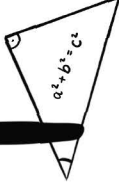


Queering



STEM




Collections

1st Vienna Workshop


This zine is a visual report of the 1st
conference "Outer Edge: Queering STEM Collections"
held in March 2020 @Technisches Museum Wien

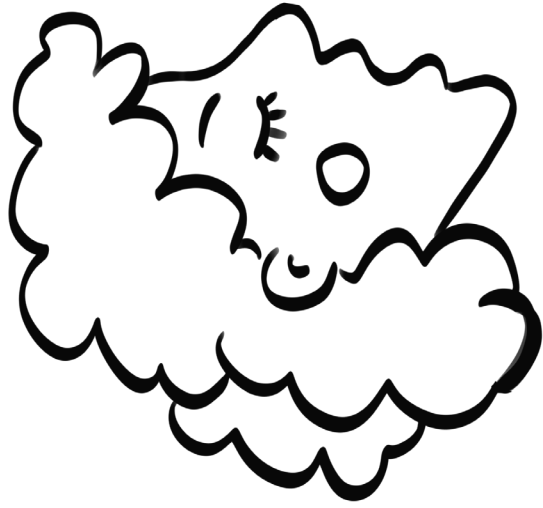
Layout & Live Recording
Kathrin Gusenbauer
irrlight - impressions.com



How can the science and technology museum, as a cultural and social institution, explore the opportunities of reflecting and developing a plural society?

This workshop critically attended to constructions of gendered and heteronormative technology and science, and brought together scholars and practitioners to scaffold actions in museums, and build a network of interested parties.





! ! !
dive

Recordings



JOSH DAVIS & FLORENCE OKOYE

OPENING HISTORICAL MUSEUMS

How can it be queer?

- * TAKE PART IN CITIZEN SCIENCE

REFRAME MODE OF COLLECTING

BATTLE BIAS IN GENERAL PUBLIC

LOOK FOR QUEER NARRATIVE

THESE ARE OFTEN HIDDEN WORK WITH THE LGBT+ COMMUNITY now!

MARtha CLEWLOW

"Just the facts please: WORLD CAFE"

ANDREAS BRUNNER & FLORIAN HILDENBERGER

"GOOD VIBRATION"

* CURE DISEASE THROUGH MASTURBATION

* "MACHINES CAN'T FAIL"

POWDERED BY WATER OR A LIGHT BULB

OR MASTURBATION? CHANGED A LOT OVER TIME

VS. MACHINES ARE NOT NEUTRAL

* DOCTORS OR ?

TELLING LGBT+ EUMS / GAY NARRATIVES IN STEM

KEYWORDS: QUEER

LOVE IS NOT

* MOST OF THEM OF THEM RELATED TO HIV/AIDS

* ONLY ~50 ACTUALLY

QUEER: 0.047%

* THESE ARE LONE OBJECTS MOSTLY // NOT IN PERMANENT EXHIBITIONS

NO PUBLIC ACCESS

Curatorial



Dreaming

BODIES, NORMS & SCALE

GROUP ↑

FEEL SEE HEAR SMELL

WHAT COULD BE THE MA

BIAS IN EXHIBIT SENS & IT'S DIMENS

WE WANT TO SEE NOT JUST WHITE PEOPLE

WE WANT TO FEEL

IN A MUSEUM YOU NORMALLY CANT TOUCH THINGS

WE WANT GENDER STEREOTYPE TO BE A TOPIC TALK ABOUT!

END

GROUP 2

ADAPT & ENHANCE

* AGENCY → What's human?
What's technical?

* NARRATIVE OF PROGRESS → out of the
HARD OF HEARING / DEAF MUSEUM?
→ e.g. do not need to enhance.

GROUP 3



CONTROL & SURVEILLANCE

WHO ACTS OUT CONTROL?

WHERE? — KITCHEN
— UNDER BRIDGES
SOCIAL MEDIA
FACIAL RECOGNITION

Sensual
Connection
to
Objects

IS ALSO
INTERSECTIONAL

GROUP 4

MEASURE & SCALE

* COLONIAL BIAS IN
"OBJECTIVE" REPRESENTATIONS
* CIVIL CONTRIBUTIONS TO
NOT BUILD BIASES IN
AGAIN

WHAT ARE
GENDERED
ASPECTS OF
PAIN?

BIRTH

FEMALE
SENSITIVITY

URANCE
PAIN

S
ED

IONS?

NG
ES

LE
O

Measuring and Scale

TECHNOLOGY ENCODERS AND INCREASES BIAS

WHO IS THE HUMAN "TYPE" WHO ARE WE MEASURING AGAINST?

WHO NEEDS THE DATA? WHO PROFITS FROM THE DATA?

AVERAGE TEMP IN OFFICES NOT OPTIMAL FOR WOMEN

BIAS THAT NUMBERS ARE...
FACTUAL OR OBJECTIVE

WHAT DOES "OBJECTIVE" MEAN?

FIGURES OBJECTIFIES THE OBJECTIFIED

NO MENTION OF HOW HISTORICAL BIAS IMPACTS US TODAY

NO MENTION OF SELF REPRODUCING BIAS ARISING FROM "SCIENTIFIC" BIAS "WHITE BULIMINIST"??

REFERENCE TO "PORTRAIT CRITIQUE SATIRON"

COLONIALIST IMAGES/NARRATIVES NOT CRITIQUED

FIGURES OBJECTIFIES THE OBJECTIFIED

WHY CAN WE BE BIPARTISAN? WE CAN'T BE BIPARTISAN

ANTI-SUBVERSIVE ACTIVISTS * FASHION HISTORIANS

WHERE DO "SIZES" COME FROM?

QUESTIONS TO ANSWER!
IT DOESN'T FIT ME
I DON'T FIT

WHAT HAS THIS DO TO ME?

TRANSVERSANA GENDER NATIONALIST DIETRIICH MARRIETTE
PRESENTATION/ DISGRAN
* DON'T OBJECTIFY WITH MORE PROBLEMATIC OBJECTS IMAGES
ECO-FRIENDLY FASHION BEHAVIOUR TO REPRODUCE? OR NOT?



ADAPT/ENHANCE

DIFFERENT ORGANISATION OF COOKING
→ not individual and in family unit

AGENCY

DOUBLE-EDGED SWORD
"FRANKFURTER KÜCHE"
ENABLE / CONTROL

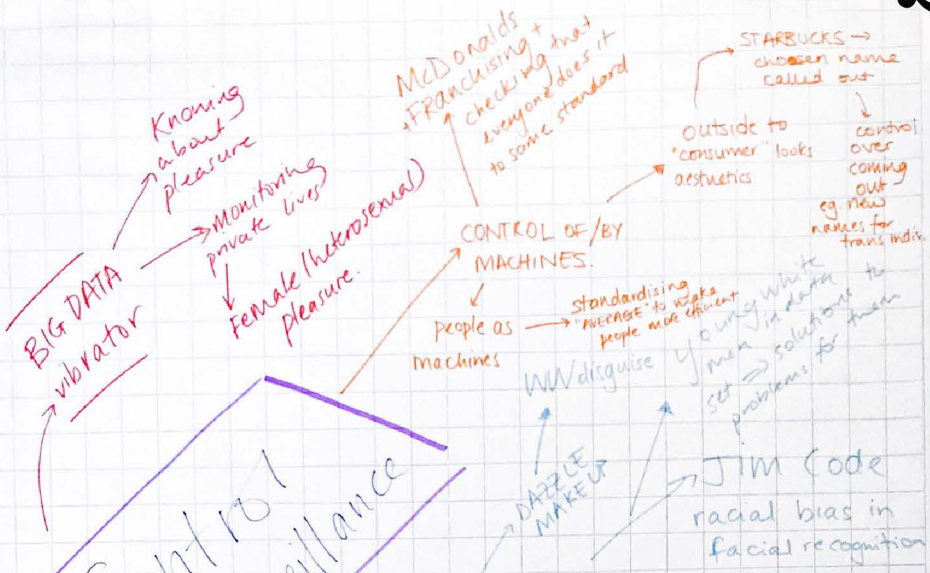
VIBRATOR
OPPORTUNITIES & CONTROL
DATA FEEDING

DEAF COMMUNITY MEMBERS
REJECTION OF HEARING AIDS

Bio-Hacking
Cyborgs

CHRONOLOGY
NO MORE!
GET RID OF STORY OF PROGRESS

Control and Surveillance



FACIAL RECOGNITION

China ⇒ mask for virus

new AI software

Hierarchies →

who is allowed to surveil who?

GENDER BINARY

changing AI database

not about self-identification but is someone else's choice.

Crime and Punishment OR Überwachen & Strafen

FRANKFURT KITCHEN

show was it dictating the way people had to move?

changing practices in cooking

dictating the way they SHOULD WORK.

⊗ EXERCISE OF POWER:

- ↳ Shifting power (eg. Eugemics ⇒ Silicon Valley ⇒ ...)
- ↳ Fitting into "norms" of bodies
- ↳ what are we "protecting" or "controlling"

"efficiency" ⇒ making invisible

WHO CAN CONTROL WHO?

changing powers
 "winning" into #.
 GDPR who owns your data

corporations
 => more than state control.

erasing data over short terms
 indigenous environmental movement

environmental activism give on fingers
 DAZE/R makeup
 VPNs / Tor network
 natural disasters
 instagram accounts run by groups.

WHAT DOES CONTROL MEAN?

eg. protection => control of SECURITY CAMERAS

Panopticon
 SELF-REGULATION
 amusement
 punishment
 control

"visiblising" social "problems":
 what's "normal"
 Kitchen design
 hostile architecture
 dripping water
 benches
 vents
 spikes

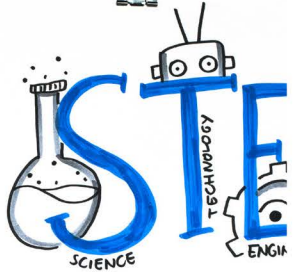
control of environment

anthropocene -> changing climate or natural environment
 built environment of / against climate change.

MEDICAL CARE CONTROL

BIG DATA vibrator
 who are the doctors?
 who is approving the treatment?
 trans/gnc/intersex
 assigning sex of intersex babies

OUTER EDGE QUEERING



WHERE IS MATHS?

MATHEMATICS EXHIBITIONS

BIOGRAPHICAL & FEMINIST
* WOMEN in MATHEMATICS
- NOETHER 1st professorship in mathematics

* IMAGES OF WOMEN & THEIR SOCIAL RELATIONS

* INTERSECTIONAL? - BLACK WOMEN?

ARABELLA DENK & ANNA PILLINGER

GUJARAT SCIENCE CITY

* NEW MUSEUM THEORY ≠ OLD MUSEUM THEORY

* GENDERED NATURE OF TECHNO SCIENCE

* NO POSTERS OF WOMEN SCIENTISTS

Rajni Gupta



TECHNI NIKOLA T

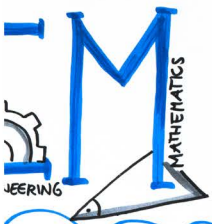
* SPECIAL C "BRIDGE" PART OF

* LABELS, TE: PHOTOGRAPH 158 person

157 O

* ALSO NIKOLA TESLA'S MOTH Tesla attributed a

COLLECTIONS



ICAL MUSEUM
 TESLA ^{FIND GENDER}
 CONCEPT PERSPEKTIVE
 TO INDUSTRIAL TOWN
 XTS & HS ^{ANALYSIS}
 is mentioned ^{CONTRIBUTION OF WOMEN}
 1 ♀ ^{INTERVENTION IS PLANNED}
 COSMONAUT
 IER → just the "wife of" a lot to her

TAXONOMY IN BOTANY & MYCOLOGY



^{CATALOGUE ANALYSIS}
 * TRADITION OF TAXONOMY COVERS FEMALE CONTRIBUTION (no first name)
 HEATHER LINDON
 * OF ALL THE PEOPLE TO CONTRIBUTE PLANT NAMES WOMEN IS VERY LITTLE
 1.
 * WHO WAS THE FIRST WOMAN TO NAME A PLANT? WHY ARE THEY SUCCESSFUL?

SCIENCE & TECHNOLOGY COLLECTION - PEABODY MUSEUM @YALE
 ALEXI BAKER
^{COLLECTION ANALYSIS}

* INTERSECTIONALITY REGARDING DISPLAY & RECEPTION
 * MAIN OBSTACLE: TRIVIALIZATION
 ONE SOLUTION: PUT MODERN ART IN BETWEEN TO RECONTEXTUALIZE
 IT IS NOT THAT IMPORTANT



Actions in Museums



WHAT CAN WE DO?

- BRING LGBTQ+ INTO THE MUSEUM
- SHIFT LOCATION OUTSIDE, CORNERS
- BIOGRAPHIES OF US WE NORMALLY DO NOT TALK IN MUSEUM

EXERCISE: IN (1) & (2)

THINK OF INCLUSIVE INTERVENTIONS



EXAMPLE: BOTANICAL GARDENS VIENNA

- MAKE NAMES OF PLANTS UNDERSTANDABLE

→ EUROCENTRIC VIEW OF THE WORLD

SHAKE UP!

→ MIGRATION HISTORY OF PLANTS



→ WHAT IS NATURAL / CULTURAL?

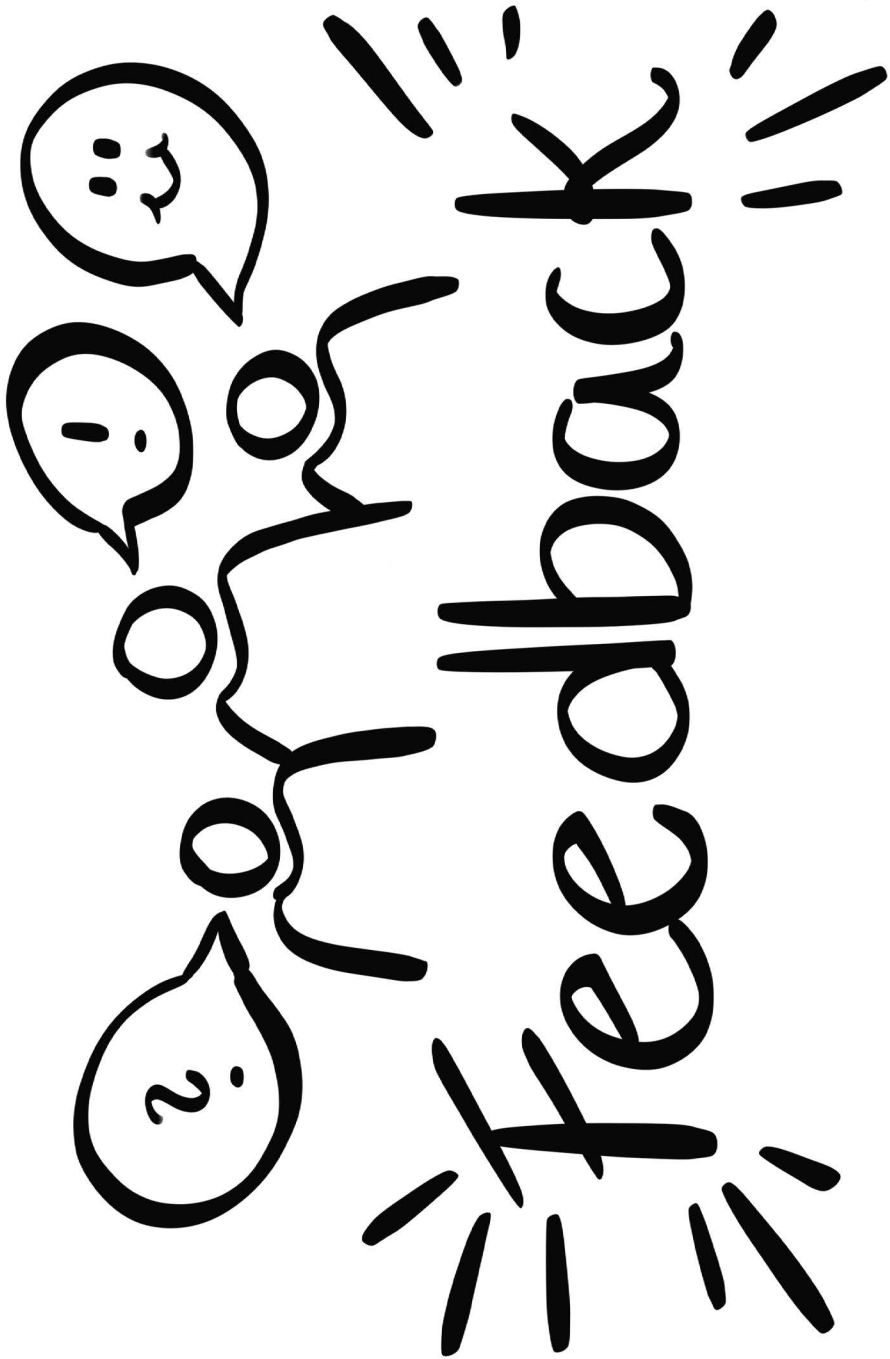
→ THEMATIZE QUEERNESS OF PLANTS

→ CONNECT "WITCHHUNT" TO HERBS & PLANTS ⇒ TOUR

→ TAKE BOTANY INTO THE STREETS & COMMUNITIES

OTHER EXAMPLES

- * OBSERVATORY → MYTHS INSTEAD OF TECH
- * APPLIED ARTS → CYBER FEMINIST PARTY
- * TECH HISTORY MUSEUM → DIGITAL EASTER EGGS
- INTERSECTIONAL STORIES



What qualifies someone or something for being included?

HOW DO YOU REMEMBER TO INCLUDE EXPERIENCES / PEOPLE / ETC. YOU DON'T EVEN SEE??



Still hoping that somehow that including without excluding is possible - although museums are not the best example so far

What is inclusion in a systematically excluding social structure?

Why does anybody qualify for being included?

And who is judging?

Can we have a more plural group of people talking about who to have

Isn't this a question of power?

Who are we talking about? Who is curating? DIVERSITY IN INSTITUTIONS (with FOR) (Lisa Simon)

INTO WHAT?

No. something that is needed

do people have to have "the work"? could we have more queer quarters?

What are we offering when we offer inclusion?

WHAT CAN / COULD PEOPLE TAKE FROM BEING INCLUDED?

* "you're going to be judged"

IS IT ENOUGH JUST TO SEE YOURSELF REPRESENTED, OR DO YOU NEED SOMETHING MORE?

Wanting to be included should be enough

ALL welcome

THIS: not being an asshole helps!

...Phobic



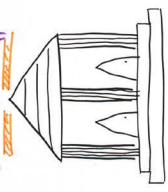
OBJECTIVITY

... Start thinking about social contexts.



is vital to feel your voice counts + spaces for openness + discussion

What are your hopes for Queer(y)ing STEM for collections?



influencing how STEM is...
... seen
... enough
... practised

To question the barrier of technological progress vs. humanitarian.
The presentation of technological progress is often sullied and do not consider human beings at all.

making them "irrelevant" to many people

Be a part of it
no less

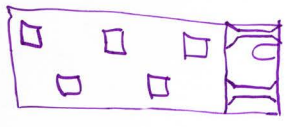
people seeing themselves + their stories represented in all spaces

shaking up the system => become more inclusive and less white + bi way + hetero, far white

CHANGES HOW WE TEACH HISTORY / SCIENCE TO FUTURE GENERATIONS!

That (relatively) powerful public institutions can better respond to & meet public needs

THAT PEOPLE & COMMUNITIES FEEL LIVE THESE SPACES BELONG TO THEM AND THAT THEY HAVE AN INT.



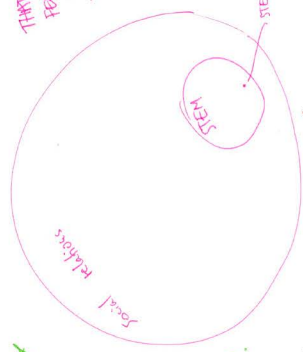
CHANGES THE WAY SCIENCE IS DONE / TECH GETS MADE!

bringing all the people to the museum (if they want to) and welcome them all equally.

STORIES THAT ARE NOT TOLD
THE WORK HAS BEEN DONE

to open up records to anybody

to change dominating narrative



MATERIAL EMPowers COMMUNITIES

MUSEUMS BECOME MOSTLY FOR THE PEOPLE, BY THE PEOPLE



Allow
uncomfortableness -
↓
sit with it

and challenge myself
to understand what

say NO
to chauvenistic ideas!

What will you commit to doing to Queer(y) STEM collections?

welcome disruption/
slowness/complexity/
mess

encourage these
behaviors in my students too

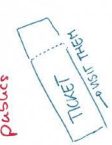
BE EXTRA
ANNOYING AND
"TALK" TO EVERYONE
(to get in their business)

BIG PICTURES
CONTEXTUALIZING / EXPLAINING /
CRITIQUING
(if I am allowed to)

constantly engaging!
communicating with
different publics

re-thinking / re-structuring collections
Thinking out of the box
for archiving / tagging /
databasing

trying to bring in
other people too -> how can
we collaborate
beyond our
own groups?
working in my feminist ideas into the database!



Importance of a
feminist social science / gender
Studies perspective to
people providing the STEM fields.



⊗ try to unlock for more people ⊗

DONT
MAKE
ASSUMPTIONS

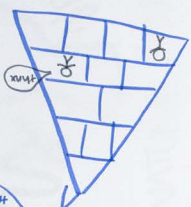
provide
space for
asking people
about their
preferences.

ALWAYS think
about why I make
assumptions come
from

domestic technology
Technology
UP FURTHER
a mind work with
GEMINITY
OPEN conversations

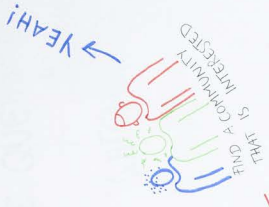
What institutional barriers ^{now} could you tackle with the help of this network?

I can help! (from the top)



learn about problems that have been encountered elsewhere

Share best practices as examples to people I work with



- WARNING!
- DATA!
- REPORTS!
- FUNDING OPPORTUNITIES!
- CASE STUDIES!!!

Sharing great ideas & experiences

Other people across the different countries

But also one and one with other organisations + universities, NGOs, research centres, etc.

What institutions?

YOU ARE NOT ALONE!

My comfort blanket when somebody says this is all overrated and unnecessary

Make concrete & explicit & higher profile that change is needed → enrolling allies

being outside the institution can help.

Language barriers (yes for some)



teach those who aren't as 'well-read' in gender theory → connect every day life with these concepts.

What are "gender" & "sexuality" and how do we engage with these ideas?

they are everywhere, especially in LGBT!



They are difficult concepts that have to be relevant to everyone on a day-to-day basis?

Swainson's 'Sexuality'?



When we talk about "gender" why do we (almost) always talk about women?

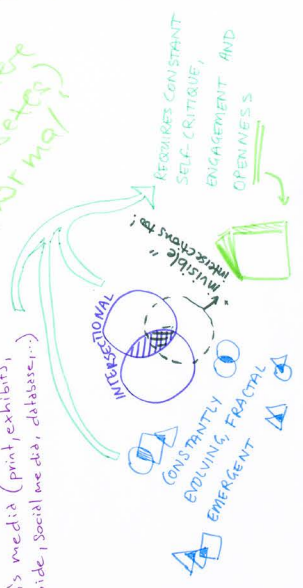
seems "lacking" rather than "anything else."

finding new/other perspectives / categories / themes (other sets) are more "normal"

Not as "escapating any of these terms"

How to represent this problem? Communication?

Making all genders & sexualities visible in all museum's media (print, exhibits, audio guide, social media, database...)



process / dynamics? what to grasp here?



What are the limits of terms - how will they change in the future?

Who are we (still) missing in these discussions?

↳ what

Migrants and
Migration (in general
(via outflow or
inflow))

Intersectionality
↳ intersection of
multiple forms of
discrimination
↳ intersection of
multiple forms of
discrimination

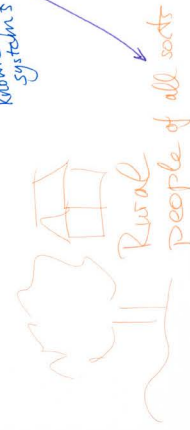
Those with
disabilities or different
body abilities

Different languages
+ different levels of language

↳ what is "queer"
all parts of
the rainbow?

Disabled
Publics

NEIGHBORHOODS



indigenous
perspectives
non-western
perspectives on
knowledge
systems



AGED PEOPLE (AGEIST)
LESS MEANING (SOCIAL MARKERS)

NON-UNIVERSITY / COLLEGE
EDUCATED FOLK

Women / Children
(taken we think about queering
offer about power - ops)

Workers
in production
and domestic
work

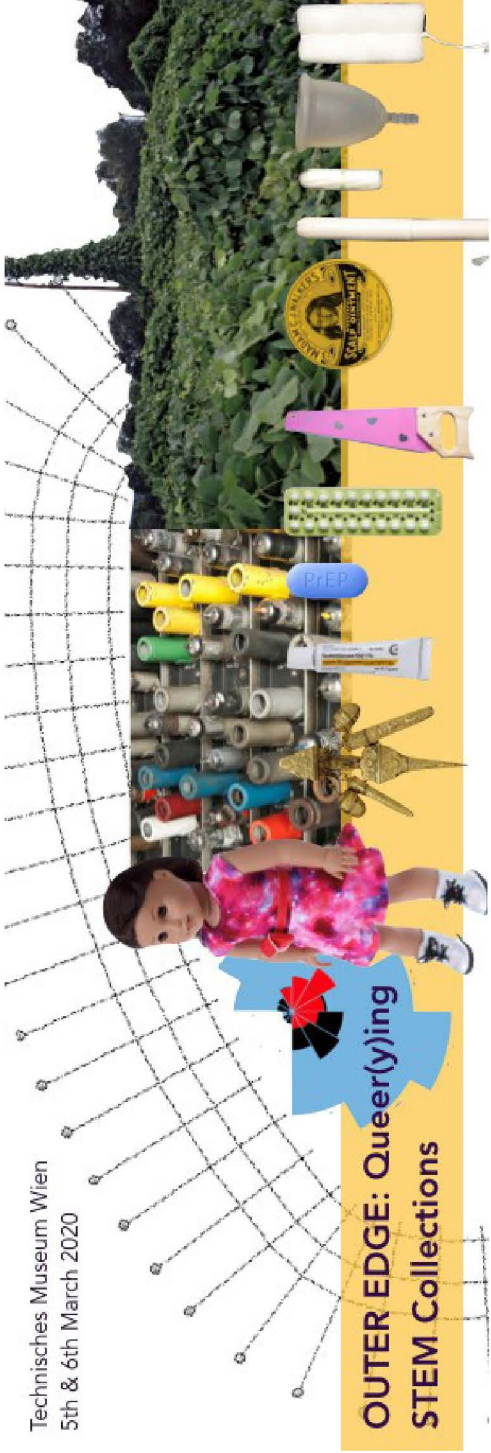
Senior queers (65+)

↳ older folk, MM
NOT OVER EVERY LIFE
THE WORD "QUEER"
DO WE NEED TO FIND
OTHER WAYS TO ENGAGE
WITH THEM?

MARKERS
COMMUNITY / SOCIAL

PEOPLE ON THE EDGE
(PRISONERS, ASYLUM SEEKERS
Refugees)

Technisches Museum Wien
5th & 6th March 2020



OUTER EDGE: Queer(y)ing STEM Collections

**technisches
museumwien**

MIT ÖSTERREICHISCHER MEDIATHEK