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Irritating, Intervening, Interacting: Doing Queer Science and Technology Studies

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In this article we want to reflect on our queer approach to Science, Technology and Society Studies (STS). Simply put, we have realised that we want our actions (research in particular) to have an effect on practice, maybe because we both are – among many other identities – pedagogues. We often find ourselves intervening in meetings, in our social media activities, in our university courses, during conferences, and when we do research. Most of the time, the main topics we deal with do not directly relate to queer studies but are questions concerning science, technology and society studies. Among those, the role of gender in academia may be one more closely associated with queer studies, or when we ask how to use youth media as agents for political competence training. But we also work on seemingly unrelated topics like sustainable food produc-tion or users' roles in energy efficient office buildings. However, queer and socially just thinking cannot simply be switched off once you have developed it, and, because pro-jects on queer STS are far from being heavily funded, we often find ourselves in the role of 'queer devil's advocates'. In other words, simply by asking our queer questions[1] and thinking in alternatives, we irritate colleagues, we intervene in our classes or during conferences, and we interact with (and thereby learn from) like-minded people. Our

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[1] „In general, by adopting a queer perspective, we have to reflect on the ways we, as researchers, contribute to the reproduction of e.g. gender as a binary and the heterosexual norm. We have to identify hegemonic discourses in our field of research and critically question in which ways they exclude or marginalize perspectives. We have to revise our methodology and the assumptions we base our interpretations of data on. One example for these efforts is that in some cases we shifted our focus from gender as a category of differentiation and tried to find other explanations for the phenomenon at hand. This way we could avoid the reproduction of gender stereotypes and conclusions being drawn on basis of heteronormativity." (Hofstätter 2012, p. 4)

queer (studies) community comprises people we know from courses at university, conferences, research projects, and meetings as well as people we have never actually met physically (yet) but interact mostly via social media (although we do not think of these as two separate worlds). Twitter,[2] in particular, makes it possible for us to share thoughts, ideas, future events, and publications with others and discuss queer topics with scholars who work on, and think about, similar issues, geographically sometimes very close to us and sometimes rather far away. This is a very important arena of reflection for us.

Of course it would be great to generally have more funding for explicitly queer-themed STS research projects and for working on some of our ideas, e.g. on how theoretical considerations could be empirically implemented – a topic we have been interested in since founding the working group (AG) Queer STS (Hofstätter & Wöllmann 2011; AG Queer STS 2014). In any case, we would and could never stop our irritations and interventions (might these be smaller or bigger) because we think that also small dosages of queer thinking can improve almost everything, especially science and research. The following examples give an impression of what we mean by "queer interventions":

Example number one: Queering research on technology users by challenging the way we define 'experts'

In the research project "Build to Satisfy",[3] Magdalena Wicher (another member of AG Queer STS) and I (Anita) worked together with colleagues from the IFZ[4] research unit "Energy & Climate" and with other researchers and experts in the field of sustainable office buildings and facility management. The main interest of this study was to find out about ways users can influence the energy performance of low energy or passive house standard office buildings. The goal was to feed all our data about users and their practices (coming from interviews and a survey) into a computer based simulation to help facility managers and architects to better plan and manage 'green' office buildings according to users' needs (cf. Suschek-Berger et al. 2014). Our role was, besides doing environmental psychological research (cf. Wicher 2014), to ensure the implementation of a gender inclusive and diversity perspective in the research project. Already in our first kick-off-meeting within the project team, I explained that I wanted to work with a queer-feminist perspective and what I meant by this. In the first interim report I wrote a chapter about gender in energy research (more specifically: on 'green' office buildings) and took on a queer perspective in there, too. These interventions led to some questions and comments from the participating STS colleagues. Nobody seemed particularly irritated, though. When our project leader met an evaluator of our project we even got

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positive feedback because, obviously, with our attempt to include queer theory into the project report we raised interest and received extra attention: "Ah, you're the ones doing the queer stuff! That's interesting!" So far, all sunshine and roses. And then we started with the empirical phase.

In the beginning of this phase we had the classical job of gender experts, making women visible but taking care of not perpetuating gender stereotypes, asking for diversity criteria additionally to gender etc. When the research team was looking for interviewees for expert interviews, i.e. experts in the field of green office building planning and maintenance, our STS colleagues ended up with the 'usual suspects': architects, facility managers, and CEOs from the research companies. And, surprise, surprise, we ended up with an all-male group of white, Austrian, around 50-year-olds, most of them with wedding rings on their fingers. So we made a small queer intervention and asked ourselves and our colleagues: How can we redefine expertise in this field in order to get a more diverse group of interviewees? We suggested including more and other staff members from the companies, people who know the buildings and their characteristics also very well but maybe from another perspective (e.g. cleaning workers). This was probably seen as an unorthodox suggestion, but it was appreciated by our STS colleagues who were committed to our approach to gender and diversity for the project. Only when adding a third gender category in our online survey, we scratched the highest irritation level of some of our STS colleagues. And finally, when we did not use gender as an independent variable to explain effects in measure variables (like satisfaction with a heat control panel) but first looked into other social or psychological criteria (like working hours or work satisfaction) to explain effects, some of these colleagues had to reconsider what they believed to know about gender-reflective research.

Though this project had not many resources for an extensive queer STS study, our small interventions could optimise the research and generate some moments of learning for all of us. We gender/queer researchers (cf. Degele 2008) learned from green office building experts and researchers, and we are sure that especially our STS colleagues gained insight into a gender-reflective, critical, diverse, and sometimes even queer STS approach.

Example number two: Attempt of installing all-gender toilet signs at an STS conference

In the advent of the annual STS conference in Graz in 2015, some new adoptions by the organisers caused me (Birgit) to look into the degree of inclusiveness of our conference. First and foremost this question was raised in the face of increased conference fees lacking the offer of reduced fees for potential contributors and attendees with low income. By looking for solutions that would cover expenses for the conference and at the same time reflect inclusion and solidarity within our scientific and stakeholder commu-

nity, I became aware of more than just financial issues an inclusive conference organisation has to deal with. Taking on a queer perspective, and throughout the years attracting a growing number of queer-minded people to the conference, we consequently had to question whether the conference was as inclusive as we had considered it by then. Based on sources provided by our friend Boka En[5] – someone who is already experienced in organising inclusive events – I compiled general guidelines for our institute as I wanted my work to be useful not only for our annual conference but for other events such as project meetings.

One measure suggested in these guidelines addresses toilets – a representative battlefield when it comes to feminist and queer interventions (see for instance Gershenson & Penner, 2009). The question of whether to provide gender segregated toilets first and foremost is a legal one, at least in Austria: According to the regulations on workplaces ("Arbeitsstättenverordnung"), employers have to install lavatories segregated by gender as soon as there are at least five men and five women among the staff (§ 33 para. 2 AStV). The existence of transgender, genderfluid or intersexual individuals is not considered by this regulation. The law furthermore includes the instruction that around half of the facilities in men's rooms (if there is more than one required) have to be urinals. This way, the gender binary is constructed not only by spatial segregation but also by the design of the 'hardware' of the facilities. One argument in favour of distinct women's toilets could be to create a safe space for the – in our social context very intimate and tabooed – needs connected to the use of their facilities. The notion of men being potential offenders is only one problematic assumption this argument is based on. On the other hand, the segregation creates a similar 'safe' space for men where women do not have access to and thereby facilitates or sustains existing power relations along the gender binary. At the same time, people who are not conforming to either of the traditional gender categories and/or are particularly vulnerable to harassment because of their gender expressions find themselves in stressful situations when in need of using public – or otherwise broadly shared – toilets assigned to one or another gender. From this perspective, creating a safe space for women is not a sufficient argument for segregated toilets but needs to be taken one step ahead (or in some cases one deliberate step back). Toilets are sensitive areas where all people should feel safe from observation and harassment. The perfect solution would be lockable rooms providing all required facilities (i.e. also for washing hands, changing diapers, etc.) designed to be used by only one person at a time (except if assistance is required), regardless of their gender. This way, shared space is omitted and opportunities for harassment and abuse limited.

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5 You can read a paper authored by Boka En and Andrea* Ida Malkah Klaura in this online publication.

Image 1: Gender neutral toilet signs6

As of the toilets provided at the premises of our annual conference, they mostly do not fulfil this ideal design of safe toilets. Nevertheless we wanted to create all-gender lavatories to raise awareness for this issue and to take into account that gender fluid individuals were among the contributors and attendees of our conference. The most suitable way for us seemed to be to cover the existing gendered toilet signs by all-gender ones, indicating only whether there were urinals in the rooms, but otherwise stating that this was a measure to make the toilets inclusive spaces welcoming all genders. It was not surprising for us that attendees were irritated by the temporary interruption of the all too familiar binary gender segregation.

But we were simply taken aback when the event management office of the university contacted our organisers and instructed them to remove the all-gender toilet signs and restore the segregation.

From what we learned in the aftermath, it was students who went to the head of the institute we rented the rooms from and complained about people not their gender coming out of what they were used to be 'their' lavatory. The head of institute contacted the event management office who had our organisers take the temporary signs down. This happened only within a few hours in the morning of the first of only two conference days. Resistance against a measure of inclusion was THAT quick and effective. Interestingly, rather than women who might have felt deprived of a safe space, it was men, members of a socially privileged group, that struggled with an intrusion into a space they claimed to be 'theirs'. Just like Taunya Lovell Banks (1990-1991, p. 267) observed a

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6 The text below the pictures states: „For gender non-conforming individuals, just walking through the door of a (gendered) public restroom can be stressful. Everyone should have the right to use a restroom without fear of discrimination. For the time of the STS conference, this restroom is for everyone, regardless of their gender identity or expression. Thank you for your cooperation!"

quarter of a century ago: "Men can get very hostile when their bathrooms are threatened, causing one to suspect that men see bathrooms as indices of power." So far nothing seems to have changed in the past 25 years. We did not want to leave this resistance uncommented, though, and in an impulsive outburst of protest we created new toilet signs indicating which gender was meant to use the respective lavatory but simultaneously questioning the binary constructed by this.

Image 2: Resistance to the resistance
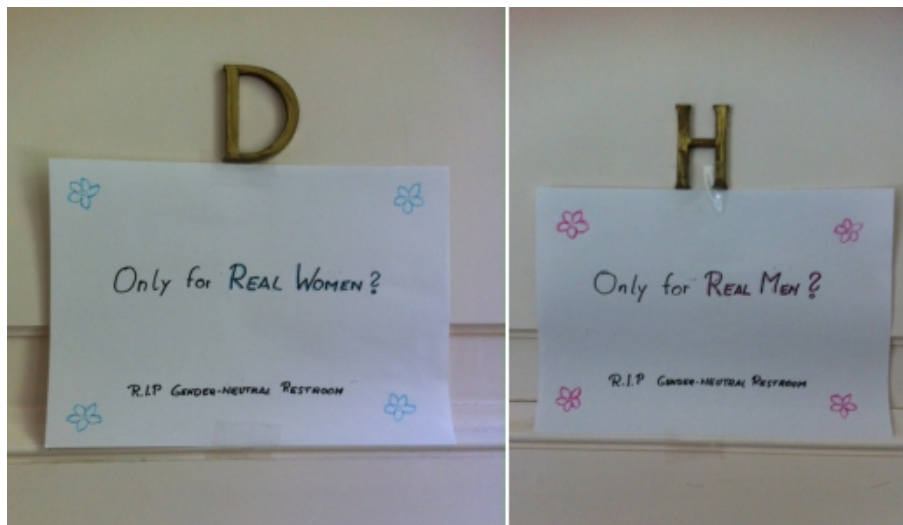
The whole intervention – from installing all-gender signs to restoring the gender segregation in an openly provocative way – made people think and talk about it. Some attendees, observing the changes of toilet signs throughout the morning, came up to us and wanted to know the details about the incident. In that sense, the protesters did us a favour by drawing even more attention to our inclusive measure, forcing us to take one step back and pointing out exactly which considerations it was based on. Furthermore, they reminded us of how deeply society (and the academic context is no exception) is soaking in heteronormative thinking and that gender segregation in public spaces serves not only a feminist purpose (in terms of protection or empowerment of women) but also create homosocial spaces for men that obviously mean a lot to some of them for sustaining a position of power, or at least exclusiveness. Another interpretation could be that (privileged) men are more outspoken when they cannot have it their way.

Example number three: transFAIRmation – creating political remix videos in the classroom

With media technologies pervading our everyday lives, enabling us to become creative and participate as producers of media, we also face educational challenges (cf. Jenkins 2009:15). With possibilities come responsibilities and thus the need to teach conscious and reflective use of these technologies. Our approach with technology education is to use a vehicle (cf. Thaler & Zorn 2010), a (non-gendered) topic the learners in question identify strongly with. With young people, music, fashion, or, in the case of our project "transFAIRmation"[7], TV-shows work well as vehicles. These topics are used to transport technology-related knowledge. Starting point for transFAIRmation was the observation that, through self-made videos, young people express their opinions and world-views and what they have learned about society. Popular mass media like movies and TV-shows are arenas of informal learning, and videos made by recipients reflect how these contents are processed, adopted and transformed. One genre among these DIY-videos[8] sticks out as it is self-aware of its political nature: Political Remix Video (PRV) can be defined as "a genre of transformative DIY media production whereby creators critique power structures, deconstruct social myths and challenge dominate media messages through re-cutting and re-framing fragments of mainstream media and the popular culture" (Jonathan 2009).

The main objective of transFAIRmation was to test PRV as a didactic tool in middle school to address some of the issues Henry Jenkins (cf. 2009:15) lists as challenges faced by media education:

- **the participation gap:** the difference in what the internet means to (young) users – the possibility to engage and create or a rather narrow and little important means of entertainment,
- **the transparency problem:** the misconception that children are capable of actively reflecting and articulating their experiences with media, and
- **the ethics challenge:** the misconception that children are capable of single-handedly developing the ethical norms they need for engaging in a virtual social environment.

These challenges apply for technology in general as we live in a technological civilisation that requires the training of technological competence, comprising skills in handling technologies (know-how) and the ability to reflect on e.g. social and ecological implications of these technologies (know-why) (cf. Thaler 2014). Following these considerations, for transFAIRmation we conceptualised media as technologies of learning and participation. We worked with 52 12-16-year old pupils with various ethnic and socio-

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7 Funded by Zukunftsfonds Steiermark and received the Fairness Award 2014 from the Austrian Federal Ministry of Education and Women's Affairs.
8 DIY = Do It Yourself

economic backgrounds, language skills, and learning abilities. Our intention was to make transFAIRmation an inclusive project as we had the idea that if it works in a rather challenging teaching setting it would work with many other target groups as well.

The didactical concept along which we wanted to test our idea was structured into three practical phases. We began by proclaiming 'fairness' to be the topic of the project and the first phase was about finding a common understanding of what fairness means and looking into different examples and related topics such as dis/ability, human rights, environmental justice, sexism, homophobia, transphobia. It turned out that the pupils were massively interested in the latter topics as it seems that they hardly had the opportunity to ask their burning questions in regard to gender and sexuality and to meet people who are open about their 'non-conforming' gender/sexuality. This discovery set the course for the second and third phase of the project. The second step was to take a critical look at two of the pupils' favourite TV-shows ("Two and a half men" and "The Simpsons"). We chose episodes of both series addressing the topics we discussed in phase one, preferably with focus on gender and sexuality, and analysed them together with the pupils. In the final phase these episodes served as material for remix videos the pupils created. Again, gender and sexuality were dominant topics in this process.

However, the queer intervention of transFAIRmation did not stop at the level of content by focussing on gender and sexuality in media representations. We also chose a participatory, transdisciplinary design for the project, i.e. contributions of all parties involved (researchers, teachers and pupils) were considered equally valuable. All participants had the status of experts concerning their roles in the classroom. Like in the project "Built to satisfy" (described above) we sought to queer the way we include people in our experiment, avoiding – or at least minimising – the usual researcher-subject-hierarchy by redefining expertise and in that sense considering all participants co-researchers and learners at the same time. This way, transFAIRmation grew into an explicitly queer project, even though it started out very open and unspecific in this regard.

Example number four: "Queerschnitt|materie" – Queer STS as a lecture series
Eventually, in 2015 we got the opportunity to host an explicitly queer STS lecture series at the University of Graz (in cooperation with Alpen-Adria Universität Klagenfurt who financed the lecture), where we discussed many of the topics presented in this very first edition of Queer STS Forum. If you now think, "Oh wow, they got to teach a course on queer STS, how awesome!", let us explain a bit more:

When a number of colleagues at Alpen-Adria Universität Klagenfurt cancelled their lectures due to various reasons, the study programme director asked the staff of IFZ in Graz if anybody was interested in an additional course.[9] It was at the end of March 2015

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9 Background information: Some third-party funded IFZ researchers work as external lecturers for Alpen-Adria-Universität Klagenfurt and usually have to fight for these courses as they have to be paid extra.

when the question was addressed to IFZ. But since all teaching activities had already started, not many found this offer very attractive because, in order to get a course approved and paid, you need a certain number of participating students. Still, we (Anita and Birgit) thought about it and said yes, let's do this, let's include our colleagues from AG Queer STS and try to find other queer STS scholars and colleagues interested to join us on a Queer STS lecture series.[10] We came up with a framework, defined the topic, found a name ("Queerschnitt|materie[11]"), contacted potential lecturers, designed the programme for one week in May 2015, and then the organisational challenges began: First of all, the university was not very happy about a course with more than two (or, okay, at most three!) lecturers. So, one of us had to be the official lecturer and had to subcontract all the others. Soon this hurdle turned out to be of advantage for us as we could divide the salary in a more solidary and fair way among us. We decided to pay all lecturers the same amount for the same hours of teaching, regardless of whether they were teaching their lessons alone or as a team. Usually, when you teach a course with a colleague, the university assumes that you split the work and do not do team-teaching (meaning working together for the whole course). As a result of this assumption, you only get paid half for a team teaching course. In our case we had the possibility to change the system which was easier than you think.

Next, we had the risk of investing a lot of resources (time for preparing a new course, coordinating all the others, preparing the administrative tasks, and also money[12]) without knowing if we would be able to attract the minimum of eight students (remember: this was in the middle of the semester at the University of Graz). When we announced our lecture series on Twitter and Facebook, we got a first impression of the kind of interest such a lecture series could raise. We booked a room at the university premises[13] and optimists that we are (and because of some encouraging Facebook postings and tweets we received) we booked a room for 30 students.

One last hurdle was to prove that at least eight students were attending the course in order to get paid. While the participants of the lecture received their certificate from the University of Graz the teachers were paid by the University of Klagenfurt. Nonetheless, the students had to register at both universities. Usually this administrative task is not

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10 Find the description and a list of the lecturers here: http://sts.aau.at/Media/Dateien/Downloads-IFZ/Lehre/LV-Que-e-rschnitt-materie!-Queer-feministische-Technik-und-Wissenschaftsforschung [12.11.2015]

11 As 'queer' is related to the German word 'quer' (='across'), blending it with 'Querschnittmaterie' (German word for a 'cross cutting issue') added to its meaning. Furthermore, the vertical bar between 'Queerschnitt' and 'materie' points out to (post)materialist discussions in gender and queer studies.

12 We designed and printed pretty posters which you can see here: http://www.sts.aau.at/var/ezwebin_site/storage/images/media/bilder/frauen-und-technik/queerschnittsmaterie-ringvorlesungsuebung/84410-1-ger-DE/Queerschnittsmaterie-Ringvorlesungsuebung_medium.jpg [12.11.2015] Thanks to Julian Anslinger!

13 Warning: Do not try this at home … trying to find a room for a whole week in the middle of the ongoing semester, but hey: We made it! Unbelievable! Thanks to Lisa Scheer!

much of a problem, but in our case the lecture started a month after the registration deadline. With great foresight we asked for an extension of the deadline for our special case and finally, after some emails back and forth, got the permission.

We do not want to emphasize these hurdles too much, though, because "Queerschnitt|materie" was a huge success for us: More than 80 students registered, we filled our course with 34 of them; the students came from very diverse backgrounds studying IT, chemistry, social sciences, etc. All lecturers were very satisfied with the enthusiasm and participation of the students, and in the reflection in our last session we found out that the students had really learned a lot, even – or because? – without having to write an exam at the end. But let us just add that although we got the "okay" for the extended deadline before the lecture series started, our students could not register because the online system to do that had closed by then and so our 34 students stayed invisible to the statistics. In another set of emails back and forth we could convince the administrative staff that we would find a way of proving the sufficient number of participants to start the lecture and get paid for it. Despite the success story and the joy over finding enthusiastic and competent university lecturers in the middle of the semester to work on a new lecture series on the topic of queer STS and reaching more than 80 interested students with such a course, we are critical of the fact that this success was not taken notice of by the system of 'university administration' – maybe because it was too queer in too many ways. In any case we uncovered the rigidness of the procedures and how powerful technologies of administration are. So, while organising and teaching we intervened, interacted, and irritated a lot, and we like to think of the whole thing as a queer intervention process. In this sense it feels right, because this is what we do.

Conclusion

In this article shared our queer approach to Science, Technology and Society Studies with you. One main motivation in our research and teaching (and especially from a queer-feminist point of view) is to have an impact on practices and people. Maybe because our 'daily businesses' are often not directly related to queer studies we developed a habit of doing queer interventions by asking queer questions, thinking in alternatives, irritating colleagues (like in our example one, where we challenged colleagues with our definition of 'experts'; or example two, where we tried to install all-gender toilet signs at an STS conference) and students (like in example three about creating political remix videos in the classroom; or example four, the Queer STS lecture series). Finally, we told you about our regularly interactions with other queer scholars and 'queer-minded' people in our research and at conferences (face-to-face and online), but here is the thing we learned:

A queer perspective can enlighten and broaden so many more issues than just STS, so we use our methods of queer irritating, intervening and interacting more and more in our everyday lives.

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