Internal workshop	Discussion and translation of open questions and topics from the co-creation workshop into concrete ideas for technological features	FairCom project team members (n= 7)	- Online setting with a Miro board - In collaborative brainwriting, ideas were first collected in individual work, then added to by others and finally condensed and prioritised in a discussion.

Table 1: Methods used in the FairCom project

In this paper, we discuss our approach to accounting for the diversity of meeting participants during the research process, the challenges we faced, and our strategies to address them. In addition, we want to determine how we can improve our practice of dealing with diversity and contribute to learnings and further development based on our practical experience. This text is therefore intended as a report on practical experiences in a research process and seeks to contribute to an open and failure-friendly exchange of approaches in research.

Firstly, we aim to examine exclusion mechanisms present in online meetings, focusing on user groups that have been identified in the literature so far, as this was our starting point for sampling and developing the survey instruments (chapter 2). We then describe our methodology and its pitfalls for identifying the user habits and needs of a diverse user group (chapter 3). Then we will focus on the major challenge of incorporating a diverse sample of potential users into the needs assessment and the co-creation of potential solutions (chapter 4 and 5). Finally, we will discuss the difficulty of shedding more light on the topic of "making diversity visible" (chapter 6). The co-creation workshops demonstrated that the participants came up with a wide range of solutions, but unfortunately, in relation to the objective of addressing the diversity of participants in online meetings, there were only a few suggestions.

2. What kind of diversity and exclusion mechanisms might play a role in online communication?

In 2022, we started the FairCom Research Project with a literature review to identify relevant diversity dimensions and exclusion mechanisms we should consider in our research process. The literature review revealed that, depending on how they are utilised, online meetings can both reduce and exacerbate existing inequalities.

The findings of the existing bodies of literature in the field of gender studies indicate that online communication in general is not a gender-neutral space. Women, BIPOC and LGBTQIA* individuals are often subject to aggressive intimidation, harassment and threats in virtual spaces (Amarasekara und Grant 2019; Nadim und Fladmoe 2021; Veletsianos et al. 2018; Frey 2020; Rubin et al. 2020; Kawsar 2021; Herring und Stoerger 2013). Both offline and online communication are characterised by exclusionary com-

munication practices and microaggressions, such as interruptions, which disproportion-ately affect non-binary individuals, women, queer women, women with disabilities, and black women (Thomas et al. 2019; Mendelberg et al. 2014; da Silva Figueiredo Medeiros Ribeiro, Karen 2020). Women are more likely to be ignored and overlooked, and their voices may not be valued to the same extent as those of male colleagues, according to research based on a binary understanding of gender (Armentor-Cota 2011; Connley 2020).

There are some factors, which can influence the level of participation in online meetings: Certain user groups may feel insecure due to their lack of technological proficiency and digital literacy, which are related to gender and age (Laitinen und Valo 2018; Arellano 2020; Reidl et al. 2020; Hauk et al. 2018; ÖIAT 2014). The level of education can also be related to the openness towards digital (educational) formats (Buchebner-Ferstl et al. 2020; SPECTRA Marktforschung 2018). In virtual meetings, age (potentially related to hierarchy) can also influence active participation (NeXR 2020). Additionally, social anxiety and introversion can play a role in this regard (Luk 2021; Lowenthal et al. 2020; Callahan 2021). Moreover, communication is a challenge for individuals whose native language is different from the language used in the meeting, and online communication can further exacerbate this difficulty due to the absence of comprehensive non-verbal cues and subpar video and audio quality (Hui et al. 2021; Rini et al. 2021; Arellano 2020; Sohn 2018; Mori 2020).

In summary, we found the following exclusion mechanisms related to online and offline communication behaviour in the literature, which can reinforce existing differences in participation:

- *Exclusionary communication practices and micro aggressions*: These include interrupting, ignoring and overlooking people in online communication (Cullinan 2016; Connley 2020), as well as the use of technical language, monologuing and debating, which shifts the focus away from collaborative to individualised communication. Passive aggressive behaviours such as rolling the eyes or making disparaging remarks are also examples of exclusionary online communication (Arellano 2020), as are misgendering or ignoring, not acknowledging or pathologising gender identities (Scheuerman et al. 2021).
- *Perception and participation*: privileged individuals occupy more speaking time, while others participate less actively in discussions and their contributions are regarded as less valuable (Catalyst 2020).
- *Unstructured meeting culture promotes exclusion*: people who speak without waiting for others to speak have an advantage over those who wait to be requested to speak (Tannen 1995; Heath und Flynn 2014).

- *Camera Use*: Although a deactivated camera makes participation in communication more difficult, not using the camera is more pertinent for certain groups than others. This is especially true for women and BIPOC, according to a study of US-American students (Castelli und Sarvary 2021). In part, this is due to poor internet connection, and in part it has to do with dissatisfaction with the current design (Meyer 2020).

These exclusion mechanisms can occur in online communication and lead to certain individuals being disadvantaged and having less influence. However, much of the literature primarily originates from the US context and often considered one diversity dimension rather than including several dimensions. Therefore, we wanted to collect more data on online meetings from our Central European cultural context and consider several diversity dimensions like gender, age, language, ethnicity and education. In the next chapter we will discuss our methodological approach and the difficulties in this attempt.

3. What was our methodology for the needs assessment?

In the development of the various survey instruments for the needs assessment (quantitative online survey, interview guideline, observation protocol), we attempted to take the exclusion criteria and diversity dimensions identified in the literature review into account. Some details on the individual methods (e.g. numbers of participants) can be found in Table 1 in the introduction.

Observations

Approach: For the observations of online meetings, identified exclusion mechanisms were integrated into the observation protocol (e.g. microaggressions and discriminatory practices such as interruptions, overlooking or misgendering, sexist/xenophobic/racist remarks, etc.). For each observation, there were two observers from the project team. Each observer took notes on the demographical characteristics of each participant and after each observation, both observers exchanged their respective notes on these characteristics in order to calibrate them.

Difficulties/learnings: We are aware that an external assignment of diversity characteristics to people is by no means reliable. However, since we also had the interviews and the survey, in which the same participants could express their insider perspective, we deemed it appropriate to concentrate on the outside perspective in the observations. This also seemed suitable because exclusion mechanisms in online meetings are partly based on external perception. In addition, it would also have been practically challenging to capture the demographics with small questionnaires, as we did not want to overly influence the observation and prevent sharing individual characteristics within the group. As observers, we found it difficult to complete this section and felt uncomfortable

answering these questions from an outside perspective. However, it was helpful to discuss this with the other observer. In addition, it is important to clarify in the description of diversity characteristics in the report that they were not self-reported (e.g. perceived as women). Overall, we experience the handling of diversity characteristics in observations as challenging and want to explore this matter further.

Interviews

Approach: The interview guideline touched on similar topics as the observation (e.g. micro-aggressions), but focused more on the interviewee's perception and experience of online meetings and on needs and ideas of improvement. For example, one question was about how comfortable the interviewee felt speaking up in online meetings and the reasons behind it. We asked quite open-ended questions and also spontaneous follow-up questions during the interviews to give space to the experiences of the interview partners. Following the interview, we distributed a brief demographic questionnaire in order to capture the diversity characteristics of the interview partners.

Difficulties/learnings: The interviews worked quite well and the brief demographic questionnaire was an appropriate tool to obtain self-reported information. Specific challenges with the individual questions of the brief demographic questionnaire are described below in the section on the online survey, as the wording of the demographic questions was the same for both. In addition, during the interviews, we encountered some language barriers with a few interview partners, where a translator would have been helpful.

Online Survey

Approach: Similar to the interview guide, we incorporated the exclusion mechanisms of the literature review into the online survey by inquiring the participants' experience with microaggressions such as interruptions or being overlooked, having difficulties speaking up, among others. Additionally, we focused on capturing their usage behaviour in online meetings (e.g. camera use, chat use etc.). On the other hand, we included gender and other diversity dimensions that appeared to play a role in the literature review (e.g., age, education, language) in the demographics section in order to analyse the results accordingly. In developing the specific questions for the quantitative online survey, we aimed to formulate questions and response categories that were easily comprehensible and sensitive to various life circumstances and affected groups.

Difficulties/learnings: We now want to critically reflect on the development process of the questionnaire and the challenges we had in this context:

First, we discussed the manner in which we intended to inquire about gender: Since we planned a rather small sample size for the survey and this option was recommended in the guidelines of Scheuerman et al. (2020), we chose an open text field. The question

was not a compulsory, so participants could decide whether they felt comfortable answering it. In this open text field, survey participants could describe their gender *("Geschlecht")* in their own words. The majority of the participants identified themselves as female or male, few used the terms woman or man. Some participants identified as non-binary (some in English, others in German) and others as inter*, intergendered, genderqueer-/fluid or inter/male. One participant proactively gave feedback that they strongly support the option of open text fields[2].

In order to capture gender transitions, we also asked: *„Entspricht Ihr aktuelles Geschlecht jenem, das Ihnen bei Ihrer Geburt zugewiesen wurde?"* [Is your current gender the same as the one ascribed to you at birth?]. We requested this information, because we wanted to include the perspectives of inter* and trans* individuals on online meetings[3]. This question was also not compulsory, so participants could decide whether they felt comfortable answering it. One participant from the inter* community gave feedback that asking for gender in this manner can be confusing, as it is unclear whether we ask for the legal gender or the gender identity. Therefore, as Pöge et al. (2022) point out, it should be phrased in a more understandable and precise way. Another participant in the online survey, a moderator from one of the recruited teams whose members have a diverse cultural background and first languages other than German, also told us that the team found this question confusing. This shows that addressing the needs of several groups can be contradictory and therefore challenging. So a potential approach could be to ask explicitly and precisely about individuals' identification as inter* or trans*, but also to include info boxes that explain these terms in a comprehensible way for people who are not yet familiar with them.

In order to capture whether participants might have marginalisation experiences in online meetings for being BIPOC and/or having a migration background, we included the question: *Werden Sie von manchen Personen z.B. aufgrund Ihrer Sprache, Hautfarbe, Herkunft oder Herkunft Ihrer Eltern nicht als Österreicher*in gesehen?* [Are you not perceived as an Austrian by some individuals, for example because of your language, skin colour, origin or the origin of your parents?] In contrast to other questions, we did not receive any feedback on this question, but are considering an alternative wording because it was challenging in the report to describe this group as it covers many life realities at once. For the future, it might be easier to be more precise and ask about the groups individually. However, this would unduly lengthen the questionnaire.

To inquire about physical limitations that could impact participation in online meetings, we posed the question, "Haben Sie eine Seh- oder Hörbeeinträchtigung?" [Do you have a visual or hearing impairment?]. In our case, it would have been better to ask about

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[2] We did not ask for feedback directly, but the person chose to give feedback to the project team in an email.
[3] Currently, there is little research that includes the experiences of inter* and trans* individuals in online formats.

disability instead of impairment, as individuals who can see well with glasses also responded affirmatively to this question, although they have visual difficulties in online meetings. However, the primary intention was to use the question to identify people whose vision cannot be fully compensated for by glasses. This resulted in a decrease in the significance of the collected data on this item.

Regarding educational background, we asked for the highest level of education with a closed question. The answer categories were highly aligned with the Austrian educational system, which makes it difficult for individuals with education from other countries to classify themselves. In addition, it was unclear for the participants if they could include their foreign degree even if it was not officially recognised in the Austrian system. In the future, it might be better to use an international classification system of education levels.

As a general learning, we can conclude that being as precise as possible makes it easier for the participants to answer questions, as well easier for us to use the results. In addition, if one aims for a diverse sample, the survey instruments also have to reflect these different life realities (e.g., language). However, this also leads to longer questionnaires with info boxes and more detailed questions.

4. How to consider diversity dimensions in selecting a sample for the needs assessment?

Simultaneously with the development of the data collection instruments, we started to recruit teams for the needs assessment. In compiling the sample of eight teams, we faced the challenge of representing the following diversity dimensions:

Context of Use	Gender	Age	Language	Ethnicity	Education	Online Tool
Company	Women	Under 35	Meeting in native language	BIPoC	Low	Zoom
Research	Men	36-50	Meeting in other language	Caucasian	Middle	Microsoft Teams
Association, community of interest	Diverse	Older			High	GotoMeeting
Self-help group or similar						Google-Meet

Table 2: Dimensions and characteristics for the selective sampling

We initiated a search among our extended networks to identify teams that meet specific diversity requirements and have a maximum membership size of 15 for the purpose of observation. In order to identify teams, we requested the following information from teams via email:

- What is your team working on, and what is the purpose of your meetings?
- How often do you meet?
- How many members does your team or group have? What is the approximate composition of your team in terms of gender and age?
- What software do you use for your online meetings?

The selection of the teams to be observed followed a selective sampling strategy (Ganz and Hausotter 2020), for which the diversity dimensions to be covered were defined. The search for the teams was modified on the basis of the information provided by the teams already acquired in order to meet the dimensions that were still missing.

The teams that we were able to recruit for our study covered a wide variety of individual dimensions:

Team	Gender			Age			Meeting language skills		Ethnicity	
	Women	Men	Divers	Under 35	36-50	Older	Fluent	Partly	Cauca-sian	BIPoC
Neigbourhood network	9	0	0	1	3	4	5	4	5	3
Adult education course	8	2	0	3	4	2	1	9	0	10
Education team	8	1	0	5	4	0	9	0	8	1
Facility management team	0	6	0	1	3	2	6	0	6	0
IT-team	2	4	0	3	3	0	6	0	6	0
Research group	3	5	0	4	4	0	7	0	6	2
Lab team	1	4	0	4	0	1	5	0	4	0
Total	31	22	0	21	21	9	39	13	35	16

Table 3: Coverage of diversity dimensions of selected teams

We were able to cover nearly all diversity dimensions to at least some extent, as table 3 shows, but none of the designated teams had an individual that identified gender-divers. As it was a big concern and part of our research interest to think gender not only in binary terms, we decided to reach out for a team of trans*, inter* and non-binary people within our research project. A search on the web and in our personal networks resulted in 16 possible groups/associations/networks/sub-organisations of advocacy LGBTQIA groups/parties for FLINTAs, queer individuals, trans* and inter* individuals. All individuals were contacted via e-mail and, to a lesser extent, through telephone communication, with the purpose of extending an invitation to participate in our project. In the end, we did not succeed in finding a group that was willing to be observed in online meetings. In hindsight, it might be argued that the decision to propose the observation

of one of their meetings to the target group was inadvisable. Due to the stigma and prejudice faced by marginalised groups, it can be difficult to obtain consent from members of these groups to participate in research projects (Else-Quest und Hyde 2016) as this requires a relationship of trust between the group and the research team.

As the online survey of the needs assessment later revealed, trans- inter and non-binary people in our sample activate the camera in meetings less often than other participants (Reidl et. al 2022). This suggests that they would also not like to be observed by researchers in a meeting. The potential cause of this outcome could also be attributed to the intricate nature of the study design, which may have appeared labour-intensive and hence acted as a disincentive. In addition, we suspect that LGBTQIA groups and associations are receiving an increasing number of requests from the research community. This can be attributed to the rising prevalence of investigating gender diversity in research endeavours, which is increasingly regarded as a scientific standard. Therefore, these entities are unable to fulfil these requests due to time constraints. In addition, the timing of our survey in spring 2022 was probably also inconvenient, as many groups were returning to face-to-face meetings at that time after a long period of online meetings caused by the COVID-19 pandemic.

After we had realised that a team of trans*, inter* and/or non-binary individuals was unattainable, we therefore decided to alter our strategy and asked members of the researched and requested organisations, our personal networks and on social media for interviews and participation in the online survey. In most cases, we did not receive a response to our requests; but, in two instances, we successfully arranged interviews, only to have them subsequently cancelled. Finally, only one trans* woman agreed to be interviewed. Furthermore, the online survey was ultimately completed by six trans*, inter* or non-binary individuals.

In addition, to the observations and the online survey, we interviewed three to five members from each team whose meeting we observed. Again, the respondents were selected using the method of selective sampling (Ganz und Hausotter 2020).

In each case, the moderator of the respective meeting was asked to participate in an interview, as they could report both from the perspective of moderator and participant in online meetings. In addition, we interviewed between two and four participants from the observed meetings. On the one hand, we paid attention to the coverage of various diversity dimensions (gender, age etc.). On the other hand, we examined the team's structure and the role of its members. We wanted to ask both seemingly more extroverted individuals, who had a large share of speaking time in the observed meetings, and seemingly more introverted, quieter individuals. In addition, three interviews were conducted with experts on moderation and (online) communication via online meetings.

In total, 63 individuals were involved in the needs assessment: 53 individuals were observed, 60 individuals participated in the online survey and 27 individuals were interviewed - so the individual samples overlap to a large extent (see table 1). Given the comprehensive data available on the participants of the online survey, we will provide a concise overview of the sample in light of this information:

Online Survey

The link to the online survey was sent to all team members, facilitators and few interest groups and associations of gender diverse, trans*, inter* or non-binary individuals. There were 60 questionnaires included in the evaluation. The sample is not at all representative of the population. Significantly more women participated in the survey, followed by 28% men and 17% trans*, inter* and non-binary individuals. Six people have not answered this question.
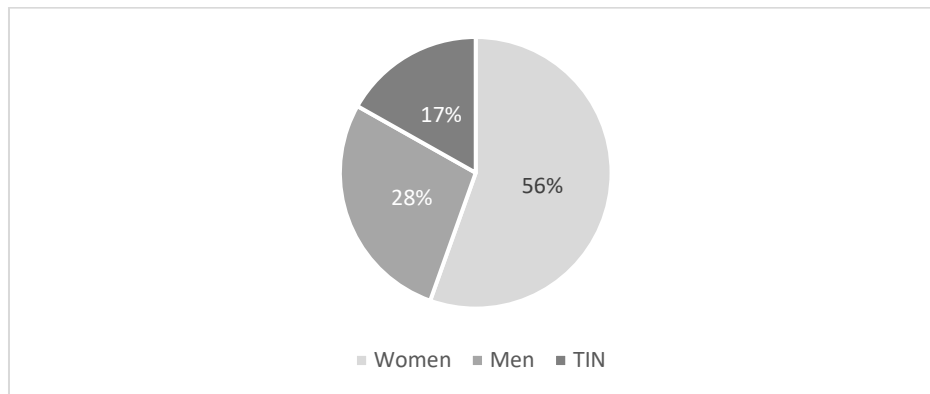

Figure 2: Survey: Participants by gender (n=54)

The participants' ages ranged relatively evenly between 18 and 70 years. 42% of respondents were between the ages of 36 and 50. Up to 35-year-olds accounted for 30% of the sample and those over 50 years made up 28%. Men tended to be younger than women. Additionally, individuals whose native language is not the meeting language tended to be younger.

Among the participants, a particularly large number have completed higher education at a college, post-secondary institution, university of applied sciences, academy or university (68%). Just under 20% have completed an apprenticeship or similar programme or hold the high school graduation as their highest level of education. Twelve percent of the participants have a compulsory school leaving certificate or no completed school education at all.

Almost 90% of the respondents speak German as their native language, while 10% of the participants have another mother tongue. Among the participants, about 18% stated

others perceive them as non-Austrians based on factors such as appearance or language.

Due to limited resources and a small sample size, we were unable to conduct an intersectional analysis of the data. Therefore, we decided to analyse the quantitative and qualitative data step by step according to diversity dimensions. On this basis, we were able to identify differences based on age, gender or origin, but cannot make any assertions regarding the overlap of diversity dimensions. This additive approach is a deficiency of our project because social identities and inequality are interdependent and not mutually exclusive for groups such as Black lesbians (Bowleg 2008). An intersectional analysis of all types of data would be preferable.

5. How to consider diversity dimensions in selecting participants for Co-Creation?

For a common understanding of the target group's desires and needs, we developed personas based on the results of the needs assessment. Personas are fictional user profiles that help visualize a typical user, foster empathy, and improve designers' understanding of the people they are designing for (Miaskiewicz und Kozar 2011). We used these personas in remote co-creation workshops with potential users to develop solution ideas for different application scenarios. To find suitable and appropriate participants, a questionnaire was sent to a user panel in advance. Based on the answers, a diverse group of people was put together for the workshops.

Personas

When creating the personas for our project, we paid special attention to gender and diversity dimensions and attempted to avoid stereotyping. Following the work of Himmelsbach et al. (2019) we tried to consider the four layers of diversity (Gardenswartz und Rowe 2009) in the design of our personas. The first layer of diversity highlights the distinctive personality, which in our project represents technology affinity and extraversion. For the second and third layers, we mapped age, ethnicity/race and gender in the first dimension and education, geographic location, language, migration biographies and also parental or relationship status in the second dimension. The individual aspects in the work context are displayed in the fourth layer and were also represented in the personas and their scenarios through the use of online communication, either in the business context or in the private context, as well as through the role as moderator or participant.

We started in a coordinate system with the dimensions technology affinity and extraversion (see figure 3). Within the coordinate system, four personas formed the basis for further development. The female and male gender components of the dimensions were equally distributed. In order to avoid these stereotypes, the female persona was not assigned with non-tech proficient and introverted.
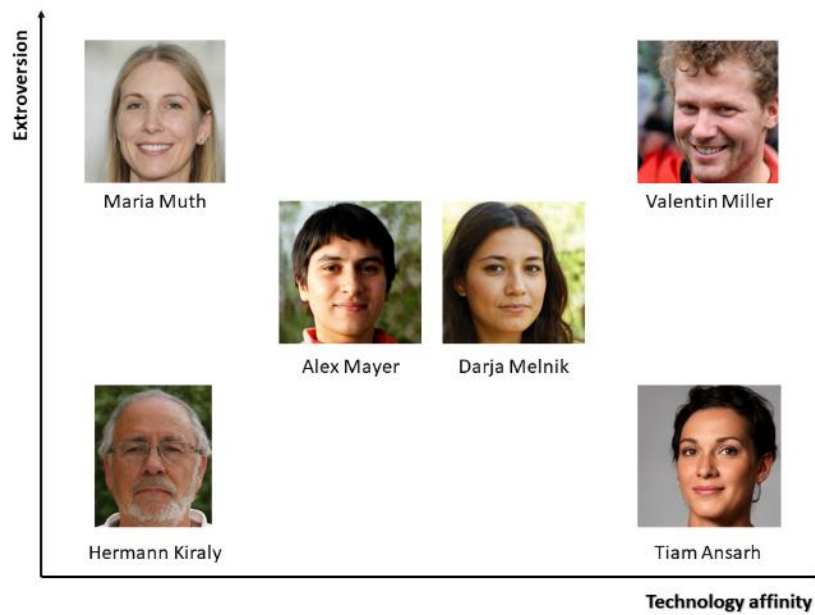
Figure 3: Coordinate system for creating the personas (pictures are AI-generated)

In addition to the four basic personas, a fifth non-binary persona was created with medium expressions of the two dimensions. All other previously mentioned diversity dimensions were distributed among the meanwhile five personas.

This set of five personas and their corresponding user stories were further enriched by incorporating the findings from the preceding needs assessment. This approach aligns with the recommended practice of developing personas by aggregating user research, combining insights from numerous users into a cohesive narrative (Adlin und Pruitt 2010). After a detailed review of the results of the needs assessment, that took place in advance (see chapter 4), it immediately became apparent that another persona was crucial, whose primary focus was on mobile online communication. Thus, a total of six personas were created, which are described in more detail in table 4.

Persona Name	Short description	Age	Gender	Origin	Device
Hermann Kiraly	Must attend telcos at work, is very stressed as a result, has difficulties in using, often turns off his camera	63	m	Austria	PC at work
Valentin Miller	Successful start-up CTO, likes to share, technology must be able to do everything and solves any problems	36	m	Austria	Mobile, tablet, PC
Tiam An-sarh	Language barrier, therefore, prefers to use chat, afraid of making mistakes, is very structured and wants structure in an online meeting	28	w	Iran	Mobile, tablet, PC
Alex Mayer	Has to communicate a lot at work, but doesn't like telcos, feels misgendered and being discriminated against, wishes for more sensitivity, acceptance and tolerance in this context	43	Non-binary	Austria	Mobile, tablet, PC
Darja Melnik	Uses telcos privately to communicate, participates with her cell phone, in a noisy environment, is often disturbed, always has her micro on	30	w	Ukraine	Mobile

Table 4: Short description of all personas

Co-Creation Workshops

Fostering the involvement of a wide range of individuals, in human-computer interaction research is essential for the development of technologies that are both safe and inclusive, thereby promoting fairness and equality.

To facilitate the upcoming co-creation activities, efforts were made to form diverse groups of participants for the workshops. Consequently, a short questionnaire was sent to a user panel in advance with the purpose of soliciting their participation in complementing the questionnaire and engaging in one of the co-creation workshops. On the

basis of those answers we selected the participants for the upcoming co-creation workshops. This questionnaire inquired about various dimensions of diversity, including gender, age, ethnicity, experiences of discrimination, and educational background. Additionally, participants were asked about their familiarity with technology (Wessel et al. 2019), their extraversion (Rammstedt und John 2007), and other factors relevant to online communication, including their role in the meeting, the context, the device they would be using, the environment, and their frequency of engagement.

The response rate of the questionnaire was high, but we were only able to cover the female and male gender dimensions but could not engage inter*, trans* or non-binary individuals. Thus, several individuals who had previously been asked for an interview as part of the needs assessment were subsequently contacted via email and asked if they would be interested in attending one of the subsequent co-creation workshops. We also re-contacted the various groups, associations, networks, or sub-organizations that represent the interests of FLINTAs (women, lesbians, inter*, non-binary, trans*, and gender individuals), queer individuals, LGBTQIA communities, and trans* and inter* individuals who had already been contacted for the needs assessment. The goal was to ask them to complete the questionnaire and participate in one of the co-creation workshops. Unfortunately, these efforts did not produce the anticipated outcome.

The three co-creation workshops took place online. Within two hours, suggestions for solutions and ideas for possible interaction concepts that address the hurdles described in the scenarios were developed together with users. Therefore, the created personas and user stories served as input and starting points.

A total of 24 people participated in our workshops, including 11 females and 13 males. They were all between 26 and 76 years old, with an average age of 45. Seven participants reported that they had experienced discrimination in their life. The range of affinity for technology was from relatively low (three participant) to very high (five participants). On average, the affinity for technology was slightly above the mean. The average extraversion of all participants was 3.66 on a Likert scale ranging from 1 not at all to 5 very much. While three people had only engaged in private online communication, all other participants use online communication more in a professional context, with six individuals having no moderation experience and one participant acting solely as moderator.

Difficulties and Learnings

In all workshops, we managed reasonably well to assemble a diverse group according to the previously queried dimensions age, experience of discrimination, extraversion and technology affinity, but we were unable to adequately cover the gender and education dimension.

During the workshops it became apparent that at least one participant is in a same-sex relationship. This individual was able to empathize well with various gender and diversity obstacles faced by the exhibited personas. This prompted us to question whether we had asked the correct question in our pre-questionnaire to select the participants, whether it was sufficient to ask about gender, or whether other dimensions, such as sexual orientation, would have been relevant here as well.

During a workshop, one individual was clearly discriminated against on multiple occasions due to their origin. This situation was extremely unpleasant and stressful for the individual and also for the facilitator and all other participants. It took the facilitator several attempts to stop the discriminating person from continuing to discriminate against a participant. This incident once again emphasized the importance of the project because on the one hand, the moderator does not always notice discrimination and may first have to be made aware of it by other participants, and on the other hand, the moderator may not even know how to deal with it.

Within the co-creation workshops, participants actively contributed by generating a multitude of ideas and formulating initial interaction concepts specifically tailored to overcome the obstacles presented in the personas and scenarios. Three main topics could be identified. The first topic was that users support a distribution of speaking time among all participants based solely on task and contextual factors rather, irrespective of their individual characteristics. For example, participants who present something in the meeting should get more time than those who just listen and give feedback. This objective can be supported by technology, specifically by using visual information, such as displaying the amount of time already spent speaking. Furthermore, participants should have opportunities to provide non-verbal feedback on meeting experiences, both during and after the session, including instances of inappropriate behaviour such as discriminatory language. Moreover, making diversity visible was frequently addressed and discussed. Existing solutions in online communication platforms only provide limited options, such as displaying pronouns alongside names. It is crucial to develop solutions that comprehensively address diversity in a more inclusive manner.

6. How to shed more light on the topic of "Making Diversity visible"?

As the participants found it difficult to develop concrete ideas on the topic of "making diversity visible", the project team decided to conduct an internal workshop to further enhance our understanding and broaden the range of potential technological and moderation solutions for the further use of the project. Seven members of the FairCom project team discussed the significance of emphasizing diversity and collected ideas for technical and moderation solutions.

The results of the user survey were reviewed in preparation of the workshop, and all pertinent information was presented in condensed form during the workshop. This included the problematic areas of inappropriate jokes and other micro aggressions, misgendering, varying speaking times, and different levels of attentiveness to speaking inputs. The survey revealed that trans*, inter* and non-binary individuals were more likely than cis-woman and cis-man respondents to not want to be filmed during a meeting. In addition, clear rules and the chat were especially relevant for trans*, inter* and non-binary individuals. In the interviews, it was also mentioned that an outing can be more difficult when individuals only know each other online as trust is easier to develop in personal meetings. Consequently, the subject of visibility is complex and ambivalent. This prompted the following questions: What visibility options does the digital environment provide? Who is doing it for whom and to what extent? Who wishes to be made visible? What benefits can feedback mechanisms provide? In addition, since this topic frequently came up in the process, (how) could avatars contribute to this?

After the presentation of the results, possible solutions were collected. For this, the method of collaborative brainwriting[4] was used, in which each participant was given several minutes to independently generate ideas and record them on a whiteboard without any critical evaluation. After this phase, participants had time to silently read and add to the ideas proposed by others. The collected ideas were then grouped and discussed with the project team in plenary. One group of proposed solutions centred on providing feedback to and attracting the moderator's attention (e.g., some sort of emergency button). Another group of solutions focused on awareness and sensitivity for needs of gender diverse individuals (e.g., different options of stating pronouns). The third group was about visualisation and options of anonymous communication in online meetings (e.g., anonymous message channels to moderator). The last group addressed sensitization of moderators and moderation techniques and methods (e.g., post-meeting feedback questionnaires and interaction cards). The ideas were refined and prioritised. These ideas then contributed to the subsequent process.

Resumé

This project was conducted in the field of applied research and carried out to the best of our abilities. When we started the project with the literature review, it became evident that we would have to consider a variety of diversity dimensions for a needs assessment in online meetings. However, due to limited resources, restrictions had to be imposed. For instance, we decided not to address the question of how to develop online meetings for people with disabilities, despite the fact that there is definitely a significant demand for this. Finally, we succeeded in covering many diversity dimensions when recruiting participants for the needs assessment, which led to relevant results for the co-

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[4] More about collaborative brainwriting can be found here: https://www.lucidchart.com/blog/how-to-use-brainwriting-for-idea-generation or here https://conceptboard.com/blog/brainwriting-technique-free-template/

creation workshops. Additional personas had to be developed to reflect these findings in the personas and user scenarios developed for the co-creation workshops. Overall, this contributes very positively to the further development of inclusive moderative and technological solutions in the further course of the project. However, we have been insufficiently successful in acquiring non-binary participants. To attract this target group, we should not have asked them for observation. Also, we would have had to think of a strategy to build trust, e.g., by involving a non-binary person in the research team (e.g., an expert). The experiences from the co-creation workshops have also shown us that under certain circumstances it can be helpful not only to focus on non-binary persons but also to involve persons with a homosexual orientation in research projects. The co-creation workshops have shown that they empathized well with gender and diversity obstacles faced by the personas. In addition, this target group is larger and perhaps easier to reach than non-binary people.

In conducting the needs assessment, we learned a lot about how to better serve a diverse group of participants. We need to use an international classification system to identify levels of education. We need to ask about disability, not impairment, to get meaningful data on people who cannot compensate for vision problems with glasses. In order to accommodate participants whose native language is not German, the utilisation of interpreters for interviews and the inclusion of information boxes in surveys would have been essential. This would have had to be calculated in the project costs. However, we also recognised that different target groups have different needs for question wording (clear and in simple language for people with different cultural background and language, more open text boxes and differentiation between legal gender and gender identity for LGBTQIA* people). Designing intersectional survey instruments that work equally for all participants is an art that requires further development. We also contemplate the feasibility of eschewing a one-size-fits-all questionnaire in favor of target group-specific surveys, allowing for nuanced adjustments in aspects like wording to better cater to diverse needs. In this case, however, the challenge is to ensure that differently formulated questions measure the same. In addition, this approach also raises the question of resources, as the data analysis is much more time-consuming. Solutions in this regard need to be developed in following research projects.

We also found that we should have addressed the individual steps of instrument development, sampling, and data analysis in more detail for claiming an intersectional approach than was possible in this development project. An intersectional analysis of the interview data, for example, would have been beyond our budgetary scope. We were therefore left with the approach of analysing the data according to individual diversity dimensions. Yet, with our exploratory approach, we succeeded to collect a wide range of suggestions for improvement and ideas for solutions that, if implemented, can benefit a broad range of individuals.

All in all, we discovered that dealing with diversity in research and development projects means a continuous learning process. Based on our experience with FairCom, we would do some things differently in subsequent projects:

In future endeavors, we aim to assemble a more diverse research team in terms of gender, origin, and other factors. This will enable us to better reach various target groups when recruiting test subjects and to incorporate a broader range of knowledge and perspectives into the project. One option here would be to calculate fees for experts to conduct more specific sensitivity checks with survey instruments. We anticipate additional resources for a qualitative intersectional analysis.

In conclusion, we expect that our insights from our applied project will contribute to advancing and further developing the treatment of diversity in research and development, as well as promoting an open and honest exchange within the research and innovation community.

References

Adlin, Tamara; Pruitt, John (2010): *The essential persona lifecycle. Your guide to building and using personas.* 1st edition. Burlington, Mass.: Morgan Kaufmann.

Amarasekara, Inoka; Grant, Will J. (2019): Exploring the YouTube science communication gender gap. A sentiment analysis. *Public understanding of science* (Bristol, England) 28 (1), S. 68–84. DOI: 10.1177/0963662518786654.

Arellano, Evelyn (2020): *Power Dynamics and Inclusion in Virtual Meetings.* AspirationTech. Online verfügbar unter https://aspirationtech.org/blog/virtualmeetingpowerdynamics.

Armentor-Cota, Janet (2011): Multiple Perspectives on the Influence of Gender in Online Interactions. *Sociology Compass* 5 (1), S. 23–36. DOI: 10.1111/j.1751-9020.2010.00341.x.

Bowleg, Lisa (2008): When Black + Lesbian + Woman ≠ Black Lesbian Woman. The Methodological Challenges of Qualitative and Quantitative Intersectionality Research. *Sex Roles* 59 (5-6), S. 312–325. DOI: 10.1007/s11199-008-9400-z.

Buchebner-Ferstl, Sabine; Geserick, Christine; Kaindl, Markus (2020): *Elternbildung im digitalen Zeitalter. Chancen - Risiken - Grenzen* (ÖIF Forschungsbericht, 34).

Callahan, Kristin (2021): Valuing and Supporting Introverted Students in the Virtual Design Classroom. *Int J Art Design Ed* 40 (4), S. 714–722. DOI: 10.1111/jade.12383.

Castelli, Frank R.; Sarvary, Mark A. (2021): Why students do not turn on their video cameras during online classes and an equitable and inclusive plan to encourage them to do so. *Ecology and evolution* 11 (8), S. 3565–3576. DOI: 10.1002/ece3.7123.

Catalyst (2020): *The Impact of COVID19 on Workplace Inclusion*: Survey. Online verfügbar unter https://www.catalyst.org/research/workplace-inclusion-covid-19.

Connley, Courtney (2020): *45% of women business leaders say it's difficult for women to speak up in virtual meetings.*, 03.09.2020. Online verfügbar unter

https://www.cnbc.com/2020/09/03/45percent-of-women-business-leaders-say-its-difficult-for-women-to-speak-up-in-virtual-meetings.html.

Cullinan, Renee (2016): Run Meetings That Are Fair to Introverts, Women, and Remote Workers. *Harvard Business Review*, 29.04.2016. Online verfügbar unter https://hbr.org/2016/04/run-meetings-that-are-fair-to-introverts-women-and-remote-workers.

da Silva Figueiredo Medeiros Ribeiro, Karen (2020): A Gender Analysis of Interaction in Online Work Meeting Tools. *IHC '20*, October 26–30, 2020, Diamantina, Brazil.

Else-Quest, Nicole M.; Hyde, Janet Shibley (2016): Intersectionality in Quantitative Psychological Research. *Psychology of Women Quarterly* 40 (3), S. 319–336. DOI: 10.1177/0361684316647953.

Frey, Regina (2020): G*eschlecht und Gewalt im digitalen Raum. Eine qualitative Analyse der Erscheinungsformen, Betroffenheiten und Handlungsmöglichkeiten unter Berücksichtigung intersektionaler Aspekte* (Expertise für den Dritten Gleichstellungsbericht der Bundesregierung).

Ganz, Kathrin; Hausotter, Jette (2020): *Intersektionale Sozialforschung*: transcript Verlag.

Gardenswartz, L.; Rowe, A. (2009): *Diverse teams at work. Capitalizing on the power of diversity.* Hg. v. Society for Human Resource.

Hauk, Nathalie; Hüffmeier, Joachim; Krumm, Stefan (2018): Ready to be a Silver Surfer? A Meta-analysis on the Relationship Between Chronological Age and Technology Acceptance. *Computers in Human Behavior* 84, S. 304–319. DOI: 10.1016/j.chb.2018.01.020.

Heath, Kathryn; Flynn, Jill (2014): Women, Find Your Voice. *Harvard Business Review*. Online verfügbar unter https://hbr.org/2014/06/women-find-your-voice.

Herring, Susan C.; Stoerger, Sharon (2013): Gender and (A)nonymity in Computer-Mediated Communication. In: J. Holmes, M. Meyerhoff und S. Ehrlich (Hg.): *Handbook of Language and Gender.*

Himmelsbach, Julia; Schwarz, Stephanie; Gerdenitsch, Cornelia; Wais-Zechmann, Beatrix; Bobeth, Jan; Tscheligi, Manfred (2019): Do We Care About Diversity in Human Computer Interaction: A Comprehensive Content Analysis on Diversity Dimensions in Research. *Do We Care About Diversity in Human Computer Interaction: A Comprehensive Content Analysis on Diversity Dimensions in Research*, S. 1–16.

Hui, Sun; Milin, Petar; Divjak, Dagmar (2021): Native perception of non-native speech: Speaker accent mitigates penalization for language errors in non-native speech unless the listener is conscientious (*UC Merced - Proceedings of the Annual Meeting of the Cognitive Science Society*). Online verfügbar unter https://escholarship.org/uc/item/54r77777.

Kawsar, Ali (2021): Zoom-ing in on White Supremacy. *M/C J* 24 (3). DOI: 10.5204/mcj.2786.

Laitinen, Kaisa; Valo, Maarit (2018): Meanings of communication technology in virtual team meetings. Framing technology-related interaction. *International Journal of Human-Computer Studies* 111, S. 12–22. DOI: 10.1016/j.ijhcs.2017.10.012.

Lowenthal, Patrick R.; Borup, Jered; West, Richard E.; Archambault, Leanna (2020): Thinking Beyond Zoom: Using Asynchronous Video to Maintain Connection and Engagement During the COVID-19 Pandemic. *Journal of Technology and Teacher Education* 28 (2), S. 383–391.

Luk, Artesimia (2021): *Zoom 2.0: Designing a Video Conferencing Platform for Students with Social Anxiety at Wellesley College.* Master's Thesis. Online verfügbar unter https://repository.wellesley.edu/object/ir1600.

Mendelberg, Tali; Karpowitz, Christopher F.; Oliphant, J. Baxter (2014): Gender Inequality in Deliberation. Unpacking the Black Box of Interaction. *Persp on Pol* 12 (1), S. 18–44. DOI: 10.1017/S1537592713003691.

Meyer, Zlati (2020): Do you show your face in Zoom meetings? Your gender may play a role. *FastCompany*, 23.06.2020. Online verfügbar unter https://www.fastcompany.com/90514033/do-you-show-your-face-in-zoom-meetings-your-gender-may-play-a-role.

Miaskiewicz, Tomasz; Kozar, Kenneth A. (2011): Personas and user-centered design. How can personas benefit product design processes? *Design Studies* 32 (5), S. 417–430. DOI: 10.1016/j.destud.2011.03.003.

Mori, Akira S. (2020): Next-generation meetings must be diverse and inclusive. *Nat. Clim. Chang.* 10 (6), S. 481. DOI: 10.1038/s41558-020-0795-z.

Nadim, Marjan; Fladmoe, Audun (2021): Silencing Women? Gender and Online Harassment. *Social Science Computer Review* 39 (2), S. 245–258. DOI: 10.1177/0894439319865518.

NeXR (2020): *Digitale Meeting-Kultur.* Online verfügbar unter https://nexr-seminar.com/wp-content/uploads/2020/09/Studienergebnisse_NeXRSeminar.pdf.

ÖIAT (2014): *Maßnahmen für Senior/innen in der digitalen Welt.* Online verfügbar unter https://www.digitaleseniorinnen.at/fileadmin/redakteure/Downloads/studie_massnahmen_fuer_senorinnen_in_der_digitalen_welt.pdf.

Pöge, Kathleen; Rommel, Alexander; Starker, Anne; Prütz, Franziska; Tolksdorf, Katharina; Öztürk, Ilter et al. (2022): Geschlechtliche Diversität in der Studie GEDA 2019/2020-EHIS - Ziele, Vorgehen und Erfahrungen. *Journal of Health Monitoring* 7 (2), 52-71.

Rammstedt, Beatrice; John, Oliver P. (2007): Measuring personality in one minute or less: A 10-item short version of the Big Five Invento-ry in English and German. *Journal of Research in Personality* 41 (1), S. 203–212.

Reidl, Sybille; Streicher, Jürgen; Hock, Marlene; Hausner, Beatrix; Waibel, Gina; Gürtl, Franziska (2020): *DIGITALE UNGLEICHHEIT - Wie sie entsteht, was sie bewirkt ... und was dagegen hilft.* Online verfügbar unter https://www.femtech.at/sites/default/files/pictures/Reidl%2C%20Streicher%2C%20Hock%2C%20Hausner%2C%20Waibel%2C%20G%C3%BCrtl%20%282020%29%20Studie_Digitale_Ungleichheit_barrierefrei_final.pdf.

Reidl, Sybille; Beranek, Sarah; Greithanner, Julia; Sauer, Angelika; Schiffbänker, Helene: D2.2 *Ergebnisbericht zu Nutzer*innenerhebungen.* Wien 2022

Rini, Rini; Noorman, Safrina S.; Nafisah, Nia (2021): Zoom-Storytelling. An Activity to Reduce Students' Speaking Anxiety. *JPP* 21 (2), S. 112–121. DOI: 10.17509/jpp.v21i2.36653.

Rubin, Jennifer D.; Blackwell, Lindsay; Conley, Terri D. (2020): Fragile Masculinity: Men, Gender, and Online Harassment (*CHI '20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* April 2020 Pages 1–14). Online verfügbar unter https://doi.org/10.1145/3313831.3376645.

Scheuerman, Morgan Klaus; Jiang, Jialun Aaron; Spiel, Katta; Brubaker, Jed R. (2021): Revisiting Gendered Web Forms: An Evaluation of Gender Inputs with (Non-)Binary People. *CHI'21*.

Scheuerman, Morgan Klaus; Spiel, Katta; Haimson, Oliver L.; Hamidi, Foad; Branham, Stacy M. (2020): *HCI Guidelines for Gender Equity and Inclusivity.* Unter Mitarbeit von Os Keyes, Kate Ringland, Brianna Dym, Leo Stewart, Danielle Lottridge, Jes Feuston et al. Hg. v. Alex Ahmed, Os Keyes und Danielle Lottridge. Online verfügbar unter https://www.morgan-klaus.com/gender-guidelines.html#About.

Sohn, Emily (2018): The future of the scientific conference. *Nature* 564 (7736), S80-S82. DOI: 10.1038/d41586-018-07779-y.

SPECTRA Marktforschung (2018): *Spectra-Digi-Monitor Österreich* (Teil 1).

Tannen, Deborah (1995): The Power of Talk: Who Gets Heard and Why. *Harvard Business Review*. Online verfügbar unter https://hbr.org/1995/09/the-power-of-talk-who-gets-heard-and-why.

Thomas, Rachel; Cooper, Marianne; Konar, Ellen; Bohrer, Ali; Mohsenin, Ava; Yee, Lareina et al. (2019): *Women in the Workplace* 2019. Hg. v. McKinsey & Company.

Veletsianos, George; Kimmons, Royce; Larsen, Ross; Dousay, Tonia A.; Lowenthal, Patrick R. (2018): Public comment sentiment on educational videos. Understanding the effects of presenter gender, video format, threading, and moderation on YouTube TED talk comments. *PloS one* 13 (6), e0197331. DOI: 10.1371/journal.pone.0197331.

Wessel, D.; Attig, C.; Franke, T. (2019): ATI-S – An Ultra-Short Scale for Assessing Affinity for Technology Interaction in User Studies. Hamburg: Gesellschaft für Informatik e.V. *Mensch und Computer 2019* - Tagungsband.

Susanne Kink-Hampersberger

Inclusion through exclusion?
The Frauen*Strand as a feminist action

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Starting Note: My contribution about the Frauen*strand (women's*beach) is a collection of reflective thoughts on a feminist action in Graz Geidorf, which took place in the summer of 2023. At its centre stands the question of whether the exclusion of certain people – in this case men*[1] – can also lead to inclusion. Specifically, the inclusion of women* of all ages, origins, religions and physical characteristics.

Reflection thoughts 1: How it all began – or: which feminism is mine?

Actually, it all started with a coincidence and the announcment of a a special meeting – "Frauengespräche" (Women's talk) – that cought my eye[2].

> Meet Anna Majcan, the new chairperson of the Graz Women's Council @ Margerl Grätzeltreff!

Figure 1: Microphone (freepik.com)

I went there with no expectations other than to discuss feminist issues and meet other feminists.

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[1] The use of the * after women and men is intended to draw attention to the social construction of gender and to the visualisation of gender beyond a binary logic.
[2] All of the following drawn pictogrammes were bought from freepik.com.

Really??

NO expectations?

Figure 2: Reflection (freepik.com)

Ok, let's be honest. Beeing socialized in a certain university environment, I went there with the expectation of meeting (young) people between the age of 20 and 45 years, discussing queer-feminist topics. Suddenly, I found myself sitting opposite to female feminists mostly aged 60+ and drinking beer.

Figure 3: Beer bottles and cans (freepik.com)

Why am I mentioning this? It serves as an example of my own stereotypical ideas of feminists and lead to the start of the question: What feminism is actually mine?

In this meeting I had the impression that most, but not all, of the present women* there took a clear position in the direction of difference feminism (see Tandon, 2008). At the same time, fascinated by the feminist energy of experienced women*, I have already asked myself the question: Where would I actually place myself at the moment? Where do I feel I belong?

And then, unexpectedly, the public swimming pool became part of the story.

Reflection thoughts 2: A new idea was born – or: feminism and the public swimming pool

The Margaretenbad (or Margerl) is an institution in Geidorf[3]. A place where people meet regularly. A place that is used intensively by students, families and senior citizens. A place that represents a piece of GeiDORF (in the meaning of village) for me, my partner and my children.

The public swimming pool, as described in the narratives of the older feminists, as a space that seemed much more liberal in the 1980s, a space in which women* could also be topless and unshaven, and nowbody cared about it. One thing quickly became clear: it should become that place again – at least for one day. Goal: revival of the nostaliga of the 1980s – set in a context of feminism – a specific feminism. The public swimming pool as a space for women*. Desires: a 'male-free' space; a space where sexual harrasment has no place[4], a safer space for women*.

Figure 4: Swimming pool (freepik.com)

Once more, questions have arisen: What freedom did women already have in the 1980s and where are we currently experiencing a backlash? What did feminists fight for in the 1980s and which feminism is currently predominant? What happened to the women's spaces that were established during the second wave of feminism (e.g. Brückner, 2019; AEP, 2022) and why is it often uncomfortable for some feminists when only women* are addressed?

Figure 5: Open questions (freepik.com)

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[3] Geidorf is the 3rd (of 17) district of Graz and covers an area of 5.5 square kilometres with around 23,800 inhabitants (if you want to see the city population on a map see https://www.citypopulation.de/de/austria/graz/17455__geidorf/). One characteristic of Geidorf is that the district comprises a large number of universities (including university colleges and universities of applied sciences) – namely 4 out of 8 in Graz. Furthermore, a survey on the quality of life in Graz shows that people who live in Geidorf rate the district as having a high quality of life (for Graz see https://www1.graz.at/statistik/LQI_2018/Broschüre_00_2018.pdf and for Geidorf https://www1.graz.at/statistik/LQI_2018/Broschüre_03_2018.pdf).

[4] I personally do not believe, and studies confirm this, that sexual harassment only comes from men* and only affects women*. The argument fits more to the logic of difference feminist followers.

Reflection thoughts 3: "Frauen*bad (women*s pool)" – or: how many years will it take to realise it?

The second feminist meeting was completely different: younger participants, queer and

Figure 6: Raised Fist (freepik.com)

non binary people as well as older feminists at one table. And me: finding myself sitting between different logics of feminism. On the one hand those, who represented the position of men and women beeing different by nature and call for a feminist action exclusively for women. And, on the other hand, those queer-feminist oriented people, who fundamentally questions the binarity of the sexes and demnadend an opening of the discussion round and feminist action also for LGBTQIA+ people. And what do they have in common? In the words

Figure 7: Arrows (freepik.com)

of Celia Parbey (2022): "*The overarching goal of all feminist movements is to end sexist oppression.*"

And which feminism is actually mine?

Why do I feel comfortable to discuss different topics with a group of people who have all been socialised female? Why do I feel uncomfortable and also inwardly resistant thinking of feminist actions that exclude people, who do not fit into the heteronormative, binary construct of our society and e.g. identify as non-binary or trans*? Is it really still necessary to provide spaces exclusively for individuals socialized as female in contemporary times? If so, when and for what reasons?

After a heated discussion among people with different feminist perspectives, we

Figure 8: Visitor restriction (freepik.com)

decided to organize a "Frauenbad" for one afternoon @ Margaretenbad. The Frauen*bad, a women*'s pool, in which – as the name suggests – only female socialized people[5] are allowed to participate.

A women's pool with the aim of offering women* a safer space where they could be who they wanted to be. A women*'s pool that appeals to women of all ages, religions, skin colours, physical needs, etc. But: a pool exclusively for women*.

We formulated our concern as a group and referred, among other things, to a survey by "Catcalls of Graz". In an Instagram post that

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[5] This means that, for example, non-binary people who were socialised as female could already take part at Frauen*bad, but trans* people or non-binary male socialized people could not.

was open for 24 hours, they asked who doesn't go to the public pool because of negative experiences or body image issues (see their instagramm post from 28 May 2003). It shows that approx. 58% of the 369 women* /FINTA* surveyed never or rarely visit outdoor pools due to negative experiences with (verbal) sexual harassment and distorted body (self-)images in society.

Anna – the representative of the Graz Women's Council – sent our letter to the relevant political representatives.

IN VAIN …

Our request was shot down by politics and the owner of the public pools in Graz with the comment that male season ticket holders could not be excluded from access to the swimming pool.

So we needed to change our minds, or maybe only change the idea a bit?

One question remained: Is a women*'s pool for just one afternoon in Graz possible next year, in 5 years, in 10 years,…

Figure 9: Open questions (freepik.com)

Reflection thoughts 4: The Frauen*Strand (women*'s beach) – or: How much space is given to women and feminist actions?

The need to change our minds meant only to hold on to the old idea but repackage it. The idea of the Frauen*Strand was born. So we couldn't take up the whole place, but we still wanted to create a space exclusively for women*. We wanted to ensure that women* who would otherwise not use the pool for reasons of self-protection or who are not allowed to use it for various reasons, also could have access. Instead of using the entire Margaretenbad, we now concentrated on using the beach volleyball court. This was also approved by the owner of the public pools and politicians.

Figure 10: Enlightenment (freepik.com)

And it seems we hit the mark... Not only was our feminist action mentioned in several newspapers and online (e.g. ORF, 2023; Krone 2023; Mein Bezirk 2023[6]), two television stations reported in the news or on breakfast television[7] and it also attracted a lot of attention in the social media (one of the facebook posts had 19.826 comments – mostly negative, but also positive ones[8]).

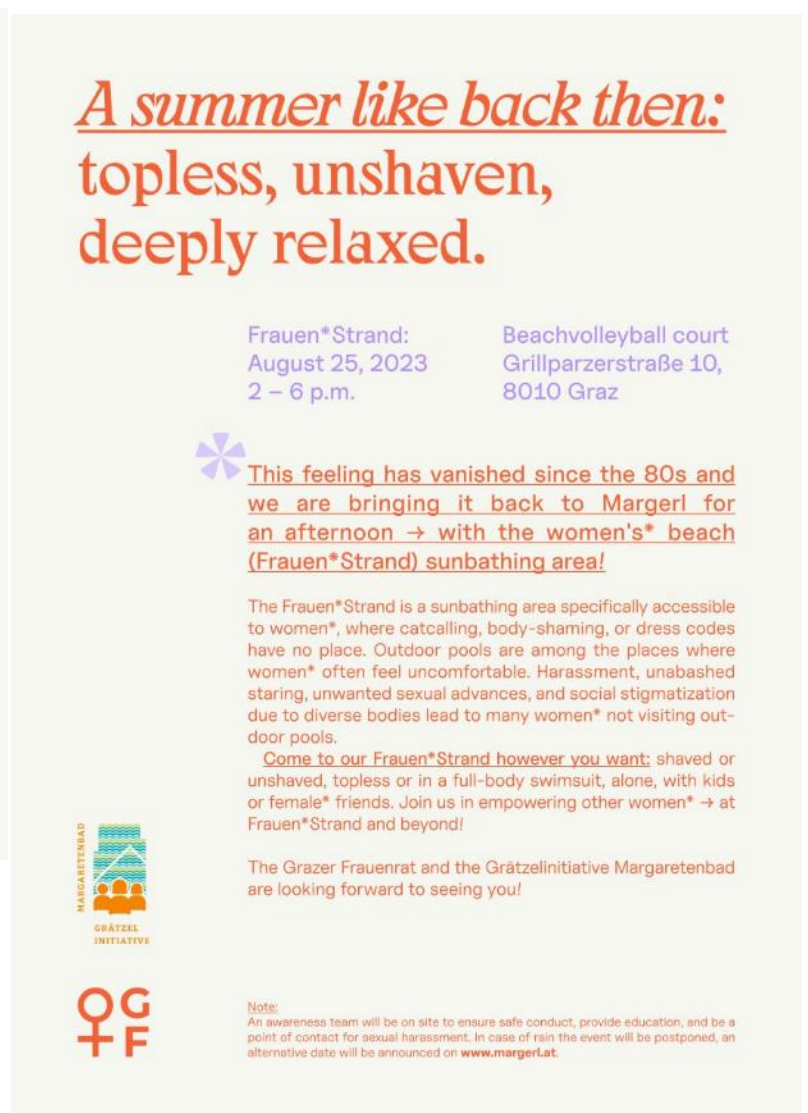Figure 11: Frauen*Strand Flyer (designed by Laura Eibeck)

Figure 12: Frauen*Strand Flyer (designed by Laura Eibeck)

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[6] The ORF "Österreichische Rundfunk" is public, the others are private newspapers.
[7] One was the regional news from ORF with round about 1,2 Million Viewers (see https://werbenmal9.orf.at/steiermark/fakten), the other a private nationwide television station https://www.puls4.com/tv/cafe-puls/staffel-2023-2/episode-241/aktion-badespass-nur-fuer-frauen).
[8] The comments ranged from "regression to the Middle Ages", "nobody wants to see them anyway" to "really great and important action".

And then the day had come.

Figure 13: Frauen*Strand
(photo by Smirna Malkoc)

Figure 14: Frauen*Strand wall (designed by Clara Sinnitsch & Laura Eibeck; credit by Sinnitsch)

About 100 women* enjoyed the beach on this August afternoon in 2023 in Graz. They relaxed, ate, chatted, read and drank. Lying topless or covered up in the sun and swam in the pool. Alone or in groups. And they all contributed to empowering each other, taking up space and spreading feminist action.

But:

How did the other pool visitors react?

How did men*, who are not allowed to participate, react?

How did the sportspeople who were unable to use the beach volleyball court react?

With the exception of a few comments and thanks to the excellent work of the Awareness Team Graz[9], most of the reactions were positive.

Figure 15: Group of people (freepik)

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[9] It is an association that campaigns for more awareness at events and in clubs. See awa_graz on Instagram.

But one fact still leaves me wondering today: how can a public space that has been occupied by 100 diverse women* for three hours be back in the hands of – mostly male, young, white, able-bodied and well-trained – athletes within five minutes of the official end?

Reflection thoughts 5: Inclusion or exclusion or: feminism and participation

To come back to the topic of the issue and the question I asked at the beginning: the exclusion of certain people – in this special case men* – can also lead to inclusion? Have we really created inclusion with our feminist action and the decision to only allow female socialised people on the Frauen*Strand?

Today, I have no clear conclusion for myself. On the one hand, the conversations showed that many women* used the feminist action to dare to go to the public pool again. Different Women* who have not entered a public swimming pool for years for various reasons. At the same time, I'm still frustrated about the joint decision to only allow female socialised people on the Frauen*Strand.

Figure 16: Thinking process (freepik.com)

At this point I would like to add the thoughts of my dear colleague Anita Thaler, who came to the following conclusion:

I think that with your activity 'all men*' were officially and explicitly excluded whereas usually in public or semi-public spaces also implicit limitations are there. Many women* are excluded, but also males. There is classism, ableism, racism and discrimination on the intersections of gender, sexuality etc. at work here. This is highlighted by your action. To see how much more diverse this specific space became for one afternoon and after that switched back to this very homogenous and privileged masculinity of users. This shows that an action which excludes formally people can paradoxically work towards more inclusion in future by visualizing the informal mechanisms of privileged access to public spaces. (Anita Thaler on 14th Nov. 2023)

Figure 17: Anita Thaler (freepik.com)

And finally: can we actually include a broader and more diverse range of women*, when organizing such a feminist action apart from Margaretenbad, which is located in the middle-class district of Geidorf?

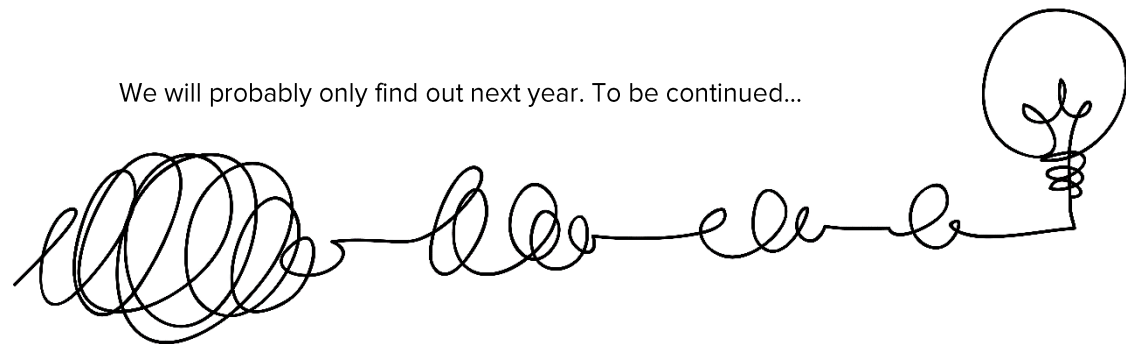We will probably only find out next year. To be continued...

Figure 18: Idea process (freepik.com)

And last but not least:

A special **THANK YOU** to ...

... Anna Majcan, a great feminist and activist, who has done the main work for this action.

... Smirna Malkoc, Claudia Baiser and Irene Windisch, who also put a lot of heart and soul into it.

... the Graz Women's Council, who also supported the campaign.

... Clara Sinnitsch & Laura Eibeck, who designed the wall and flyer.

... the Awareness Team Graz, who provided a safe space.

.... (all those I have forgotten to mention)

... and of course all the women who made the campaign what it was: simply wonderful!

References

AEP (2022). *Frauenräume. Gestern. Heute. Morgen.* See: https://aep.at/frauenraeume-gestern-heute-morgen/

Brückner, M. (2019). Frauenprojekte im Fokus der Geschlechterforschung: vom feministischen Aufbruch zur Institutionalisierung. In Kortendiek, B., Riegraf, B., & Sabisch, K. (Eds.). *Handbuch Interdisziplinäre Geschlechterforschung* (pp. 963-972). Springer-Verlag.

Krone (2023) *Geschützt vor Belästigung: Liegewiese für Frauen. See*: https://www.krone.at/3087861

Mein Bezirk (2023). *Safe-Space gegen Belästigung. Ein Strand nur für Frauen im Margaretenbad. See*: https://www.meinbezirk.at/graz/c-lokales/ein-strand-nur-fuer-frauen-im-margaretenbad_a6212409

ORF (2023): *Margaretenbad öffnet für einen Tag „Frauenstrand".* See: https://steiermark.orf.at/stories/3220285/

Parbey C. (2022). *Feministische Strömungen. VON WOMANISM BIS WITCH FEMINISM.* See. https://www.goethe.de/ins/es/de/kul/sup/fem/22665970.html

Tandon, N. (2008). *Feminism: A paradigm shift.* Atlantic Publishers & Dist.

Lisa Scheer & Susanne Kink-Hampersberger

Queer STS Forum contributions as course assignment

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This short paper serves as an introduction to several student contributions which are published in this Forum. On the following pages, we briefly describe the course and present a few reflections which can be useful for fellow teachers but also editors who wish to attract diverse contributors.

The course

In summer 2023, we held the seminar "Equality policies from affirmative action to intersectional mainstreaming" at the University of Graz, a mandatory seminar in the master programme Gender Studies. Among the 21 students were mostly those from the MA Gender Studies, but also a few students from other BA and MA programmes such as Global Studies and Pedagogy who took it as an elective. As intended learning outcomes for the course we listed that students should be able to

- name and describe underlying equality policies based on different problem formulations,
- know different equality policies and link appropriate measures with them,
- design concepts for the implementation of gender equality and diversity measures,
- link their own professional and leisure experiences with what they have learned,

- analyse their practical experiences with regard to the underlying equality policies, find best practices, formulate gaps and think about further development.

We had the impression that the Queer STS Forum 2023 call on Queer-Feminist Inclusion and Visibility met with what was covered in our seminar and with what students were supposed to learn. Additionally, we like including 'real' assignments: projects with outcomes that are viewed by a larger, class-external audience, that have practical relevance or can directly be used outside of class. Such assignments usually increase students' motivation. Therefore, we included contributing to the Forum as one of three larger assignments, crediting it 20% of the overall course grade.

In one of the classes, we presented the call text, discussed on how it could be understood and let student brainstorm and exchange first ideas. We then gave them a deadline to hand in abstracts so that we can provide feedback and guide students in their assignment work. How students first reacted to the call, how they realised the assignment and what learnings we as teachers and forum editors can draw, is presented in the next section.

Observations and reflections

At first, the students were irritated and put off by the call. They found it very difficult to understand, needed time to digest it and to come up with ideas. We experience insecurity and uncertainty about the correct interpretation and understanding as rather common reactions to assignments and exercises in Austrian higher education settings. This can be explained by a dominating assessment culture in which contributions of any kind are quickly evaluated and mistakes are seen as negative and problematic rather than as learning opportunities. In addition, students' first reaction to the call provides important feedback to editors, especially to the Queer STS working group members who serve as Forum editors. If we aim at inviting diverse contributors, also from outside academia, we must reflect on the style of our call and especially on the language we use. Taking students' reactions seriously, the 2023 call text (and most likely previous ones too) was quite complex and demanding – certainly not very inclusive and barrier-free. We should reflect further on purposes and intentions of our call texts and providing a call in plain language in the future in order to attract further contributors and to minimize scaring interested people off.

Already when receiving the abstracts, we were impressed by the great ideas our students had. This positive impression continued when receiving the contributions: From drawings and poems through posters and (video) interviews to visions and short analysis of queer-feminist inclusion and visibility examples student covered a broad span of topics and styles. We take this variety in contributions as a positive effect of a broad call text and an openly formulated assignment and believe it allowed students to either try out new creative ways of tackling a topic or choose known formats, letting each student

decide on how far they wanted to go regarding creativity and experimentation. Despite its positivity, there is also one downside: grading such a diverse range of contributions. Since it was hard to apply the same criteria to all the contributions, we decided to grade them quite mild and not be too critical about them. This led us to realize that further joint reflections on and conceptualisations of creative assignment grading criteria and practices are needed.

In the end, not all students wanted their contribution published in the Forum. Some would have needed small revisions but did not have the time during summer, others did not want to put in further resources for a translation from German to English. Two students did not feel comfortable sharing their very creative and rather personal contributions. These observations point at additional challenges in higher education such as limited student resources and limiting semester structures.

Overall and looking back, we were glad that we included the Forum contribution in our course and assignment structure because we believe it fostered student learning, it let them choose their level of creativity, and it motivated them because they contributed to a 'real' format that is openly accessible and read by many people – definitely by more than just their instructors which is usually the case with student assignments.

Stefanie Reinthaler & Meike Steinberg

Visibility and Inclusion

Introduction

The words visibility and inclusion, their interplay, and especially their role in activism are becoming increasingly significant. The visualization of experiences of discrimination has the potential to bring previously invisible experiences into the spotlight and dismantle barriers to inclusion through lived and narrated experiences of exclusion. Particularly in feminist activism, there is a striving to consider and tell intersectional and multidimensional experiences of discrimination in order to make them visible and create safe spaces for individuals through measures and concepts. In this interview with Eva Taxacher (E) held on June 12th, 2023 by Meike Steinberg (M) and Stefanie Reinthaler (S), we attempt to define the terms visibility and inclusion and illustrate how they are employed in practice.

S: I would like to thank you once again, and we are very happy that you took the time for us. Would you please introduce yourself briefly, regarding your education, career choices and so on?

E: My name is Eva Taxacher. My pronouns are preferably none, or in the context of working in a women's organization, also she and her. I studied sociology and later pursued a part-time master's degree in International Gender Studies and Feminist Politics. In recent years, I have increasingly focused on facilitation, coaching, and organizational consulting, but for our conversation, my sociology studies and the International Gender Studies and Feminist Politics are probably more of interest. I have been working at the WomenService Graz for ten years. So we are almost the same age. The WomenService was founded in 1984 and is one year younger than me and will turn forty next year.

S: So, in this call, it's ultimately about the visualization of inclusion, especially in practical terms. And if you had come across the call on your own, would you have felt addressed by it, would you have connected it to yourself and the WomenService in any way?

E: It would have definitely caught my attention, but I don't think I would have thought of submitting anything. And I believe that's because from the perspective of an organization like the WomenService, all our doing is about inclusion and social justice. However, the term "queer-feminist" is not something that immediately comes to mind as something that specifically concerns us.

S: How would you define visible queer-feminist inclusion? Because these are two very broad terms, and based on what we have heard about the call, there is a lot that can be done with them since the call is quite wide-ranging.

E: Well, thinking these two terms together ("inclusion" and "queer-feminist") is actually harder for me than other terms related to visibility or social justice. I wonder why that is. I haven't been able to read the call in depth, but if we were to reverse the interview, I would ask you what exactly is meant by queer-feminist inclusion?

S: Well, when I think of feminist, I immediately think that feminism is no longer just about the equality of men and women. It has become much broader and includes the classical concept of intersectionality. It encompasses all feminist concerns, addressing marginalized groups where some individuals face discrimination, some multiple times. It's not just about making marginalized women visible but all marginalized individuals.

E: And what makes it queer-feminist?

S: The term queer is somehow intertwined with that from my perspective. Queer, to put it cautiously, is everything that deviates from the norm or what the majority of people consider as the norm. It doesn't necessarily refer only to sexuality or being non-heterosexual, but also encompasses – I'm missing the term right now – but generally, it means that queer and feminist are not limited to women but also include marginalized groups in general. The aim is to integrate them and make them visible, incorporating them into projects and drawing attention to the issues they face. That's my thought on it. What about you, Meike?

M: Similarly, by focusing on queer people, it highlights a group that might not be visible in research, even though it's already included in the feminist perspective as you mentioned, especially if we consider it as intersectional. It's good to emphasize it because queer people often remain invisible in research, for example, due to surveys being designed for the inclusion of binary genders only. So, it's important to highlight the significance of inclusion and give it a name to ensure that all people, regardless of gender, sexuality, or self-identification, become visible in research.

S: Exactly, especially in research, like with the Gender Data Gap, the classic example where car airbags are designed for white middle-aged men, which can be life-threatening for individuals with different body types. It's crucial to be visible in research. Do you have anything to add or any further thoughts on this?

E: Yes, I've had some Aha moments while you were talking. One thing is that much of what you described would already be covered for me by the term feminist. And then my biggest realization was actually that, for me, I believe that the terms queer and inclusion don't really go together. Of course, it depends on how one understands the term inclusion, but often it is used in the sense of personnel policies, hiring practices, addressing diverse target groups, it is about integration. While the goal of "queer", for me, is not integration into an existing system but rather doing something radically different. That's why I think I'm drawn to this term individually, but it gets entangled in combination, and I find that really interesting. I find that really fascinating.

S: I think the term queer is really difficult to define somehow.

E: That's the good thing about it. Another question could be, how inclusive is the term queer?

S: We have at least started an attempt at defining visible queer-feminist inclusion. Earlier you mentioned your master's studies. To what extent was the inclusion and exclusion of people in research a topic there in general? Because the call is very much oriented towards activism and really taking active measures or having programs, but how does it look like in research?

E: Well, in my master's thesis, I dealt with an archive, where it was very much about the question of inclusion and exclusion and whose history and materials were documented there. Moreover, it was an archive that attempted to document the history of the women's movement in Graz/Styria. So, what happened in archives in general was always focused on specific aspects, like: Who is actually meant by women's history? What I'm interested in is this distinction and specificity of fields. So, as you asked me, would this call have appealed to me if I had found it? And my answer is, I find it interesting, but no, it probably wouldn't have appealed to me in the sense that I could submit something as WomenService or Gender workshop. And that's the distinction between science and

socially engaged institutions and projects which work very, very practically oriented. We have something like an activist scene, people who don't get paid, whereas we all here at WomenService do (there is a small project where volunteers also work). And yes, that's something I'm thinking about a lot: there are many people dealing with feminist issues, visibility issues, inclusion, social justice, and queer topics. But where are the intersections and what can we do together? And there is still a lot of room for improvement. And trying to do something about it was with the founding of Women's Action Forum. I don't know if you've heard about it? It has been around since 2016, and there were eight or nine of us from different fields and areas: artists, activists, employees of women's organizations, academics. So, we created forums to bring together the various actors. And it's working well and is important, but there still needs to be happening more.

S: Referring again to this archive story: Which stories are primarily told?

E: Well, it's not an easy question to answer. The archive that I researched, the archive of DOKU Graz (Women's Documentation and Project Center) was an organization that existed from the late 1980s until 2011, I believe. I studied their collecting practices. And the result is that there is always a specific, very particular image of who is an actor in this field, who is considered part of the local women's movement, what does "feminist" mean. And these ideas manifest in what is being collected and what is being left out.

M: We found on the WomenService website that you are a coordinator for the course "Gender and Diversity Competence for Scientists" at the Technical University (TU) Graz. What is taught in the course, and what experiences have you had during the course or in creating the course? And how do you see it in relation to the call?

E: A colleague from TU, from the Office for Gender Equality and Equal Opportunity, Armanda Pilinger, approached the Gender workshop to jointly design this course, based on the course that the Gender workshop has been offering for a wider public since 2004. This regular course already has decades of experience in how to build it best, the flow of modules and content, as well as the cooperation and collaboration of the staff, the lecturers who lead these modules. An essential point, for example, is that we always work in pairs, simply to have more eyes on the participant group, both in terms of process and content. In the course we specifically designed for TU, there is a focus on specific aspects. The first two modules are an introduction to diversity and an introduction to what gender means in research and technology. Then there are in-depth modules on research, teaching, and team work and personnel selection. I find the experiences in these courses and with the participants really encouraging. Encouraging in the sense that these are people who will shape the future with their expertise and knowledge in their respective fields. So, everything related to technological innovations, software, and all these highly complex topics that we laypeople have no idea about —

if there are people with gender and diversity competencies involved, it's really reassuring because many of the maldevelopments we have experienced and are experiencing might be reduced.

They will really make a difference. At the end of the course, the participants, in the regular course and at the TU course do a thesis, a practical work where they are asked to integrate and implement the course content into their respective field of work, their research or teaching. I remember one colleague, who did research in her field. She is in architect, and the history of architecture, like many disciplines, is male-dominated. She then designed her own course on female architects and the role that women in Graz have played in architecture. So, it was more like a historical exploration, which connects to our topic of visibility. Another colleague dealt with representation. I believe that at the TU, for each field of study on the website, there are image photos where you can see a person holding or doing something typical for the field of study. She studied these photos and did a visual analysis, questioning who is represented. The result: they are all young, almost all white, very attractive, and conforming to body norms and beauty standards, with an above-average number of women. But here we come to the dilemma: Do we want to depict reality, which would show far fewer women, or do we want to depict the women present, so that more women will also come here? Especially when it comes to visibility and representation, there is no one right answer. A little sidestep regarding visibility: it's currently Pride Month (June), and I'm even wearing a rainbow belt. But at the same time, I feel uneasy when institutions, like Magenta and A1 and all the trams of the Graz Holding Company, display rainbow flags. Because I know that still, I believe two-thirds or of people who identify as homosexual are not "out" at their workplace. We still don't have full recognition and antidiscrimination laws regarding sexual orientations in Austria. And that is a reality that is distorted or made invisible by this rainbow flag display.

M: Is the course primarily for students, or is it for researchers who are employed?

E: It is primarily for scientific personnel with the consideration of sensitizing young scientists at a point in their career where they will continue to pursue and support gender and diversity competence throughout their careers.

M: We've already touched on the Gender workshop. I wanted to ask again, in a general sense, what is the Gender workshop, and how is queer-feminist inclusion and visibility practiced there? What are their goals? What are the challenges? And how does the team deal with it?

E: The Gender workshop is a collaboration between the association WomenService Graz and the Association for Men's and Gender Issues in Styria. This collaboration started in 2001 when Gender Mainstreaming was mandated as an EU directive, and the colleagues from these two genders-specific organizations thought about what it actually

means for them. How can they make something out of it? And that's how the Gender workshop was born. It has been around for more than 20 years now, and the team has partly changed over time. Some people have been there from the beginning, and there is also a relatively large group that is new, including considerations of visibility and expertise. The Gender workshop is an expert working group where individuals work either in one of the organizations or work independently as lecturers, presenters, or facilitators, and with different competences. Currently, we are a team of 13 people, many of whom teach in one or both of these courses. But we also receive inquiries from social and educational institutions for workshops or in-house trainings. Our experience has been that in recent years, due to changes in the Civil Status Act, where there are now not just two options for gender registration but six, there is a lot of interest in topics such as trans issues, queer issues, gender diversity, non-binary perspectives. Therefore, we have also tried to incorporate these topics within our team. As for visibility, for example, on the Gender workshop website, some individuals have their preferred pronouns mentioned, while others don't. I believe it makes people think, it creates some irritation, but also provides an opportunity.

M: What are the challenges and how do you deal with them?

E: The challenge we face in working with the groups we primarily engage with is that there is a simultaneity of different experiences. There is a growing group that already has a lot of knowledge about gender and diversity, is familiar with the terms and abbreviations, and has high expectations of us as lecturers. But there are also participants who have fewer theoretical knowledge, and if we were to communicate only with the knowledgeable group, we would lose those. So, the challenge in workshop settings is to design content and exercises in a way that, ideally, participants benefit from each other by realizing what concerns each of them. It's about creating educational settings that are inclusive and non-dogmatic, where people can open up, can struggle and deal with gender and diversity issues in a brave space, where they find encouragement and the insight there isn't one right answer to complex questions. As one of my colleagues, Michael Kurzmann, would say: "The world is complex and so are we". This is something that we reflect on and discuss a lot within the Gender workshop team. For example, we discuss how to introduce the topic of preferred pronouns, whether it should be a norm or not, as it may require people to disclose their own pronouns. Personally, I have mixed feelings about it because there are contexts where it should not about me. But as soon as I say that being a woman is not my preferred identity, it becomes an issue that may distract from the participants topic. So, there is no definitive answer to what the right approach is.

S: So, it also relates back to the issue of visibility we discussed earlier regarding the TU. How can we build something that is effective in raising awareness but not off-putting for some who may resist the idea of pronouns, for example?

M: Do you have any ideas or suggestions on how science could become more inclusive? Because you already have experience with scientists from TU Graz in various contexts through the courses and working with different people. What would be an idea of how it could work?

E: Saving the world? (laughs) Well, I believe the most crucial point is the issue of the inheritance of educational qualifications in Austria. This is not directly related to queer visibility, but it has to do with an intersectional understanding of who is represented in universities. Working-class children simply have a much more challenging start. The probability of attending a university, let alone having a career there, is much lower for them. And there is still a lot to be done on every level, I would say. The understanding of what makes a good scientist is an excellent example. There is a great book by a sociologist and colleague, Sandra Beaufaÿs, called "How Are Scientists Made?" (Wie werden Wissenschaftler (sic!) gemacht) It shows that a lot of what is expected of a scientist is male-coded. This is not specifically related to queer visibility, but it has to do with the compatibility of family, personal life, and profession. Universities have a very elitist, exclusive attitude in terms of who can work passionately and voluntarily for 60 hours or more per week. This is only possible if there are people who take on the care work, and often these are women from Eastern European countries or from the Global South. Thus, a chain of injustices continues, a global care chain, and it applies not only to universities or TU Graz but to society as a whole. It is important for couples, regardless of their gender constellation, to share unpaid work fairly. The slogan of the former Minister for Women in 1994[1], " Full fletched men share 50/50" ("Ganze Männer machen halbe-halbe) is still very relevant. There is a re-traditionalization that is associated with legal regulations on when and how much parental leave can be taken, the fact that men earn more and are expected to work, while women are expected to stay at home. So, it's a big, complex issue that needs to be addressed.

M: And as a final question, how is the relationship between scientific theory and practice? Is there potential for better collaboration in the future between theorists and those with practical experience?

E: If I knew the solution, I would have already implemented it, but I think there are good examples of mutual recognition, acknowledging each other's strengths and finding ways to integrate them. There are many good examples of this. For instance, in the field of pedagogy, they often invite practitioners from the WomenService to their lectures, and they sit in the WomenService library or attend events at the Infocafé Palaver with my colleague to see what it looks like in practice. I believe that's very important, and it can be applied to any context. In many research projects, they already consider implementation in practice, and there are many practitioners who are eager to share their

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[1] Johanna Dohnal

experiences. Of course, it's also a question of resources. There is often interest from universities, for example, to collaborate with the WomenService. But then the question arises: How do we allocate resources? Yes, the motto is probably the recognition of diversity. If we talk about the issue of simultaneity and non-simultaneity, there might be a gap between theoretical development and practice, both in gender research and, I believe, in more technology-oriented fields of study. Practitioners often feel that what is produced in theory is not applicable to their work. This requires some kind of translation between the two. It's great to have innovative thinking and concepts like cyborgs, for example, inspired by Donna Haraway's work. But in practice, it's not always straightforward, and practitioners may still be dealing with the same issues as forty years ago, counselling women on how to achieve financial independence, how to leave a violent partner, how to manage a living as single parent. This creates a fundamental dilemma. One cannot exist without the other. And it's essential to be aware that practice is often more challenging, less subtle and rougher than we would like it to be. That's not a very optimistic ending, but it's the reality.

Stefanie Reinthaler is a master's student in political economics at the University of Graz. In the future, she wants to focus her research on the field of feminist economics and specifically engage with economic research on the topic of care work.


Meike Steinberg is a master's student in political economics at the University of Graz. In her specialization courses, she decided to not only study traditional subjects in economic theory and empirical applications but also to focus on diversity and gender. This choice aims to broaden her perspective and deepen her understanding of how economics, diversity and gender interact.

Lea Ostendorf

I want to go and ask the mountains: How to start a garden? From permaculture to overcoming stories of invisibility.

Mountain! How do I start a garden?
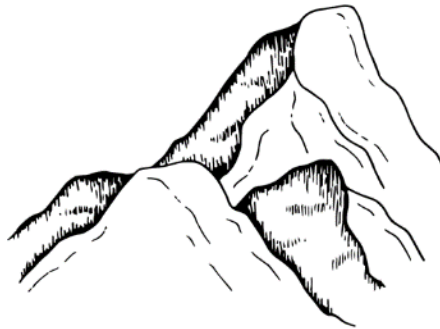
Mountains do not speak, but we can listen to what they say. I personally learned this through a permaculture project in Aotearoa (New Zealand), which was managed by a Maori named Lisa. What I learned there was gained through experience, and I continued learning about permaculture in Austria (although more through my mind than my body). The following are questions that made sense to me regarding overcoming invisibility, along with answers from a permaculture perspective. I took a walk through the landscape, which is not a garden yet, and interviewed myself. This is an initial inquiry, involving questioning, contemplating possible answers, making mistakes, underlining, and using exclamation and question marks in the hope of sparking some answers or good questions.

Could you explain briefly what permaculture is?

I would say that permaculture is a way of thinking. The idea is to create self-sustaining systems. The term "permaculture" was coined by Bill Mollison, but the principles behind it have indigenous origins. Mollison asked, "How can we survive on this planet?" and then looked at indigenous cultures, as well as patterns of nature to understand how they sustain themselves[2]. In short, I would describe permaculture as a truly circular economy, most commonly seen in permaculture gardens that are built to provide food for people.

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[2] Simmons, I. G. (1980). Permaculture One: A Perennial Agriculture for Human Settlement, by B. Mollison & David Holmgren

How is knowledge obtained in a permaculture system?

Permaculture first takes a long look at what is actually present in the system and what it needs. Then comes the "how." With permaculture, I have learned to think in circles, considering relationships and seeing the bigger picture. I've learned a lot about plants and animals, but the most valuable thing was learning how to ask questions. I begin with the assumption that I know nothing about the system I want to change. I consult all the people, animals, wind, and soil. Permaculture asks questions like, "How is the mouse? How does it move through this particular piece of land?" As we know, diversity makes a system resilient; we want to have as many different beings in this system as possible. To achieve this, we need to ask: "What are the needs of these beings? And what are these beings giving back to the system? And which gifts and needs align?" A huge part is understanding the relationships between the beings in the system, strengthen them and creating new ones. What permaculture also adds is a timeframe which goes beyond what we usually think of. We ask: "How does this element change over the years, and by years, I mean a time frame of 10 to 20 to 50 to 100, 200 years? Can I build it in a way that is adjustable to change? What happens if we take the humans out of the system?"

I would like to talk about how value is defined in a permaculture system.

In permaculture, value is defined differently. Changes are made only when necessary and after careful consideration. We may question whether something is useful, but the crucial point is that in a balanced ecosystem, many things are useful that may not directly benefit humans. When we ask this question, we are fully aware that something may not be useful to us, but it plays a vital role in sustaining the ecosystem we inhabit. For instance, a flower may hold value for a different being in the system, and therefore, it has value to me. Since humans are a part of the systems we create and we want humans to stay in this system, live and thrive in it, we also give value to things humans like. Here comes a curtail point to me, because we also value energy a lot (in order to be sustainable we want the system to be as much self-reliant as possible), we do not want to create things that are not going to add to a sustained joy or not going to add to adequately fulfill the needs of the humans in the system. To achieve this, we must honestly address questions related to needs, desires, wishes, wants, can-dos, and cannot-dos. If our answers are not truthful, the system will not work. It is as simple as that. Or complex actually.

What answers does permaculture have to the question: How can we overcome stories of invisibility?

It might seem like nothing novel, but I think learning to listen is the answer permaculture holds for us. Also, learning to take things slow in order to give the complexity of our reality its space. Giving space to ask a lot of questions and then giving space to be confused. We simply ask everything in the system, "What do you need, and where do

you have overflow you can share?" Thinking of the complexity of our social systems and stories of invisibility, permaculture does not translate so easily. On a human level, I have had very different experiences in systems (mostly gardens or households) that used permaculture techniques in cultivating food. In some, I and the other humans involved got to be freer versions of ourselves, got to discover ourselves, each other, and life, and be held by the community and the land around us at the same time. In some, I met homophobic and racist people believing in conspiracy ideology. And still, what I have experienced opened up a lot for me, and I know it has for others as well. Living in a system where you get to experience the interconnectedness of your own life with the ecosystem around you changed how I think and feel in the world. I think in terms of species invisibility, economy, and sustainability, permaculture holds a lot of answers. In terms of social systems it is not so clear. As I said at the beginning, this is a first inquiry, so I will leave not completely satisfied with my answer, knowing I can come back any-time.

And maybe we have to ask some more mountains.
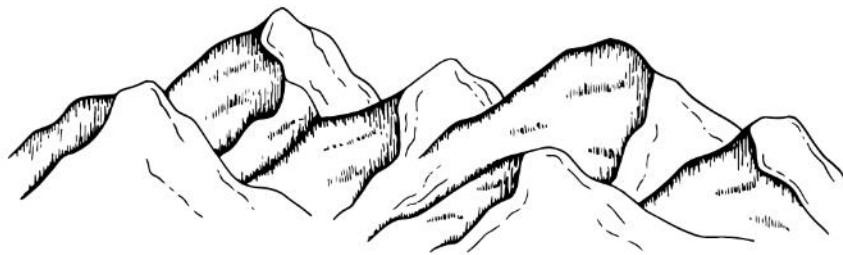
Lea Ostendorf is a yoga teacher, youth sex educator, permaculture de-signer and has a bachelor's degree in psychology. The central theme of her work is the question how we can enter into healthier relationships with our-selves, others and our environment.

Kerstin Brysch & Katharina Wesselkamp

Diversity@WKO

DIVERSITY@WKO

Portrait based on an interview with a teacher
of the Diversity-Working group (WG) at the
Wilhelm-Kaisen-Oberschule (WKO) Bremen

Foundation of the WG

*"My motivation at that time was that there was an
unbelievable amount of trans- and homophobia in my
8th grade class and I just wanted to talk to the older
students who I knew were queer."*

So in the summer of 2021, the teacher met with two of
her students with queer backgrounds to find out what
the students needed, what is problematic and what is
important to them. It was not their initial goal to
establish a working group. The "Diversity@WKO" was
founded by pure coincidence, when two days later
other students approached her and expressed their
wish to participate in the working group, which did
not exist at that time.

Growing of the WG

At the WKO, the concept of WGs does not actually exist.
Diversity@WKO has therefore also spread exclusively by
word of mouth. This was also a protective mechanism.
People who want to participate must know someone from
the WG. This is an attempt to protect against people who
might be hostile or attack, while also striving not to create
excessive obstacles for those who are genuinely
interested.In the course of the school year 2021/22, the
teaching staff was also informed by means of postcards
and information flyers, and students were specifically
approached. All of a sudden, a group of people from
grades 6-10 appeared and even students who had already
left the school continue to come to events.

*"But we urgently need and want to be a kind of safe space, within the framework of how safe
as possible it can be at school. That means for us it was important that if someone wants to
join the WG, it must be through someone who is already in the WG".*

Topics

"For us, it's just that we also want to talk about things that concern us, where we also have knowledge. We also have neurodivergent people with us in the working group who share their knowledge with us in this regard, people from different cultural backgrounds, different origins in social terms, so we end up with a diverse group that wants to deal with all the issues of diversity."

Discussions als focus on these topics:
Desire of gender neutral restrooms
Vandalism at toilets
Raising a rainbow flag at the school

Sensibility & Allys

"First, we always tell our pronouns when we meet. We also have students who have to live with their dead name at school, unfortunately for a variety of reasons, which in this case, why the dead name is still there, can be traced back to the parents, but we always work with the names and pronouns with which the students want to be addressed and there is a high sensitivity for this. There are very, very many allys who are really in this WG because they say 'I want to support you. I want to be there. I am there for my friends. I am simply there for this person and would like to participate in this WG.'"

Activities and projects
Catcalls of Bremen and CSD

(O) @catcallsofbrmn

Catcalling is also an issue at the school. A year ago, the WG wanted to address this issue. In this context, a student reported about a workshop that was offered by catcallsofbrmn at a school. The WKO became the second school where such a workshop was organized. Students from grades 7-10 (12-17 years olds) participated. It was shocking to see what these young people experienced in terms of sexual harassment, insults, shouting after and (verbal) attacks.

In the preparation of the workshop, the wish was expressed that experienced catcalls at school would be chalked up. Since this was not allowed, they used an endless paper roll to write down their experiences.
"And that, in the end, was our version to show: Hey, also these young people, which was denied them, and also at this school, in the schoolyard catcalls happen."

The WG also met outside of school at Christopher Street Day in Bremen and participated in the parade.

Financial support

The WG was announced by the teacher for financial support from a reading foundation. The WG was selected and received 300 euros, which is used for the purchase of various literature for which a lending system has already been developed.
Some of the parents are also incredibly enthusiastic about the WG and provided 150 euros to the WG.

Teaching staff & Conflicts

The project is supported by the staff and the school management also shows a positive development in regard to the topic.
The working group is jointly led by two teachers, one school social worker and one trainee teacher. Since sensitive topics are discussed, the teacher emphasizes the importance of having several contact persons. The students manage to distinguish well between her as a teacher and the WG leader. She herself also sees it as "an excellent addition to my role as - in the end - an evaluating person." Nevertheless, it is valuable to have a person in the team who is not in an evaluation situation with the students.

The WG is described as a very conflict-free group, also despite the diversity of the students (social origin, age, gender identity, etc.). There is an incredibly respectful exchange and conflict management in which problematic situations are addressed, listened to and solutions are found in an appreciative manner.

"A very big wish of ours would be to have a real safe space where you can withdraw, where there is peace and quiet, where we have materials that you can use to sometimes get out of the line of fire, so to speak, when things get tough in some classes or teaching situations."

Kerstin Brysch is a social worker who has worked with traumatized women and is now studying for a Master's degree in Gender Studies at the Ruhr University in Bochum. Within the study program, one semester was spent at the University of Graz as part of a double-degree.

Katharina Wesselkamp completed her bachelor's degree in social work/social pedagogy at the University of Applied Sciences in Düsseldorf, specializing in human rights and health. Since then, she worked in the social psychiatric field and is currently studying Gender Studies at the Ruhr University in Bochum. As part of a double-degree program, one semester was spent studying at the University of Graz.

Carla Camps Santasusana, Jakob Fesca & Jacqueline Schöttler

Thinking about queer Christian religion: *Mama bears*

Mama bears – the Documentary

The documentary *mama bears* was made by Emmy award-winning director Daresha Kyi and followed mothers of the mama bears movement for over six years. Filming began on 13 May 2017 (Instagram mamabearsdoc 20.06.2023) and specifically features mothers Sara Cunningham, Kimberley Shappley and Tammi Terrel Morris with their queer children (Instagram Crossroads, 16.05.2023). The other people involved in the production, including brief biographical introductions, can be viewed at mamabearsdoc.com. Within the production team there is a racial diversity as well as a queer person as impact producer that we want to emphasise.

The documentary accompanies the aforementioned people who have exchanged and networked via the Facebook group *mama bears* and have since been leading the fight for the rights of their queer children together with other members of the group (Instagram crossroads 16.05.2023). The mothers themselves grew up in conservative fundamentalist Christian families and continued to live this faith until they were confronted with the outings of their children. At first, they could not reconcile these outings with their faith. They sought advice and support in the Facebook group *mama bears*, where they could exchange with other believing mothers of queer children. This group was founded in 2014 by Liz Dyer, who states on the *mama bears* website that it was her dream to make the world a little safer and kinder and whose dream has now come true (Mama Bears 2019). Partly before that, partly through the exchange, the portrayed mothers learned to accept their children and since then they have actively decided to love their children just as they are. Many of these mothers, in addition to networking in the Facebook group, have become politically active and are now activists who fight for their children's rights and/or support them in their fight for their rights. *Mama bears* now exist across the United States and there are information booths, networking, readings, etc. at local Pride Parades, for example, and activist walks along the parade. As an example, the mama bears were shown giving out free hugs with which they try to fill the gap that their own parents' turning away from their queer children has created. The documentary shows the activists giving hugs to people of different ages in different settings on and around the pride parade and in a bar listening to various people and responding to them with love and empathy, which is perceived as very positive by the people. In another scene, Sara Cunningham is shown at a wedding of two women where she takes on the role of mother to one of the brides because her own mother had distanced herself since her coming out and did not want to attend the wedding.

Apart from the families, the queer people portrayed say that, their families have turned away from them because they cannot reconcile their sexual or gender identities with their faith. Although the *mama bears* have experienced similar things, they continue to struggle and form an ever-growing community where faith is compatible with queerness. They have lost family members, friends and in some cases their church communities because they chose to accept and love their children as they are and refused the idea that their children's gender or sexual identity changes anything for their religious lives. Kimberly Shappley and her daughter Kai, for example, were shown getting ready to go to church on Sunday. *Mama bears* enables new friendships and communities to be found and strengthened, where everyone can pursue their faith, be themselves and be loved in return.

Since Liz Dyer's initiative, *mama bears* has evolved and there are now numerous Facebook groups, all of which can be found on the website. In these groups, mothers can be more specific and oriented towards the different needs of their children, e.g. there is a group for *mama bears* of autistic children (Double Rainbow) or for children under or over 18 (<18 #BeYou and >18 #BeTrue) (Mama Bears 2019). Also, several projects have developed out of the groups and activism, Mama Bears Safer Schools can be mentioned as an example. Those involved, who are not mentioned by name, have created a freely accessible flyer that gives schools five tips that can be used to create safer schools for LGBTQ+ children (Mama Bears 2019). For other contexts and especially for families, resources have been collected that recommend e.g. blogs or literature to find one's own way to unite Christian faith and queerness (Mama Bears 2019).

Queerness and Christian faith

LGBTIQ-friendly (self-help) groups fortunately do exist. What is distinctive in the documentary as a specific feature of *mama bears* is that they portray fundamentalist Christian families trying to reconcile their faith with their love for their queer children. However, if one visits the *mama bears* website, at first glance one encounters an organization that does not seem to define itself by its faith. Only hidden in the Resources-section of the website we find two links to "Fully Inclusive Faith Communities" on the one hand and "LGBTQ+ Affirming Wedding Officiants" on the other. At first impression, one might think *mama bears* are trying to find allies without particularly emphasizing the issues of religion and belief.

In an internet research for *mama bears* and Christianity, we find another bear community that also identifies as *mama bears* (mamabearapologetics.com). They call themselves *mamabears-apologetics* and overtly advertise Christian values. They aim to reinforce children's Christian faith in a "cultural war" we supposedly find ourselves in and want to prepare themselves for this so-called war, among other things, to encounter a non-Christian queer environment. They prepare their children for pride month, though,

to reinforce beliefs such as that affects between people of the same sex might exist, but that "romantic love" was designed by God between a man and a woman. The *mama bears*-apologetics teach their children to distinguish between a biblical marriage of the God-created male-female pair and a civil marriage, which in their view is not biblical if the couple is of the same sex.

It is obvious that these two organizations are ideologically at different ends. They differ in the way they understand Christianity as queer inclusionary or not. It is not the place to analyse here how their argumentation works; it's just striking how differently they emphasize Christian values and faith on their websites. We are left with the question: Why aren't Liz Dyer's queer-friendly *mama bears* putting the focus on faith more strongly? A list of LGBTIQ-friendly churches and one of officiants who marry same-sex couples are maintained. But the initial contradiction that parents experience between their faith and the queerness of their children is not mentioned to be loudly refuted in a second step highlighting their compatibility. Perhaps *mama bears* are thus reaching out to a larger community, as well as to parents who are not strictly Christian and who want to try to support their queer children. Or maybe they don't enter a battle over queer interpretations of the Bible because that could run in favour of other, queer-exclusionary *mama bears*.

At this point, we do not want to give the impression that these are similar organizations that only differ ideologically. Especially in terms of physical and material consequences, queer *mama bears* and their families are particularly unprotected. The consequences of the state's lack of human rights guarantee in the case of a trans child in the USA are shown in the following section.

Queerness and the state

On Independence Day 2022, Kai tweeted that her family was moving out of Texas (Shappley 2022). She wrote about Texas being "not safe for trans kids". In the message, Kai also referred to the historic date. The 4th of July is associated by patriotic US citizens with values such as freedom and independence. Kai saw her own freedom in Texas restricted to such an extent that she had to leave the state. She wishes a happy Independence day "to everyone who gets to celebrate that", implying that she could not celebrate this date.

Since leaving the state she was born in, Kai has described herself as a political refugee.

A year after the move, Kai tweeted that her family had moved to Connecticut in the north-west of the USA (Shappley 2023). She wrote that life there was more expensive than in Texas and set up a fundraising campaign to cover the costs of the move.

Kai also noted that her first school in C. was again transphobic. She concluded that transphobia exists in liberal states as well and that it is not just a Republican state phenomenon.

Kai's departure from Texas shows the dilemma faced by trans people in the USA. Moving is very expensive and not all trans people can afford it. It is important to remember that trans people are disproportionately affected by poverty. In a new state, they (or in Kai's case, her mother) have to find a new job and a new place to live.

However, anti-trans laws and hostile attitudes in parts of society (for example, among fundamentalist Christians) make it increasingly difficult to live in republican states. In order to ensure one's own security and the free development of gender identity, it becomes necessary at some point to leave such states.

Moreover, Kai's experiences at a Connecticut school show that liberal legislation does not necessarily improve the situation. Trans hostility can also come from the local school administration.

Since the release of the *mama bears* documentary, Kai has also embarked on a career as an actress. She guest starred in an episode of the Netflix series Babysitters Club, playing a trans girl. Her character arc closely resembles her own experience: a trans girl who is misgendered by adults around her.

She's been the subject of the Emmy-winning "them." documentary, and has been covered by Vice News and Time. Kai writes that she is planning more projects, but doesn't want to give specific details. Stay tuned.

The documentary is available at https://www.pbs.org/independentlens/documentaries/mama-bears/, but unfortunately not in Austria.

We hope that this forum contribution will motivate people to watch, research or support Mama Bears. It would be an enrichment to found similar groups and communities in Europe and Austria, or if they already exist, to give them the recognition and publicity they deserve.

References

crossroadsfestivalgraz (16. Mai 2023), Instagram: https://www.instagram.com/p/CsTa8aeMxmD/?igs-hid=NjFiZTE0ZDQ0ZQ%3D%3D (letzter Zugriff: 15.07.2023).

Kai Shappley HER/SHE 🔋 (4. Juli 2022), Twitter: https://twitter.com/KaiShappley/status/1543973244105015297 (letzter Zugriff: 15.07.2023).

Kai Shappley HER/SHE 🧃 (4. Juli 2023), Twitter: https://twitter.com/KaiShappley/status/1676192734195875841 (letzter Zugriff: 15.07.2023).

Mama Bears (2019): Mama Bears. https://www.realmamabears.org/ (letzter Zugriff: 15.07.2023).

Mama Bear Apologetics (2016): "Train yourself. Equip your kids.". https://mamabearapologetics.com/ (letzter Zugriff: 15.07.2023).

mamabearsdoc (20. Juni 2023), Instagram: https://www.instagram.com/p/CtuLXo7rUBj/?igshid=NjFiZTE0ZDQ0ZQ%3D%3D (letzter Zugriff: 15.7.2023).

Jakob Fesca (no pronouns) has been studying International Gender Studies at Ruhr University Bochum since 2021. Jakob came to Karl Franzens University Graz for a semester abroad.

Jacqueline Schöttler (she/her) decided to pursue a double degree Master's programme after completing her Bachelor's degree in Childhood Pedagogy. She has been studying International Gender Studies at Ruhr-Universität-Bochum since October 2021 and started her semester abroad at Karl-Franzens-Universität Graz in February 2023. This forum post was also written during this semester abroad. She combines her two focuses of study in her current job as a student assistant in the research project "Children's well-being in socio-spatial contexts. Intersectional perspectives on children's experiences in non-school learning places (WIKK*I)" at University of Vechta and TU Berlin.

Carla Camps Santasusana (she/her) is currently studying Gender Studies at the Ruhr University in Bochum. Her wage work is as a teacher of German as a foreign language in medical and dental courses. She is often in the water and likes to eat cake.

Nicole Pruckermayr & Daniela Jauk-Ajamie

GINA liebt! Partizipative Kunst im öffentlichen Raum – Particpatory Art in Public Space

Nicole A. Pruckermayr (rechts im Bild)) ist Künstlerin, Kuratorin, Wissen-schafterin und Ermöglicherin von Kunst (derzeit Geschäftsführerin der Steirischen Kulturinitiative) und arbeitet im öffentlichen Raum in Öster-reich. Ihre oft großformatigen Installationen bereichern nicht nur den Stadt- und Landraum, den sie als interaktive Leinwand verwendet, son-dern auch die Menschen, die sie immer wieder zur Mitgestaltung ihrer Arbeiten einlädt.
Das Projekt GINA liebt! ist ein 6,5/7m großes Herz das auf eine Hauswand einer neu entstehenden Siedlung in Graz tätowiert ist. Die 40.000 Knoten des Herzens hat sie mit rund 100 Menschen allen Alters geknüpft, wäh-rend sie diese in Gespräche über die Liebe verstrickte. Mit Daniela Jauk-Ajamie (links) spricht sie über ihre Erfahrungen.

Nicole A. Pruckermayr (pictured right) is an artist, curator, scholar, and art facilitator (currently Executive Director of the Styrian Cultural Initiative) creating in public spaces in Austria. Her often large-scale installations not only enrich the urban and rural spaces she uses as interactive canvases, but also the people she continuously invites to co-create her work.
The project GINA loves! is a 6,5/7m large heart tattooed on a wall of a newly emerging housing development in Graz. She tied the 40,000 knots of the heart with about 100 people of all ages while engaging them in conversations about love. She talks with Daniela Jauk-Ajamie (left) about her experiences.

GINA liebt! war nicht das erste, aber ein wesentliches partizipatives und interaktives Kunst im öffentlichen Raum Projekt das du realisiert hast. Woher kam die Inspiration fürs Projekt.

GINA liebt! war für mich der Versuch aus einer intensiven Beschäftigung mit den Schattenseiten eines femininen/feministischen Lebens auch dezidiert positive Seiten hervorzukehren. Liebe ist das Beste, was uns passieren kann. Und zu dem zu stehen, beinhaltet eine wahnsinnige Kraft. Ich gestalte mein Leben, so wie ich es will. Mit allen Konsequenzen. Gina hat ihr gutes Leben verlassen, um mit ihrer Liebe zu leben. Das geht.

Gina ist Gina von Reininghaus, geborene Agujari heiratete den wohlhabenden steirischen Industriellen Johann (Hans) Edler von Reininghaus aus der Bierbrauerfamilie Reininghaus. Sie bekam mit ihm sechs Kinder und verliebte sich in den Generalstabschef der k.u.k Monarchie, Franz Conrad von Hötzendorf. Er war wesentlich für den Ausbruch des 1. Weltkriegs mitverantwortlich. Sie ließ sich von Reininghaus scheiden und heiratete Hötzendorf. Dies war Ende des 19.Jahrhundert/Anfang des 20. Jahrhunderts. Die erste Scheidung in Österreich.

Partizipativ klingt gemeinschaftlich, ja wir haben gemeinsam ein Herz geknüpft, uns über die Liebe ausgetauscht. Es war eine Bereicherung für die Menschen, die mitgemacht haben. Ich würde aber nicht generell sagen, dass es partizipativ war, denn das würde mehr beinhalten. Möglicherweise wäre das Herz dann gescheckt oder violett geworden, hätte eine andere Farbe gehabt. *Es haben Menschen beigetragen.*

GINA loves! was not the first, but a significant participatory and interactive art in public space project you carried out. Where did the inspiration for the project come from?

For me, GINA Loves! was an attempt to turn an intense preoccupation with the dark sides of a feminine/feminist life into a decidedly positive side. Love is the best thing that can happen to us. And to stand within it contains an immense power. I shape my life the way I want it. With all the consequences. Gina has left her good life to live with her love. That can work out.

Gina is Gina von Reininghaus, born Agujari who married the wealthy Styrian industrialist Johann (Hans) Edler von Reininghaus from the beer brewer family Reininghaus. She had six children with him and fell in love with the chief of staff of the k.u.k. monarchy, Franz Conrad von Hötzendorf. He was largely responsible for the outbreak of the First World War. She divorced Reininghaus and married Hötzendorf. This was at the end of the 19th century/beginning of the 20th century. The first divorce ever to take place in Austria.

Participatory sounds communal, yes we made a heart together, and exchanged ideas about love. It was enriching for the people who participated. But I wouldn't say in general that it was participatory, because that would imply more. Possibly the heart would have become mottled or purple, would have been a different color. *People contributed.*

© Nicole Pruckermayr

Worum ging es?

Ich habe ein Zeichen der allgegenwärtigen Liebe - das Herz mit anderen geknüpft und an "die Wand geschmissen"...

What was it about?

I made a sign of omnipresent love - knotted this heart with others and "threw it on the wall"....

Was ist deine schönste Erinnerung?

Am schönsten fand ich einen etwa 70jährigen Mann, den ich ansprach und der mir sagte er kann über die Liebe nichts sagen und knüpfen kann er auch nicht.

Dann sah ich den Ehering und sprach ihn an: dass er ja verheiratet ist und das ja wohl auch etwas mit Liebe zu tun hat. Er sagte: ja und hatte so ein schönes Lächeln im Gesicht, wie ich noch selten sah...

Oder eine 60jährige Frau, die mir sagte: „Zur Liebe kniet man sich nicht hin, das ist etwas auf Augenhöhe..."

What is your most beautiful memory?

The most beautiful I found was a man about 70 years old, whom I approached and who told me he can't say anything about love and he can't knot either.

Then I saw the wedding ring and asked him about it: he is apparently married and that has something to do with love. He said: yes, and I saw the most beautiful smile on his face, a smile I have rarely seen....

Or a 60-year-old woman who told me: „One does not kneel down for love, it happens at eye level..."

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Wie haben Menschen deine diese Kunstproduktion beeinflusst? Wie konnte mensch mitwirken?

Im Reden, im Austauschen lerne ich immer am meisten. Jede Person hat ein anderes Konzept "Leben" und das hin und wieder mit anderen zu teilen erzeugt Nähe und Vertrautheit. Es gab verschiedene Termine, die ich in einem neuen Stadtteil, einem großen Stadtentwicklungsprojekt organisierte und bei diesen Terminen wurde geknüpft und geredet.

Welche Menschen haben bei GINA liebt! mitgemacht? (Und wer nicht? Hast du dazu Ideen, also warum manche gern mitmachen und andere nicht? Bzw. Ideen wen du gerne künftig dabei hättest und wie du das angehen würdest?)

Es haben alle Menschen mitgemacht, die ich angesprochen habe. Einige auch ohne ansprechen, weil sie es schön fanden (von der Ferne). Das waren Kinder, die waren sofort dabei. Ich würde das genau so wieder machen. Ansprechen und zwar alle!!

How did people influence your art production? How could people participate?

In talking, in exchanging ideas, I always learn the most. Each person has a different concept of "life" and sharing that every now and then with others creates closeness and trust. There were several meetings that I organized in a new city district, a new large urban development project, and at these gatherings people bonded and talked.

Which people participated in GINA loves! (And who didn't? Do you have any ideas about this, i.e. why some like to participate and others don't? Or ideas who you would like to have in the future and how you would go about it)?

All the people I asked ended up participating. Some came without talking to me, because they thought it was nice (from a distance). There were children, they were immediately involved. I would do it exactly the same again. Just talk to folks, and indeed everyone!!

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Wo hast du das Projekt gemacht (und warum dort?), kannst du ein bisschen zum Rahmen kommentieren?

Das Projekt habe ich im neuen Stadtentwicklungsgebiet Reininghaus in Graz gemacht. Hier entsteht neuer Wohn- und Arbeitsraum für ca 10.000 Menschen. Mich interessieren solche neuen Stadtteile, weil sie viele Hoffnungen und Möglichkeiten bieten. Personen wollen hier neu beginnen. Das ist spannend.

Ich hatte hier das Glück den Vorstands-direktor eines Wohnbauträgers (ENW) kennen zu lernen, der das Projekt gut fand und so hatte ich eine Finanzierung. Ich habe circa 8 Monate daran gearbeitet.

Spielen nicht-menschliche Lebensformen und Dinge in deinen Projekten eine Rolle? (Wie)machen diese bei deinen Projekten mit?

Nicht-menschlich, hmm. Ich arbeite gerne mit Strukturen, Bedingungen, Systemen, Regeln. Sie definieren meine Arbeiten im öffentlichen Raum sehr vehement und ich versuche da mitzuschreiben, mitzuarbeiten.

Where did you do the project (and why there?), can you comment a bit on the setting?

I did the project in the new urban development area Reininghaus in Graz. A new living and working space for about 10,000 people is emerging here. I am interested in such new urban districts because they offer many hopes and possibilities. People want to start anew here. That is exciting.

I was lucky enough to meet the director of a housing developer (ENW) who liked the project, so I got funding. I worked on it for about 8 months.

Do non-human life forms and things play a role in your projects? (How)do they participate in your projects?

Non-human, hmm. I like to work with very much are structures, conditions, systems, rules. They define my works in public space very vehemently and I try to inscribe into these, to collaborate.

113

Ich finde das aus einer demokratischen Perspektive heraus wichtig.

I think that's important from a democratic perspective.

© Raphael Daum

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Wie hat GINA LIEBT Dich verändert? (Was hat dich überrascht, und inwiefern?)

Überrascht hat mich, dass viele Männer sofort dabei waren. Wie viele strahlende Augen ich sehen durfte, als die Menschen über ihre Lieben erzählten. Viele Menschen waren recht wenig geschickt, haben sich aber trotzdem darauf eingelassen es zu lernen! Das war schön.

How has GINA LOVES changed you? (What surprised you, and in what way?)

I was surprised that many men were immediately involved. How many beaming eyes I was allowed to see when people told about their loved ones. Many people were quite clumsy, but still got involved in learning it! That was beautiful.

Planst du weitere „Einladungen" zu deiner Kunst? Woran arbeitest du derzeit?

Ich arbeite derzeit nicht mehr (weil gerade abgeschlossen) an dem Nachfolgeprojekt von GINA liebt!, der TrostHAUT/Taschen-HAUT. Dies war eine Arbeit über Trost, den wir uns gegenseitig spenden. Im Laufe des Tuns, kam ich drauf, dass Liebe teilen viel einfacher ist als Trost spenden ... oder auch annehmen.

Are you planning any more "invitations" to your art? What are you currently working on?

I am currently no longer working (because just completed) on the follow-up project to GINA Loves!, the TrostHAUT/Taschen-HAUT (engl: comfortSKIN/pocketSKIN). This was a work about the consolation we give each other. In the course of doing it, I realized that sharing love is much easier than giving comfort ... or even accepting it.

Gerade arbeite ich am Projekt FRIEDENS-STATIONEN, einem Haltestellenkino von und für Jugendliche, die ihre Umgebung, Stadtentwicklung und Frieden filmisch verarbeiten.

Wie es weitergeht, das weiß ich nicht …

Aber ich möchte jedenfalls wieder mit Menschen arbeiten, denn ich mag Menschen.

Right now I'm working on the project PEACE STATIONS, a bus stop cinema by and for young people who process their environment, urban development and peace on film.

How things will proceed, I don't know …

But I would like to work with people again, because I like people.

Mehr über Nicole Pruckermayr und ihr umfangreiches Werken:
More about Nicole Pruckermayr and her extensive body of work:

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