The story behind an exhibited rag rug – report from a workshop cleaning

ABSTRACT
In my paper, I describe my insights as manager of the textile workshop at the Department of Design at Linnaeus University, as well as how we teach material-based work. Part of my work as a workshop manager is to conduct a major clean-up at the end of every year. Last year, when I was standing in front of a pile of waste textiles, I began to reflect on how this pile of textile had been transformed from well-working material into waste. In a previous project with the research group Praktikforum, together with my colleagues, I explored what kinds of waste we produce when we make material-based artistic work. Thus, it was no surprise that practice-based work produced waste. The surprise was what I could understand from it. Looking closer into the waste, I obtained a deeper understanding of what had happened in the workshop during the year; how the students had used the material, what they had learned and what sometimes went wrong became obvious. I gained a deeper understanding of how we use, understand and teach/learn about materials and how we can develop the workshop by learning from the waste. At the same time, I learned the technique of ‘inbraiding’. For me, this was a new craft technique, in which waste textiles can be used when making rugs. I saw the opportunity to use the waste and upcycle it. By exhibiting the rug, I want to discuss the possibility of working more sustainably with crafts.

Keywords:
rag rug, making, textile waste, learning and teaching.

INTRODUCTION
I am the workshop manager of the textile- and screen-printing workshop at the Department of Design at Linnaeus University. At the end of every academic year, I conduct a big clean-up. Last year, as I stood in front of a big pile of textile waste, I began to reflect on when and how the working material transformed into that (Figure 2). In a previous project with the research group Praktikforum, my colleagues and I explored the kinds of waste we produced when making material-based artistic work (Arvidsson et al., 2021). Looking closer at the waste, I obtained deeper insight into what had happened in the workshop during the year: how the students had used the material and what had sometimes gone
wrong. I could see how they used what I had taught them, as well as what was missing. This made me start thinking about how we use, understand and teach/learn materials and how to develop the workshop.

**FIGURE 1.** My contribution to the exhibition—and the conference—is an inbraided rag rug in the making. Its present size is 125 cm in diameter, but it is growing. The rug demonstrates how to work more sustainably with craft. Since the rug is made of textile workshop waste, it shows glimpses of what the making in the workshop looked like in the academic year 2021-2022. The rug will be an archive of what happened that specific year.
FIGURE 2. Every year, I conduct a big clean-up in the textile workshop, in which I clean the screen printing frames, scrub the printing table, give the sewing machine some love, and throw away leftover materials. This is just a small part of the textile waste from the clean-up. Apart from test printing fabric, prototypes, mixed printing ink, sketches, prototypes, knitting and embroidery traces were also found.

At the same time as the workshop cleaning, I was trying to learn the ‘inbraiding’ technique. For me, this was a new craft technique that I found interesting from different perspectives, not the least since it is possible to use waste textiles when making rugs. I saw an opportunity to use the waste from the workshop and make something new out of it (Figure 1). The aim of this paper is to discuss how we can use textile waste as a resource both for new creations and for learning about sustainability. The resulting rug is shown at the conference exhibition.

To clarify the context described above, our education is what is called ‘new disciplinary design education’, which includes teaching fields like critical design, social design and meta design. To work holistically with sustainable change in society as a focus is the key. Material-based work constitutes a smaller part of the education’s curriculum compared to traditional design education. The students are introduced to several workshops, materials, techniques and equipment at the beginning of their studies. The aim is to allow students to—out of their own interest and need—utilise workshops in various modules for prototyping, model making, exhibition making and material exploration. As workshop manager, I try to keep the workshop sustainable by, for example, avoiding the use of virgin materials in...
teaching. When students test print or sew prototypes, they use second-hand textiles. The students can keep their prints or put them up for collective use in big boxes with textile scraps. The students always have free access to textiles when using the scrap. We also provide the workshop with second-hand textiles we get or buy for cheap from charity shops. This is, of course, just a small step towards becoming a sustainable workshop, and we have lots of challenges in front of us, not at least when it comes to printing ink and other chemicals.

**DESIGN AND WASTE**

For a designer, waste is part of the design process. Cradle-to-cradle thinking has become a well-known way of working, along with conducting life-cycle analyses (Braungart & McDonough, 2002; Thorpe, 2007, p. 38). Decisions made in all different steps of a product’s lifespan leave sustainability footprints. When we design, it is important to understand this.

This text focuses on waste and crafting and, even more specifically, on reusing second-hand textile waste. This is a very narrow field when considering the entire lifespan of an item but relevant to the educational context in which I work. We have chosen to use second-hand textiles in our teaching, since it is better in terms of waste hierarchy to use and reuse what has already been produced as long as possible (Naturvårdsverket, n.d.). Using second-hand textiles has many benefits: products are reused and purchasing material from organisations like the Red cross and Erikshjälpen is supporting their social work as charity (Erikshjälpen, n.d.). However, working with the second-hand trade does not come without problems. For example, in Sweden, a person donates in average 3.8 kilos of textiles to second-hand shops but buys only 0.8 kilos (Belleza & Luukka, 2018). This results in a huge overbalance. A significant number of donated textiles are unsellable (due to being unfashionable, dirty, broken, etc.), which becomes a problem instead of a resource (Röda korset, n.d.). Much of the donated textiles are sold on the global market in an unethical way or end up as trash in nature, far away from where they were donated (Brooks, 2015; BBC, 2022).

Many of us find it satisfying to donate. We want to support organisations, such as Red Cross, while simultaneously getting rid of unwanted items. However, since we donate much more than we buy from second-hand, the consumption of new items continues to grow. Changing our consumption patterns is necessary for a more sustainable future (Åkesson, 2023).

Using and upcycling surplus and unsellable items from the second-hand trade and even reusing the waste we produce as a by-product from making is a mindset and a way of acting. Even though it is a small-scale action, it can empower students and give them the courage to rethink how material-based work can be done.

**ANALYSIS OF TEXTILE WASTE**

Inspired by what Claire Wellesley-Smith calls an ‘archaeological dig’ (Wellesley-Smith, 2015, p. 28), I began to analyse the waste from our workshop. By ‘archaeological dig’, Wellesley-Smith means looking at what is left on her desk after a term in the form of stacks of books, handouts and materials. In this way, she can pinpoint exactly what the classes have covered. When I took a deeper look at the traces left, I saw that many activities had taken place, such as screen printing and sewing. I could see that the students struggled with rasterising photos and artwork for screen printing and had some problems with rinsing screens. Fabric cutting has not always been carried out in the best way; lots of scrap were produced. Many mistakes would have been simple to avoid if we could have offered more workshop tutoring.

**How did I use my insights from the waste pile?**

Last year, I was able to implement some developments and changes in the routines in the workshop based on my insights from the waste pile dig. I added some moments to the students’ workshop introduction about fabric cutting. I started the Textile-making group together with students. The idea was that we, as a group, should explore textile making with the starting point of what we wanted to
learn. It was voluntary for the students to join the group, and all our activities were guided by our curiosity and desire to work as sustainably as possible (Figures 3 and 4).

FIGURES 3 AND 4. Textile-making group doing visible mending and collective textile printing. We also explored no-waste sewing, natural dyeing, pattern design and cyanotype printing as well as upcycling of second-hand clothes. We learned a lot, but the social aspect of interacting while making was also important. The work was fun and very satisfying but also a bit frustrating; many students wanted to join, but only a few had the time.

WORKING PROCESS OF MAKING THE RUG
The rugmaking was a continuing work during the year that followed the following process (Figures 5, 6, 7 and 8):
FIGURES 5 AND 6. All waste textiles were numbered and documented in photos before the work with the rug started. After documentation, the textiles were heat transferred to obtain good washing durability. The fabric was then torn into 2.5 cm wide strips. This is dusty work and it is thus preferable to do it outdoors.
FIGURE 7. Inbraiding rag rug is a technique that looks like plain weave but is made without a weaving loom. The only tools needed are a crochet needle, a pair of scissors and a big needle. The braiding starts from the middle of the rug (or the object) and is done in a spiral shape. The inbraiding is done in the previous row, and there is no need for sewing. The technique is also called ‘no-sew rag rug’.
FIGURE 8. Over the winter, I braided the rug, along with several other rugs, with the aim of understanding the technique and how to develop the design. This has been an exploratory work with lots of trial making, drawing, research and evaluations. Reading the only book about the topic helped a lot (Blake Gray, 2015), as well as research on how colour effects can be done in plain weaving (Getzmann, 1977). While braiding, I got glimpses of what happened in the workshop when seeing traces of the test prints. I have not finished the rug yet. I wanted to show the inbraiding technique while exhibiting the rug, and I think it is easiest to understand the technique through a work in progress.

DISCUSSION
In our educational context, as well as in society, interest in making has significantly increased in the last couple of years. Activities like mending (Finnigan, 2020) and crafting as acts of well-being have become popular (Davidson & Tahsin, 2019). It is also a way of socialising that many people find meaningful. This is an area our design students may focus more on, to facilitate the making process. This needs to be taken into consideration when developing our workshops and workshop studies.

All of us working in teaching experience a hard time finding balance between practice-based work and the more theoretical parts of our education. My experience does not differ from others; we introduce students to the absolute fundamentals, then they must explore by themselves. This works fine for some students, especially those with previous experience in the field. For other students, this is a stressful situation; many want to create material-based work but cannot find time. The dilemma is that to work innovatively with a material, we need to know a lot about the material, both in theory and through practice. Some of our students chose not to create material-based work at all, but for those interested in the field, it is important to help them find the balance and time to make their efforts fruitful.

We try to avoid working with virgin materials when possible, but sometimes virgin materials are necessary. Often, waste is considered a problem, partly because it is created due to a lack of material knowledge. It is important to let students understand that they should be and are allowed to experiment and fail while doing material-based work. It is an important part of the learning experience and is impossible to avoid. The main goal in a workshop for students cannot be to avoid producing waste.
Working sustainably should not feel as a trap of guilt. The exhibited rug shows an example of how waste can be seen as a resource.

Rethinking material use is important, and extensive research is being conducted in this field (Lidström, 2023). Making rugs of waste is one small solution when working sustainably with textiles, but I am happy I made the rug. It will always remind me of the work in the workshop.
REFERENCES


Erikshjälpen (2023). https://erikshjalpen.se/vad-vg-


