

## Developing Work Uniforms for Women: The Role of Ethnographic Research

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### **Abstract**

This article makes use of fieldwork to discuss and analyse a Norwegian product development project aimed at developing workwear for women in male dominated manual occupations. Making use of ethnographic methods and analysis can be valuable in showing how users' experiences and practices can be studied also where there are poorly developed concepts and language for formulating and discussing products, such as workwear in use. The article aims at answering how ethnographic studies may contribute to the development of products and services. Understanding people and things in their everyday relations and achieving action-oriented results may be a challenge in innovation and development processes. This article explores such challenges in studying the use of clothes in specific work contexts, as well as capturing and mediating this experience with workwear in use.

### **Keywords**

Ethnography, Product development, User-driven innovation, Clothes, Gender

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**JBA 5(1): 137-153**  
**Autumn 2016**

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ISSN 2245-4217

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## Introduction

In innovation research, particularly within science and technology studies, the design process has been focused on technological objects and systems. This may produce scientific and technological knowledge that leads directly to the design of new products, systems, processes, or services, but research involved in the design process need not be technological in its form. The ways justifications, perceptions, practices, considerations, and structural conditions for how products and services actually figure in people's lives are challenging to grasp, taken for granted, and neutralized. When it comes to clothing and work uniforms, the topic of discussion in this article, the articulation of embodied knowledge falls short. It is common to be able to express what feels wrong or right, but articulating *why* it feels that way is far more complicated (Klepp 2008, 2009).

Research on uniforms and uniform dressing have to a large extent documented that women dressing in uniforms is problematic in practical, functional and social-symbolic terms (Joseph 1986; Kidwell 1989; Barnes and Eicher 1997; Craik 2005; Larsson 2008). For men, uniforms (like the business suit) are a part of a civil clothing practice (Rubinstein 2001; Pettersen 2004), but for women, clothing is both closer to the body and mutually different from men's clothing (Klepp and Storm-Mathisen 2005). The complex relationship between gender, dress and work is at the core of designing work uniforms, and can be problematic when designing for occupations where authority, danger and physical strain is involved (Ewing 1975; Craik 2005).

Making use of ethnographic methods and analyses can be valuable in showing how users' experiences and practices can be studied, as well as in identifying where there are poorly developed concepts and language for formulating and discussing products. Ethnographic methods may contribute substantially to translating this knowledge into a business world whose focus is on the innovation and development of products, services, strategies, and markets. Understanding people and things in their everyday relations *and* achieving action-oriented results are challenges within such innovation and development processes. This article aims to answer the question of *how ethnographic studies may contribute to the development of products and services*. It explores the challenges that lie in studying the use of clothing in specific work contexts, as well as capturing and mediating this experience with workwear in use.

My focus is on a Norwegian product development project aimed at developing workwear for women in male-dominated manual occupations. It was initiated due to the fact that previously-designed workwear for women in male-dominated occupations had not been successful (it did not sell well when launched on the market). A Norwegian workwear and sports company wanted to learn why this initiative failed, in order to

improve future releases of workwear designed for women. This company had a successful tradition in handling user-driven innovation in its sports- and leisure-wear section. Even so, it was not able to answer this question by itself. Therefore, a project consortium was assembled and an application was sent to the Norwegian Research Council's program for User-Driven Innovation (BIA) in order to find out if there was any unexploited potential in work uniforms for women. Together with the Norwegian Defence Logistics Organization (NDLO)<sup>1</sup> and two research institutions from Oslo and Akershus University College of Applied Sciences—Consumption Research Norway (SIFO) and Work Research Institute (AFI)—the project was accepted and received a three-year funding grant, starting from 2009 and ending in 2013.

This article's concern is not with whether the products or the development process was a success or not. It simply discusses the use of ethnographic research in the product development process and shows possible ways to employ methods, as well as interpreting and communicating results that invite and bring forth tactile, silent structures. I will start with a description of the fieldwork carried out in the project, after which I will answer the questions of what, how, and why this research work was done. I will point to *why* designing work uniforms was challenging against the background of empirical findings in the field; *how* knowledge of these empirical findings was shared with product developers; and *what* product and service solutions came out of the work and collaboration between ethnographers and product developers. Ultimately, I intend this article to add to the discussion about whether ethnography adds value to product development and innovation in general.

### **Ethnographic research**

Let me start by dealing with the ethnographic research that was done in the study as a response to the challenge of designing work uniforms for women. From the outset, the research was designed in such a way that its methods were not dependent on verbal statements, in the manner hitherto dominating social research and clothing research. Thus, the study mostly focused on the actual uses and practices tied to clothing, rather than on the way clothes were talked about. Much of our clothing practices function as tacit knowledge, as they are involved in everyday routines (Gronow and Warde 2001), which, especially in the use of

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<sup>1</sup> The Norwegian Defense Logistics Organization (NDLO) is responsible for procuring, developing, maintaining, updating, and eventually decommissioning all Norwegian Armed Forces material. In this article, the research of SIFO and the product development of the larger workwear company is in focus, which means that AFI and NDLO has been left out of the analysis. Two researchers with anthropological backgrounds carried out ethnographic research, while the writer of this article was most actively involved in the development process and conducted most of the fieldwork that appears in this study.

workwear, are characterized by being automated and invisible even to the person who practices them (Klepp and Bjerck 2014). In selecting methods, it was important to choose methodological techniques that grasped the non-verbalized experience and practice of the work clothes in use.

Collins, Green and Draper (1985: 329) identify the articulate and the tacit as a crucial division in knowledge. In design processes, user needs are articulated on behalf of the user in several ways. Most often they are articulated as user representations, in which certain claims are made as to who the supposed users are and what they want. Even though innovators are constantly interested in their future users (Akrich 1995), Stewart and Williams claim that technological studies tend to “inscribe particular views of the user, user activities and priorities into the artefact,” and that these views are based on an “inadequate or misleading view of the user and their requirements” (2005: 39). In selecting methods, it was important to choose methodological techniques that grasped the non-verbalized experience and practice of the work clothes in use, by actual users of work uniforms.

Grasping and communicating knowledge of experiences that are tacit in their form may be problematic to the extent that they are neglected in the innovation process. Specialists and non-specialists, here represented by a workwear company and users of workwear, express themselves in different ways. Much of the knowledge that users inhabit is incorporated in different repertoires of body techniques (Mauss 1979), which—simply put—refer to ways to use the body that may seem natural, but that are in fact culturally bound. The concept points to the fact that much of what we know, we know with our bodies and sometimes we do not even know that we know.<sup>2</sup> The aspects of what we know with our body, such as the ways we use work uniforms and how uniforms on the body integrate with the socio-cultural work environment, cannot always be verbally accounted for. To deal with this, the use of methods had to take into account ways to integrate with, internalize, and observe the dressed body in action. This was done through fieldwork at fifteen selected locations involving six male-dominated manual occupations: construction, handicraft, industrial production, petroleum production, fishing, and the Navy.

We gained access to and conducted fieldwork on two Navy vessels in the Norwegian Armed Forces, one land-based petroleum production site, one offshore petroleum production site, an industrial fishing vessel, three different construction sites, one roadwork site, one cellulose production site, one plastic industrial production site, one roadwork company, one electrical production and installation site, one stone production site, and an auto mechanic’s garage. Due to difficulties over

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<sup>2</sup> <http://hyllanderiksen.net/Natur.html>

access to the petroleum production sector, we had to make use of alternative methods of interviewing and talking about pictures taken by the workers themselves describing different aspects of everyday work. These occupational categories were chosen against the background of the types of occupations that the workwear company was interested in. The choice of locations and work sites was made by SIFO, and made on the basis of having at least one female employee working there. These locations were not easy to track down, however. When the necessary permissions were acquired, we spent anywhere from a couple of hours (at the oil and gas land-based production) to up to two weeks at each site.<sup>3</sup> The workwear company was not involved in the fieldwork at any time.

Fieldwork was carried out by three different techniques in this study: *participant observation*, *practice study* and *interviews*. These were chosen in order to account for the tacit structures at the work sites and embodied experiences related to the work uniforms in use, as well as the verbal accounts and material objects observable in the field. By conducting participant observation in the field, we acted as participant observers (Bernard 1994). This specifically involved following women around in their work spheres, helping out with the work they performed, following their daily routines, taking coffee breaks with their colleagues, using workwear similar to what they wore, getting dressed in unisex wardrobes and sharing cabins with other employees. In this way, we were able to internalise data relating to the socio-cultural structures of the work spheres. Fieldwork also enabled a movement in and out of the participant role in order to observe and register behaviour and movement in relation to the clothing. This is called practice study. Here we registered how clothes were used, how such use was or was not integrated in actual work tasks and social relations. We also registered how men or women wore outfits differently or similarly, and how gender was communicated or under-communicated in the work spheres materially through the garments, bodily repertoires, and accessories that were used but also immaterially through conversations and other forms of verbal communication. Being present in the different work contexts enabled us to experience working life as women workers in a male-dominated occupation, even though it was just for just a short while.

Ethnographic studies are considered immensely useful in their ability to gather a large amount of empirical data and thereby enable comparison. In addition, fieldwork provides the opportunity to experience relations in real life, or “in vivo” as Glaser and Strauss (1967: 40) put it. Doing an ethnographic study provides the possibility for collecting as much comparable data as possible in a short amount of time

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<sup>3</sup> We refer here to the three researchers from SIFO who conducted fieldwork within this project: Mari Rysst (associate professor), Marit Vestvik (researcher), and the author.

on relevant issues to satisfy aims for both a commercial industry and academia. Qualitative interviews were also an important supplement to this fieldwork. These interviews facilitated a deeper understanding of the world views of male and female workers (Kvale 1997), which were tied to experiences with work, workwear, and gender. In addition to those who dealt specifically with the acquisition of workwear at the work sites, both male and female workers were interviewed. A total of 67 interviews were conducted, with 36 women and 31 men, but many more contributed to the participant observation part of the study.

These methods were chosen in order to allow the workwear company to benefit from including users' experiences and user knowledge in the process of developing improved workwear. In order to do that, it was crucial that the design and development team put aside silent and explicit assumptions about users' wants and needs, and integrate the experiences of real users into the process. This allowed for extensive information from the field to be integrated into the design and product development process. Some of the findings from the fieldwork that were most relevant for the development of female work uniforms will be presented in the next section in order to show why designing work uniforms for women may be challenging.

### **Why designing work uniforms for women is challenging**

Findings from fieldwork pointed to several aspects in the intersection between work, gender, body, and work clothes. Gender is here understood as relational (Connell 2002), and as a process, that is to say something that is done (West and Zimmermann 1987; Butler 2006). How gender is performed varies between women, between men, and between women and men (Neumann et al. 2012: 243). However, certain things and facilities ensure that potential users are left with a wrong or inappropriate gender (Mühleisen and Lorentzen 2006: 278), and work uniforms fall into this category. One of the challenges for women in wearing work uniforms is that they are made on the basis of a standardization of the masculine body, stemming from a ready-to-wear industry. This industry, of which work uniforms are a part, creates clothes in a particular size range based on what size and form appeal to most of their potential wearers. Naturally, women are not the primary potential wearers of workwear in male-dominated manual occupations, as statistics show that more than 80 per cent of the workers in these occupations are male (Meld. St. 7 2015-2016).

There are in fact physical differences between women and men that are relatively stable. This points to a need for a different form and size range of clothing. According to Neumann, Rysst and Bjerck (2012), these physical differences essentially come down to the fact that women have breasts and have a more curved shape along their waistlines and on their lower backs. In addition, women usually have narrower shoulders and

shorter arms and legs than men do. The relative measurements for the ratio between the length of the back, the waistline and the hips are also different between women and men. This is often (though not always) taken into account in the design of ordinary clothing, but is very seldom considered when it comes to workwear and uniforms. This is an aspect that is related to the physical nature of male and female bodies that has implications for what and how clothes are worn every day at work. However, there are other socio-cultural aspects of clothing that challenge both the use of these work uniforms and how to design them better.

Two of the findings from the fieldwork were particularly relevant to the challenges of developing workwear for women, as they were not transferrable to clear-cut or hands-on solutions. The first was related to an ambivalence both in the use of work uniforms made on the basis of masculine norms and the gendered position that women workers found themselves in at work. This ambivalence was further related to their status as workers, in which they wanted to be seen as equals; yet their gendered position as women in the work space was often a hindrance to their ability to be fully included. This integration process happened socially, physically, and materially through the work uniform. In this way, women made a greater effort to be taken seriously as an equal part of the work community, and as “one of the guys” (Neuman et al. 2012; Bjerck 2013). According to Jennifer Craik (2005), the uniform possesses characteristics beyond those that are tied to authority or affiliation with a group—what Craik calls “open lives.” A uniform may also possess “hidden meanings” (*ibid.*). For example, the gendered qualities of a uniform that has been made in a masculine-defined world constitute a part of the uniform that contains hidden meanings.

The work uniform does have the ability to facilitate the integration of women in the workplace. At the same time, however, this necessitates downplaying the female gender, as often reproduced aesthetically in popular cultural forms. Female workers in our study wanted to be included in their workplace on equal terms with their male colleagues, but they were also unwilling to let go of their femininity. This manifested itself through the discreet use of makeup, hairdo, nail polish, jewellery, colourful undergarments, and the like. Work uniforms were modified by cropping or sewing, and were supplemented with personal items, so that the work uniforms worn by women were mainly the same as that of their male colleagues, but with differences in certain elements. In addition, the overall look that the uniformed workwear and the gendered body formed together revealed that the person wearing the work uniform was not male.

There was a widespread belief that feminine markers reflected a focus on clothing, body, and personal appearance that did not belong in the workplace. Uniform regulations found in the Norwegian Armed Forces (Vestvik and Bjerck 2012), for example, did not allow the use of

such feminine or individual markers to be added to the uniform. This was neither formally accepted in other occupations, nor an accepted part of informal regulations. Nonetheless, feminization occurred. Herein lies a strong ambivalence that can be difficult to grasp. How can workwear companies develop work apparel for women, when women themselves are ambivalent about how they want to appear? Women say that they want to be included in the workplace on equal terms and wore their uniforms every day; yet, in observing and participating in different work contexts, we realised that the picture was complicated. When it came to presenting this ambivalence to the workwear company, we spent a lot of time discussing how to understand this, and, especially, how to transfer it to specific products in a workwear collection.

A second finding was tied to the organization of acquisition and routines of redistribution and ownership of the work uniforms. Common to all occupations (except fishing) was the fact that employers paid for most, or at least a part, of the workwear. This came with the stipulation that someone higher up in the administrative system, management, or department would make the final decision about acquisition. Decisions were made about choice of clothing manufacturer, budgets, the overall appearance of the uniforms (colours, types of garments, quality of fabrics, and other minor details affecting acquisition), and additional work equipment. These structural conditions created a distance between the decisions being made and the end users, and limited workers' access to functional workwear on the free market—workwear that suited their body shape, preferences, and the nature of the work in which they were involved.

Many of the work uniforms in larger companies were acquired through processes of public bidding where the winning workwear company was given the opportunity to provide all workwear for the company through a predetermined contract lasting several years. The process in the different companies that decided what work garments to purchase and redistribute worked as a bottleneck and blocked workers' access to well-functioning clothing. It also hindered a flow of information and contact between the producer, distributor of workwear, and end user. In short, when the procurer and the user are not the same, it can be assumed that something will get lost along the way.

Entering contexts where work uniforms are used with an open mind allows the ethnographer to gain a fuller picture of the clothes and its users. However, this gives rise to issues that are not easily transferrable to products and services because "what anthropology has to say is multi-faceted, complex, nuanced and revealing; it shows how difficult it is to separate 'right' from 'wrong', which is a total anathema to business managers charged with making quick decisions" (Moeran 2006: 120). This points to how ethnography may complicate the product-development process, even though it helps understand patterns of

behaviour and beliefs from participants' point of view (Howard and Mortensen 2009: 19). It may therefore be challenging to accept or even understand findings considered different, strange, and contradictory. Dealing with ambiguous results presented by the researcher in the process of development can therefore be a challenge—both for the anthropologist who tries to get her views and understandings of the context right, and for the product developer who tries to transfer his or her understanding into concrete products.

Everyday practices are not a coherent and rational set of acts quantifiable into categories and schematic structures directly transferrable into products and services. As Cefkin (2010: 47) has stressed, “realities that matter on the ground need to be understood as situated, dynamic and often negotiated and even contested.” Transferring and communicating understandings from work to a business context puts the ethnographer in juxtaposition with complex, context-bound data and the need for information that can be converted to products and services. Understanding and making use of what may be seen as contradictory findings could nonetheless provide opportunities for successful innovations and lasting products. The next part of the article will deal with how insights into the use of work uniforms gained from fieldwork were passed on from ethnographer to product developers in the meeting between ethnographic researchers and a product development team.

### **How to share knowledge: ethnography meets product development**

The researchers' contribution to the innovation project was not simply to pinpoint the challenges in developing and innovating work uniforms for women. It also required finding ways to work around and solve these challenges. This depended on the ability, firstly, to present information from fieldwork and ethnographic analysis in an understandable form so as to benefit product development; and secondly, to grasp extensive contextualized information and turn it into relevant theoretical models presentable to an academic audience. In this article, this is treated as an issue of challenges to the communication of knowledge, which in the project at hand was solved by establishing a platform of communication at the very beginning.

In order to feed information from ethnographic work into product development, the project team developed informal meeting points in between fieldwork and analysis, sketch boards, and strategy planning. The informal meeting points in which ethnographic understandings met product development were labelled *work meetings*. Engaging the whole project team in work meetings was done to try to close the gap between users and product developers. These meetings also enabled an exchange of perspectives and knowledge of the concrete material properties of the garments (as communicated by the workwear company), on the one hand, and the garments in the work context, on the body and in social

relationships (as communicated by the researchers), on the other.

Work meetings were arranged in between bouts of fieldwork where findings from the latest fieldwork were presented. These were held every, or every other, month and there were thirteen meetings in all. Some were directly related to a particular work arena, while others had a more summary form relating to several work arenas within one specific occupational category. When all the fieldwork had been completed, a final summary and presentation were made. These work meetings were carried out with verbal presentations from the researchers at the location of the workwear company, who were supplied with bullet points, quotes, and anonymized photos in PowerPoint format. The internal project leader from the company's research and development department, a marketing consultant, several designers, fabric experts, the category manager, and others who had the time and interest to participate were present at these meetings, when all participants were given the opportunity to discuss the findings presented and query the details of user contexts, garments in use, or work settings. Due to methodological techniques that left room for a wider perspective of workers and workwear, it was possible to present user contexts that took all workers into account, and not just women. Routines of acquisition and problematic issues relating to ownership, information strategies, and ideas about proper dress at work (Neumann et al. 2012; Vestvik and Bjerck 2012; Bjerck 2013) were also presented.

The development team used these meetings to discuss main findings, but also small details revealed in the presentation both amongst themselves and with the researcher. They talked through design-based solutions and practicalities around garments, labelling, size range, marketing and information strategies, sales pitches, communication strategies, and more. This led to possible solutions for products, concepts, or services. It also led to a development in perspective that the researcher took back into her subsequent fieldwork. As such, fieldwork could accommodate issues that both researchers and those involved in the design process were interested in. This way of exchanging back and forth between the contexts of the user in ethnographic fieldwork, scientific analysis, and presentation in a business context could be considered a *feedback loop*. This feedback loop ensured that it not only fed information to the workwear company through findings and discussions in the field, but that the discussions, questions, and constructive critiques also fed back into the fieldwork.

The work meetings and feedback loop affected the fieldwork in that they sharpened the researcher's eye for material realities that surrounded the workers. They also forced a clearer and more reflective view of materiality in the analysis—both that which was presented in scientific publications (Neumann et al. 2012; Vestvik and Bjerck 2012; Bjerck 2013), and that which was presented to the business world. This was also reflected in the analysis of data in which, early on, the researcher

had to transform findings into analysed material presentable to the clothing industry. This feedback loop brought about developed perspectives in the work of the ethnographer, as well as in the design process.

Work meetings enabled ethnographers and product developers to work together despite the differences in *time* (the rapid product development against a slower, ethnographic serendipity approach), and *expert knowledge* (the high level of knowledge of products and design against the deeper understandings of user context). The researcher's intermediary position between the user and those involved with product development became a guiding position where perspectives were developed in juxtaposition between these two parties. This provided information that could be ambiguous and not easily transferred into physical products and services, so that, in this sense, the use of ethnography has the potential to complicate the product development process. Work meetings functioned as an arena where products and services could be designed on the basis of grounded ethnographic fieldwork. As will become clearer in the next section, the ethnographic research carried out during the project was converted into both products and services.

### **What solutions come from ethnographic work and collaboration**

The product development team from the workwear company discussed their understanding of the findings from fieldwork. For them, the ambivalence in women workers' dress practices was particularly difficult first to understand, then to relate to, and finally to convert into design-based solutions. Another obstacle was the structural conditions of the acquisition, redistribution, and ownership of the garments. Issues surrounding the findings presented above were discussed in almost every work meeting, more directly relating to the type of work arena and occupation that was presented, although it was not the task of the ethnographer to come up with a concrete solution for how to transform the results of ethnographic research into products. At the last summary work meeting, the top manager for the workwear company participated and was apparently upset over the presentation of the finding that concerned women's relation to their work uniforms. With regards to gender and work uniforms in particular, he wanted a direct answer about whether or not women workers wanted to be "women" or not—that is to say, whether they wanted to be feminine at work, and whether they wanted their own feminine work uniforms, or not. Not having participated in the other work meetings he did not have the same understanding of this ambiguity as did those who had discussed the matter earlier. This is where expectations of clear-cut answers were most apparent. However, many of the perspectives from fieldwork were easy to trace back to improved or new products and services launched on the

market.

The main question that the workwear company was interested in exploring was if it should make its own female workwear line. The ambiguity of workwear complicated the decision and made those concerned doubt the market potential of making a workwear line especially designed for women. In addition, several of the findings about women and workwear in the study also applied to men in the same occupations—size range, shape and functions, in particular, but also uses of that same workwear. Initially, a decision was made on the basis of the findings and market potential not to make a collection of workwear dedicated to women workers. However, due to the structures of acquisition and in particular due to the public bidding, the workwear company felt obliged to offer women workers products that were directed specifically towards them. These garments were not particularly visible as feminine, in either form or appearance.

The workwear collection was in general dominated by dark and grey colours, with a splash of orange or yellow on high visibility garments. The female workwear had seams or details hidden or discretely placed inside garments, pockets, zippers, or buttons. Undergarments in wool or cotton, or more technical garments, were also offered in different colours inspired by the company's sports collection and not used in the outer layers of workwear. The shape and sizes of these garments were also discretely more female in form with a narrower shape, but one that left room for hips and breasts. The challenge here was to create a shape that was not too narrow and tight fitting in a manner that drew attention to the women workers.

Solutions were also found to improve work uniforms for both men and women. A greater variation in size range in the work uniforms was among the first solutions deriving from the study of women and men's use of workwear. This made it easier for workers of all sizes to find a size that fitted. Having a more gender-neutral sizing system meant that sizes were communicated in a way that was more comfortable for women workers. They did not, for example, have to choose "small man" when selecting a size. The shape of the different garments was also improved for both sexes and made according to feedback gathered during fieldwork. In the work meetings, it was also discussed as to whether or not to offer variations in the length of the work pants and jumpsuits, so that variations in length, placement of kneepads, pockets, and other technical functions were placed correctly on the lower parts of the body. This was not done, however, due to the fact that along the way the workwear company came up with a solution to the garment design, which made the garments more flexible. This meant that, among other things, length could be solved by incorporating the ability to easily fold down or fold up the lower parts of the pants.

Increasing the possibility for variation and creating flexible

solutions in the workwear products became a solution to the problem of getting clothes that better fitted the body not only of women and the work that was done every day. Designing flexible garments was related to the placement of pockets and the use of zippers and buttons, but it also incorporated uses of particular textiles for different garments. Labelling each garment to accommodate information for all users was also discussed as part of a flexible solution. Other solutions included using images to quickly grab the attention of the wearer and to accommodate problems that existed in the transfer of knowledge between those who purchased and redistributed the products, on the one hand, and end users, on the other.

In addition to design solutions for work garments, more structural changes in marketing, information, and sales were discussed. One discussed option was to offer sales channels where users of workwear in general, and not just representatives from different male-dominated occupations, could purchase garments directly from distributors. Offering products directly to workers was a response to finding a way improve workers' access in all occupations to work uniforms and thus to shorten the supply chain. In this way, the ethnographic production of knowledge about user contexts was incorporated in design-based solutions to workwear and services.

### **Ethnographic research as added value**

The background for the study of work uniforms in male-dominated occupations offered little or no knowledge about the functional requirements and aesthetic expectations employees had towards their workwear, nor about the social and practical aspects of workwear in use. Workwear is an essential part of all workers' physical, social, and symbolic daily life, but this is seldom articulated or studied. Ethnographic research was used to overcome the challenge of translating between non-verbalized, tacit knowledge and experiences of the work clothes in use through language, and to assist developers and designers by providing them with guidance for design-based solutions. At the same time, Stewart (2014: 140) has identified the application of complex and contextualized ethnographic findings as one obstacle for ethnography in management studies. In juxtaposition between the various users and the product developer, the ethnographer may find himself/herself in a tricky position between users' ambivalence and complex feelings towards their work and workwear, and a need for rapid, clear-cut, and easily transferrable knowledge about the clothes in use.

Likewise, Howard and Mortensen have identified "the handoff from ethnographers to designers and business decision makers" as "the biggest challenge to success" (2009: 17). They claim that although the use of ethnographic methods has grown in the business world, the outcomes have not grown at the same rate. In an attempt to "make the research

stick and have long-term impact beyond any individual project” (Howard and Mortensen 2009: 20), they stress the fact that ethnographers have to act as guides to discovering customer insights instead of behaving like gurus who know more about people than anyone else (ibid. 21). Along this same line of thought, it could be said that the work meetings and feedback loop that the researcher was involved in enabled the ethnographer to act as a guide to the contexts and understandings of workers’ dress practices.

Acting as a guide to users and user contexts can be a challenging and daunting commitment. But, it is not a position that the ethnographer is unfamiliar with, given that her role has always been to speak on behalf of others, and to translate the understandings gained in the course of fieldwork into a scientific or academic language. The difference when relating to the business world is that the transfer of knowledge from users to designers cannot be communicated in an academic language, but instead must be articulated in a way that is understandable to the business world. The ethnographic fieldwork discussed here not only provided information about the work uniform and the workers, but also studied the contexts, practices, and work relations in which both male and female employees were involved. In this way, ethnography became a valuable tool for improving products, both in regards to their design and to the structural systems that enclosed them. Analysing the findings that are ultimately incorporated into the development of products and services (and those that are omitted) tells us something about the handoff of ethnographic research and points to ways in which it can contribute in making products better and possibly also improving the lives of the people involved in fieldwork.

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