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Research Days. Long text

Projekttitel: From Toxic Textile Troubles to Fabulous Fibre Futures

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INTRODUCTION

About 70 years ago, the dust in our bedroom corners was still an innocent entity made up of plant fibers, hair and skin cells. Today it consists of approximately 50% petroleum. Textile fibers make up most of the mass of what we fondly call *Dust Bunnies*: Fibers that we lose every day from the clothes we wear and the home textiles we engage with.

These furry creatures, our dust, is a testimony to our consumer behavior and equally a representation of the global production philosophy of the fashion industry. An industry that brings about products under the most questionable conditions. Products that do not last long enough but will outlast us for centuries.

So while microplastics from our clothing are long found on top of the Himalaya, most of the sheep's wool in Middle Europe goes to waste. However, can we even “consume sustainably”?

The World Is On Fire But We're Still Buying Shoes is how former fashion journalist Alec Leach sums up the current state of fashion consumerism in his book quite aptly. So what is it that makes fashion so irresistible?

In fashion the very practical necessity of dressing intertwines with social desires and cultural values. We dress to belong, to protect ourselves, to impress the outside world, and to express our inner state. Fashion is more than just material — it is who we are and who we aspire to be. Yet, since the advent of ready-made clothing, the fashion industry has developed into one of the most destructive sectors of consumption — emblematic of everything that is wrong with capitalism. A genuine

transformation of the fashion industry requires a reevaluation of our relationship to what we wear. For this we not only need a “design” revolution — we need a cultural one.

Indeed, at the moment, large-scale innovation is occurring mainly at the process and material level, rather than at the systems and value level. Major players in the fashion industry have found “recycling” to be a lucrative model, aligning with the broader shift from linear to circular economies.

However, latest research shows the myriad harmful implications of these recycling processes: from severely reduced durability due to the inferior fibre quality of recycled materials to an increase in microplastic emissions from PET bottles recycled into polyester.

This trend of employing quick fixes once again demonstrates that cosmetic changes in the supply chain are incapable of addressing the wicked problems (Rittel and Webber, 1973) inherent to fashion.

CONCEPT AND GOALS

The INTRA project, *"From Toxic Textile Troubles to Fabulous Fibre Futures – Experimental Design Practices Exploring Possible Circular and Non-Circular Material Futures,"* explores how design-inspired artistic research can contribute to value-based innovation and support the transformation toward more sustainable and just alternatives for our material culture on a planet in crisis.

Design research to understand. Designed experiences to engage. Design speculations to imagine.

The project includes a series of applied case studies within the context of the circular economy, with a focus on the textile industry. These prototypes aim to enable a critical examination of our material legacies in the age of fast fashion and to create conceptual spaces for imagining alternatives to dominant production paradigms — in a playful, exploratory way.

METHODOLOGY

By employing hybrid methods — from design ethnography to material experimentation, design speculation, experiential design, and co-creative processes — the project aims to **bridge** the promotion of awareness with the generation of new insights and the facilitation of diverse forms of innovation.

Working across disciplines — from design to the performing arts and the natural sciences — the project advocates for more inclusive and experiential approaches to discussing the global use of resources.

ACTIVITIES

Throughout the project, we organised various situations — at times more lab-like, at other times more orchestrated — involving different configurations of elements from our methodological toolkit.

The form of these situations was shaped by the given context. We aimed to collaborate with established cultural institutions such as the MAK – Museum of Applied Arts, Vienna, and Designforum Tirol; academic institutions such as the Free University of Bolzano and Johannes Kepler University Linz; and social enterprises like CARLA Mittersteig and WAMS Tirol. These collaborations helped us reach open-minded target audiences and participants.

Additionally, we were able to present our research at conferences such as *Fashion for Future Bolzano* and *CANSEE* (Canadian Society for Ecological Economics).

Depending on the context and target audience, the formats varied in duration, location, level of participant interaction, and ultimately in form.

Throughout the one-year duration of the project, there was no strict chronological order in the implementation of the three methodological strands — *Design Research to Understand*, *Designed Experiences to Engage*, and *Design Speculations to Imagine*. However, it proved effective to incorporate all three aspects within a single event, even when the format was relatively short — for example, a two-hour guided experience as part of an exhibition.

The developed formats went through various iterations over time, involving ethnographic approaches, performative activities, immersive experiences, interactive exercises, and co-creative processes.

Within collective exercises, we explored questions such as: What is our relationship to materials and textiles? What do we know about the things we wear? What are our motivations and values when we “consume” clothing?

These exercises were assembled into formats ranging from two-hour to two-day guided experiences. They served to gather knowledge, develop skills, and stimulate reflection simultaneously — workshops situated between participatory ethnography and designed experience.

Ultimately, these iterations evolved into a modular process design for guided workshop experiences.

CAPTIONS AND DESCRIPTIONS FOR VISUALS ON THE POSTER

a) Participatory Workshops about our relationship to clothing

“Beyond Labels” during Fashion for Future Bolzano 2024 (led by Nina Sandino)

The workshop *Beyond Labels* used a series of performative practices to explore the lack of care in the supply and disposal chain of our clothing. The half-day format provided space to reflect on our relationship with clothing, the concept of planned obsolescence, fleeting trends, perishable materials and about repair as a post-capitalist care practice. The workshop concluded with Nina Sandino presenting a solo edition of their performance piece *Elsewhere*.

“The P(L)astic Supper” during Fashion for Future Bolzano 2024 (a collaboration of Alexandra Fruhstorfer and Nina Sandino)

The experimental cooking session *The P(L)astic Supper* provided a hybrid environment between science lab and community kitchen. Together with participants organic matter was explored to create alternative algae based edible synthetic textile materials. Beyond the act of consuming the textiles created, the subsequent lunch experience became a moment for collective reflection – on our relationship with materials, the cycles of decay and renewal, and our connection to the environment.

“Catching Microplastic” at CARLA Mittersteig (commissioned by Wonderland Platform, led by Alexandra Fruhstorfer together with Max Scheidl)

The workshop *Catching Microplastic* offered a space to develop new skills and deepen understanding of microplastics as active agents in the circular economy. Recognising employees of CARLA Mittersteig as experts by experience, the workshop invited participants to critically examine and reimagine their daily interactions with surrounding materials. A guided workshop process included conversational reflective parts, tactile games and co-creative elements to envision the future of microplastics.

b) Immersive Experiences to foster engagement

“The Secret Life of ...” during Fashion for Future Bolzano 2024 and Circular Week Tirol 2024 (Alexandra Fruhstorfer in collaboration with Seçil Uğur Yavuz and Maria Menendez Blanco (Free University of Bolzano))

The case study *The Secret Life of...* explores how immersive, embodied experiences can facilitate engagement with complex or abstract issues that are otherwise difficult to grasp. As an interactive installation, the project aims to make the invisible both visible and tangible. A digital reflection simulates the amount of plastic microfibers released into the environment simply by walking in synthetic clothing. An accompanying participatory wall installation invites visitors to contribute a personal microfiber sample. The resulting, ever-growing diagram revealed both the material and emotional composition of the garments present in the space.

Concrete, materialised outcomes of the project included:

- An autoethnographic research process examining the materials we wear on a daily basis
- An interactive installation supported by custom software
- A research booklet presenting the findings in a playful and accessible format
- The process design for a one-hour guided workshop
- A participatory wall installation

c) Materialised thought experiments to open imaginative spaces for social dreaming

“ONE SHEEP (8 people)” during Milan Design Week 2023 and Circular Week Tirol 2024

The case study *ONE SHEEP* originated from a simple thought experiment: What if all the people on the planet had to share the wool of all the sheep on Earth, with no other resources available for clothing?

Hypotheticals — proposed situations or conditions — are popular tools used by speculative designers to explore possibilities and test ideas. They can serve as a fertile ground for developing imaginary alternative realities and worlds in rich, exploratory detail. Initially a text-based thought experiment, the project gradually expanded to include a variety of artefacts, ranging from practical online tools to written social contracts. *ONE SHEEP* evolved into both a speculative narrative and a co-creative workshop format. Concrete, materialised outcomes of the project included:

- A website and book presenting the central hypothetical in textual form
- An online tool demonstrating how the logic of textile production would change with only limited material available
- A collection of objects supporting the scenario
- A membership agreement for a speculative sheep wool cooperative
- A short documentary about a local garment manufacturer
- A process design for a co-creative, guided city-building workshop aimed at young adults