

# Informal household preparedness: methodological approaches to everyday practices

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Received: 2018-06-22

Revised: 2018-09-26

Accepted: 2018-10-14

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## ABSTRACT

Despite increasing attention to individuals' everyday lives in the literature on risk, few studies investigate household preparedness within the everyday life context. Preparedness is most often regarded as a predefined set of capacities for dealing with emergencies. This article presents methodological approaches for studying what I suggest calling informal preparedness activities that are performed as part of daily life in households. Starting with the assumption that everyday life is enacted through culturally and socially shared practices, it is argued that preparedness is interwoven into these practices. Contrary to studying preparedness as the degree to which households are aware of and act according to a formal definition of preparedness, informal household preparedness focuses on preparedness as embedded in the routinised practices that make up everyday life. The study of informal household preparedness is based on three methodological approaches that explore these practices: (i) Performance of everyday practices, where interviews that focus on performance ask questions about what practitioners actually do; (ii) materiality, where walk-alongs are used to connect performance interviews to the material surroundings; and (iii) visualisation, where the material aspects of informal preparedness are documented. These approaches were carried out in a study of Norwegian households' management of and preparedness for electricity and Information and Communication Technology (ICT) infrastructure breakdowns. Addressing informal and formal preparedness activities expands our understanding of household preparedness and should help policy makers recognise the active role of households and their actual resources and constraints in future preparedness planning.

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**KEYWORDS** Household preparedness; risk and everyday life; social practice theory; performativity; walk-alongs; visual methods

## Introduction

The current article explores the concept of informal household preparedness, which is defined as the routinised everyday practices performed by households and that bear in them elements of preparedness. In contrast, previous research on household preparedness operates with a static and top-down-oriented perspective of preparedness, defined here as 'formal preparedness'. This approach treats preparedness as a state of readiness to manage crises and is based on predefined criteria such as emergency supplies, family emergency plans and awareness of governmental preparedness actions, which are in turn measured in surveys (Kohn et al. 2012; Levac, Toal-Sullivan, and O'Sullivan 2012). These studies do not consider the ways in which preparedness is socially and culturally performed as part of the everyday practices of households (Heidenstrøm and Kvarnlöf 2017). From this approach, the aim of the current article is to provide a methodological lens to foreground the aspects of household preparedness that are often taken for granted. Exploring households' performed practices was sought in the current study by concentrating on three approaches: (i) performance of everyday practices, where interviews that focus on performance ask questions about what practition-

ers actually do; (ii) materiality, where walk-alongs are used to connect performance interviews to the material surroundings; and (iii) visualisation, where the material aspects of informal preparedness are documented.

The methodological discussions in risk research have slowly begun to include ways to explore how lay people perceive, relate to and manage risk (e.g. Henwood et al. 2011; Henwood et al. 2008; Hawkes, Houghton, and Rowe 2009; Hawkes and Rowe 2008). How people live with risk and prepare for emergencies has often been studied through concepts such as perception, meaning, framing and sense-making (e.g. Wall and Olofsson 2008; Caplan 2000; Hawkes, Houghton, and Rowe 2009; Henwood et al. 2011; Smith et al. 2006); these perspectives address the narratives individuals create about their everyday experiences with risk (Henwood et al. 2011), and in some ways, these perspectives are parallel to the theoretical discussions of risk as being inherently part of the social context (Taylor-Gooby and Zinn 2006a, 2006b; Tierney 1999; Tulloch and Lupton 2003). However, what many of these studies have in common is that they mainly analyse risk and preparedness as discursive and reflexive, subsequently using language-based methods to make sense of the ways in which risk and preparedness are part of everyday life. As a result of the highly influential risk perception perspective (Slovic 1987), these studies are grounded in methodological individualism, concentrating on how individuals handle risk (Brown 2016).

Hence, this calls for increased attention to the informal expressions of household preparedness. Given that a large share of people's daily lives is performed nonreflexively and uses embodied competences, it is difficult to describe how households actually perform preparedness. The informal preparedness approach presented in the current article goes beyond some of the limitations found in quantitative analyses of formal preparedness, examining the informal preparedness activities performed by households as part of their everyday lives; it builds on a social practice theory approach (Schatzki 1996; Shove, Pantzar, and Watson 2012; Reckwitz 2002) that forefronts the implicit and unspoken influences that make up everyday life. This focus on informal preparedness was used in the HOMERISK research project,<sup>1</sup> which aimed to understand the role of households in crisis management and preparedness for electricity and ICT infrastructure breakdowns.

The next section positions this new framework within an everyday life approach to risk and preparedness, elaborating on the concepts of formal and informal household preparedness within this framework. Social practice theory is applied to emphasise habitual and embodied knowledge as a part of preparedness. The remainder of the article deals with the methodological approaches for studying informal household preparedness. The article concludes by emphasising the need to recognise households as competent actors, indicating that households should be included in developing future preparedness policies.

## Risk, preparedness and everyday life

The advances in risk theorising have addressed the separation of expert and lay knowledge (Healy 2004; Taylor-Gooby and Zinn 2006a, 2006b; Lidskog 2008; Healy 2006), showing that this distinction fails to acknowledge the complexity of how risk is dealt with in this context by both risk experts and so-called lay people. Wynne (1996) pinpoints this by demonstrating the validity of informal lay knowledge and its confrontation with scientific knowledge in his famous study of sheep farmers dealing with risk; he finds that lay knowledge is rooted in the experiences of the farmers and is tacit when compared with formal expert knowledge.

As a result of recognising everyday knowledge, other factors, such as trust, emotions, intuition and individual experiences, have become important to study as part of how society deals with risk. Zinn (2008) has termed these factors the 'in-between strategies' that all actors use to make decisions. Zinn (2016, 354) further argues that the emotions used to deal with risk are the stabilised and embodied parts of everyday practices. Empirical studies, such as the ones by Nygren, Öhman, and Olofsson (2017) and Montelius and Nygren (2014), follow this theoretical line of inquiry by showing that risk norms are morally inscribed in and performed through individuals' bodies. Horlick-Jones (2005) argues that dealing with risk is a contextualised engagement that includes practical reasoning performed in social interaction, and this is performed also by experts although it is expressed using the language of risk management (see also Jasanoff 1999). Corvellec (2009) studies risk management in companies where risk is not explicitly dealt with, arguing that it nevertheless is embedded in the practices performed in these companies (see also Boholm, Corvellec, and Karlsson 2012).

To address the gaps in the risk literature, interpretive risk perception has become a growing stream of research that aims to recognise this context-specific risk handling and to develop methods that can provide thick descriptions of

risk in everyday life (Pidgeon, Simmons, and Henwood 2006; Horlick-Jones and Prades 2009). It stems from a theoretical and methodological critique of macro risk theories, such as in Beck (1992), where the individual citizen deals with risk reflexively. As Tulloch and Lupton (2003) note, the risk society thesis fails to grasp the complexity of how everyday life is lived and experienced and how risk is embedded in these experiences. According to the interpretive approach, culturally specific symbolic meanings are important aspects of how risk is understood (Douglas and Wildavsky 1982). Therefore, situated risk is anchored in the specific social contexts and practices, and individuals' sense-making of risk varies between these contexts (Boholm and Corvellec 2011; Wall and Olofsson 2008).

## Informal household preparedness

The concept of informal household preparedness draws on the insights from the above-mentioned theoretical advances to understand household preparedness. Heidenstrøm and Kvarnlöf (2017) have previously argued that existing research on household preparedness mostly deals with formal preparedness strategies in households. The formal preparedness perspective accentuates knowledge in the form of an awareness of local and national preparedness plans and governmental information. Material preparedness is defined as the resources acquired and used for preparedness purposes, such as family emergency kits and evacuation plans, and here, preparedness is viewed as an active state, meaning that households are more prepared if they actively engage in preparedness.

Informal household preparedness aims to go beyond this normative definition of preparedness and show how lay knowledge, life experiences and the embodied habits of everyday life also contribute to shaping household preparedness. It builds on a practice theory perspective that provides two important core points: (i) that preparedness is studied through the routine practices of everyday life and (ii) that these practices are socially and culturally shared. The analytical base in practice theory is the practice itself, not the individual actors, who are seen as the carriers of a practice, thus rejecting methodological individualism (Schatzki 1996). According to Reckwitz (2002, 249), a practice is the following:

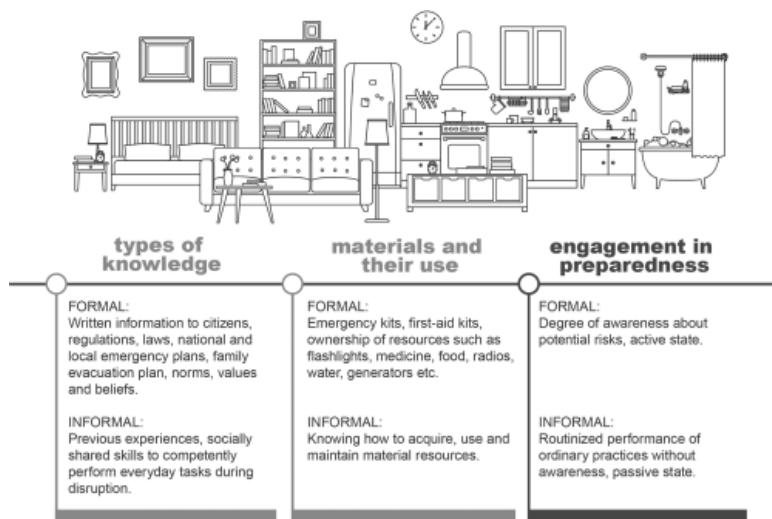
(...) a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.

This definition points to the interconnectedness of the several elements that determine a practice. These elements have been defined slightly differently by practice theory scholars [see, for example, Gram-Hanssen's (2011) outline] to serve theoretical or empirical purposes. Here, I apply the elements defined by Shove, Pantzar, and Watson (2012) to point to the routinised everyday life focus that household preparedness studies currently lack. According to Shove, Pantzar, and Watson (2012), a practice consists of the following three core elements:

1. Materials: All objects that are used by practitioners to perform a practice, such as things, infrastructures, tools and the body.
2. Competences: Knowing how to perform a practice appropriately in the form of practical skills and background knowledge.
3. Meanings: The significance of performing a practice, including emotions, motivations, beliefs and purposes.

A practice exists when these three elements are linked together, and the dynamics between them and between different practices explain how everyday life is performed (Shove, Pantzar, and Watson 2012). When engaging in a practice, the practitioner draws on this set of socially and culturally shared elements and, at the same time, on his or her individual experiences (Warde 2016). Informal preparedness is not a practice in and of itself but rather is interwoven in a number of household practices (e.g. cooking, storing, cleaning, lighting, heating, camping, communicating, etc.), and by looking at how these practices are performed by practitioners, we can uncover in-depth knowledge on the actual material, social and human resources and barriers that form household preparedness. From a practice theory perspective, a household can be seen as a cluster of interlinked practices, a sociomaterial entity where practitioners perform the practices that bear in them the elements of preparedness. Materials, competences and meanings shape preparedness in the course of the performance of these practices. Figure 1 illustrates the differences between formal and informal household preparedness.

Figure 1. Formal and informal household preparedness.



## Research project on electricity and ICT infrastructure breakdowns

Infrastructures are the invisible sociomaterial connections that keep modern life running without continuous and active engagement from citizens (Bowker and Star 2000; Star 1999). However, when they fail to work, even for a short period, there are significant consequences, from affecting basic needs such as water supply and heating, to food storage, lighting, telephone, radio and Internet communication. In Norway, electricity is the main heating source in households, with wood as the most common nonelectricity dependent alternative. Because of the country's cold climate (average temperature 2.5 °C) and long winter seasons, even outages of the electricity infrastructure for less than a day may have major effects. The HOMERISK project sets out to examine the role of Nordic households in risk management and preparedness for electricity and ICT breakdowns.

### Sample and analytical strategy

The sample used in the current article consists of two field studies. The first is a case study of how households actually manage large infrastructure breakdowns. To analyse this, I visited Laerdal, a village in western Norway that recently experienced two major infrastructure breakdowns caused by winter storms. When Hurricane Dagmar struck in December 2011, it caused power outages for 1.3 million citizens, and in January 2014, a large fire spread because of a winter storm, causing an extensive blackout. The Laerdal case consists of nine household visits, six expert interviews and a document analysis; the latter two cases are used as background material. All participants in the Laerdal study were recruited via a key informant. The second is a study of how households prepare for future breakdowns lasting more than 3 days. It consists of visits to 6 rural and 10 urban households. All participants in the preparedness study were recruited using a recruitment agency. In total, 25 at-home visits were conducted between January 2015 and September 2017.<sup>2</sup> The sample includes 42 participants (22 women and 20 men) with an average age of 44 years old (variation between 17 and 84 years old) and covers important differences in household type (two single households, eleven couples without or with adult children, twelve families with children living at home), and dwelling type (20 households with a nonelectric heating source, 5 with only electric heating).

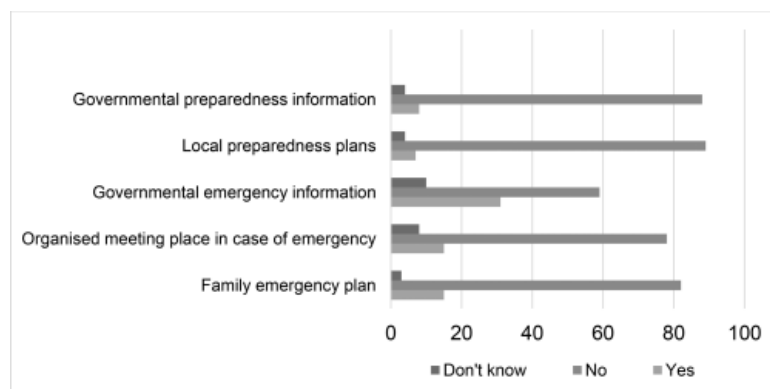
All the household visits were recorded and fully transcribed, with an average interview length of 94 min (variation between 50 and 168 min). The walk-along tours, presented below, were photo documented, and an average of 27 photographs (variation between 0 and 83) were taken in each household. The texts were coded in HyperResearch in a three-step process. The first step was to read through each transcript and identify the words or phrases used by the participants when talking about a topic, list them and finally group them into categories representing similar narratives, such as 'getting in touch with each other', 'the bad weather conditions', 'the importance of the local community', 'experiences with breakdowns' and so forth. This inductive strategy was sensitive enough to capture the complexities and contradictions within the material. In the second step, these narratives served as overarching categories

in the coding. For example, ‘experiences with breakdowns’ was further subdivided into categories such as ‘childhood experiences’, ‘experience from previous breakdowns’ and ‘lack of experience’ that were significant in the material. Inductive sorting of the material provided a more nuanced description of what participants actually said about a topic, while general and often predefined codes were mostly used to simply sort the material. In the third and final step, theoretical codes were applied to analyse the material from a practice theory perspective. For example, ‘experiences with breakdowns’ and ‘importance of the local community’ were categorised as competences, or the skills to perform a practice, while ‘getting in touch with each other’ was categorised as meanings, or the articulated reason for engaging in a practice.

## Methodological approaches to study informal household preparedness

Most of the previous studies on household preparedness have measured the degree of formalised knowledge, preparedness objects and awareness using surveys. For example, 31 of a total of 36 studies in Kohn et al.’s (2012) re-view of personal preparedness are purely quantitative. As part of the HOMERISK project, in 2016, Norwegian households were asked whether they knew of or had access to a set of formal preparedness resources in a representative web survey (Storm-Mathisen and Lavik 2016). Figure 2 indicates the low degree of formal preparedness in the studied households.

Figure 2. Formal preparedness in Norwegian households ( $N = 1007$ ).

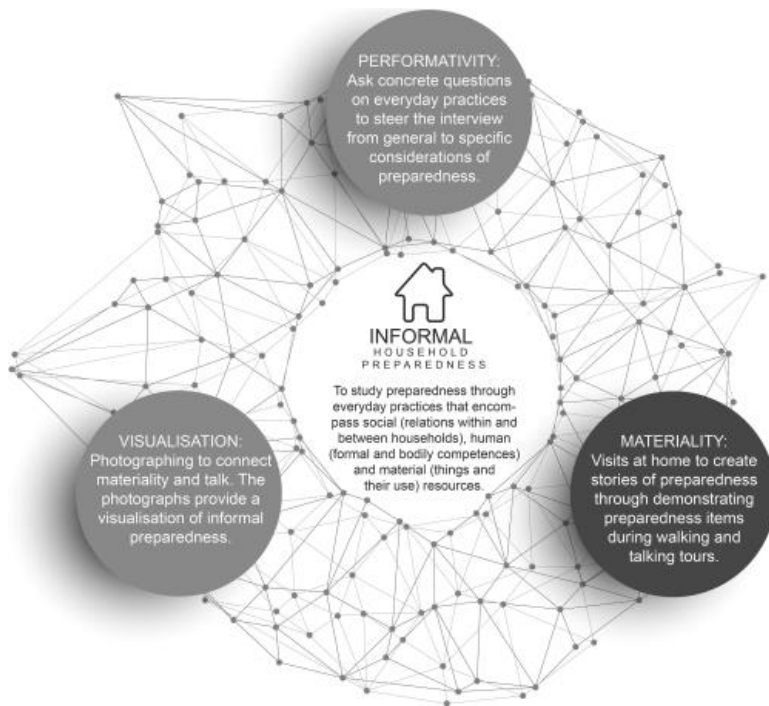


By only measuring formal knowledge, there are important aspects of household preparedness that remain understudied. Simply by taking part in household practices, households might be prepared, even though they do not have a family emergency plan. These routinised practices can be investigated using ethnographic methods. Sedlačko (2017, 54–56) argues for conducting ethnography with a ‘sensitivity for practice’ to grasp the performative nature of everyday life. He presents four principles that function as ‘sense-making devices’ to empirically study practices: (i) focus on what people actually do and the materials they converse with, (ii) focus on everydayness, to be aware of the aspects of everyday life that are taken for granted by practitioners, (iii) focus on the work of assembling, structuring and ordering elements of practices and (iv) focus on reflexivity in the research process.

A study of informal preparedness enables concrete, rather than abstract, thinking about preparedness by foregrounding the immediate surroundings of the home, both in terms of social surroundings, such as family members, social networks and the material surroundings, and the interconnectedness between these. Contrary to the extensive number of surveys and semistructured interviews in social science risk research (Hawkes and Rowe 2008), ethnographic methods unravels the performative aspects of preparedness that interviews alone cannot grasp. Figure 3 outlines the approaches used for studying informal preparedness.

Figure 3. The study of informal household preparedness.





The following sections describe why performativity, materiality and visualisation are suited methods for studying practices, and each is followed by a section on how these methods have been used to study informal preparedness for electricity and ICT infrastructure breakdowns.

## Performance of everyday practices

An informal approach to household preparedness entails turning one's attention towards preparedness as routinely made and remade in practice (Nicolini 2017). Participatory observation has been a common method for studying practices because it grasps how a specific practice is performed by practitioners (Halkier, Katz-Gerro, and Martens 2011). However, observing all practices related to preparedness is an impossible task because the antecedents of preparedness are dispersed among an array of different practices (such as hiking, cabin life, wood burning, etc.; Heidenström and Kvarnlöf 2017; Schatzki 1996; Warde 2013). To approach this challenge, practice-based talk can be used to display practices through language. Practice-based talk is a technique used in interview situations to verbalise some of the normally nonlinguistic elements of practices. One way of doing this is formulating questions of performativity (e.g. what would you do during an infrastructure breakdown, what things would you use, who would you contact, etc.) that turn attention towards performances rather than the actors' normative interpretations of a practice (Halkier 2010). Hitchings (2012) argues that people can talk about their practices if the researcher spends time explaining the types of information that are relevant for the study and why. It might be difficult for participants to recognise why a researcher is interested in how they heat their home, store and cook food, use ICTs and so forth; basically, participants may be confused as to why what they see as mundane activities are considered significant for research. In addition, using 'critical situations' to talk about something that is changing or out of the ordinary (e.g. cooking without electricity) foregrounds the informal preparedness resources and barriers that lie within these tasks (Hitchings 2012).

Applying language-based methods to study performance has been criticised. Martens (2012) argues that conversations can offer data on how practices are structured but not on how they are performed. Moreover, the cultural context and the norms that are considered important will shape how practices are discussed. For example, if asked about what types of preparedness measures a household has, the answers might be based on norms or ideal descriptions of performances (e.g. to follow governmental advice). These principles and ideals say something about what people believe preparedness should be, not necessarily how it is done. However, language is always part of analysing these practices,

and as demonstrated below, practice-based talk makes explicit in-depth narratives about preparedness that provide important knowledge about how preparedness is understood and performed within households.

### Learning about informal preparedness through practice-based talk

Hitchings' (2012) suggestion to state explicitly our interest in everydayness was not done consistently in all the interviews; we were simply not aware of the effect this measure would have. However, we discovered early in the data collection process that there was a clear difference between how the visits proceeded in households presented with the everydayness frame and not. In the households where this was not presented, talk about preparedness continued a more general level and was based on common norms and values, as the quote below exemplifies:

*Yes, people are still prepared for blackouts in rural areas because of different causes. There are often storms and rockslides in Western Norway, and if a power line goes down, days might go by before they fix it. Worst of all, in many areas, farms are dependent on electricity to operate. A normal household like us always gets by for a few days (Man, 72, Laerdal).*

We then introduced Hitchings' (2012) advice to explicitly explain the aspects of preparedness that we were interested in by adding the following: 'We are interested in everyday life and learning about what your household would do if the electricity and ICT infrastructure broke down. Some of the questions that we ask might seem irrelevant, but they matter because they will help us learn about how Norwegian households are prepared for and deal with breakdowns'. In the households where everydayness was explicitly introduced, we were, to a larger degree, given narratives from the participants' own daily lives, such as the following household telling of a story about a blackout a few years ago:

Researcher: *The food was ready, that was fine. Do you remember what else you did? It gets dark, and everything stops functioning.*

Female participant: *Yes. Then we had to light the wood stove and light many candles, even in the toilet because our grandson is afraid of the dark, and we had to have candles everywhere.*

Male participant: *We had these flashlights that had been charged and work for a very long time.*

Female participant: *And then I found an old radio that ran on batteries, and we got to listen to some music as well.*

Male participant: *As far as I remember, we did not use the wood stove downstairs?*

Female participant: *No, we thought that if the blackout were to last for a long time, it would be foolish to heat up the room where we kept the freezer (Man 63, woman 59, Grue).*

The excerpt illustrates that using everydayness to frame the talk created a specific type of conversation using certain words, narratives, references and associations.

The interview guide remained consistent throughout all the interviews and was made up of two sets of performativity questions constructed to engender stories of informal preparedness. The first set drew on the participants' *previous experiences*, starting with the following question: 'Could you talk us through what you did when you experienced the blackout?' and included follow-up questions on how the family stored and cooked food, heated their home and who they talked to and how, among other issues. The second set were '*what if scenarios*', where an infrastructure breakdown was staged by asking the following question: 'What would you do if the infrastructure broke down right now?' The following excerpt illustrates how a family would deal with lighting their home without electricity:

Researcher: *Candles, is that something you keep all the time?*

Female participant: *(...) Yes, we have candles (laughs)*

Researcher: *Whose responsibility is that, that you have candles?*

Male participant: *That has got to be her, her responsibility*

Researcher: *What about flashlights?*

Male participant: *That is a typical job for me.*

Researcher: *Do you know where they are?*

Female participant: *Yes*

Researcher: *Where are they?*

Female participant: *Well, I might not know where the flashlight is, but the headlights we have, eh, by the coats? (Woman 37, Man 33, Oslo).*

Including several members of the household in the conversation activated discussions and negotiations, unravelling the interplay between family members' different preparedness activities, which also made it easier to make explicit what is normally tacit (Halkier 2010; Browne 2016). The first part of the excerpt illustrates that the responsibility for acquiring, maintaining and locating different preparedness items differs between family members, in this case between genders, meaning that preparedness is not an individual task; rather, it is shared between household members. The second part indicates the usefulness of a performative question ('Do you know where they are?') and how performativity talk connects to showing how preparedness is incorporated into the home through daily practices. This leads to the next step in the study of informal preparedness: walk-along interviews.

## Materiality

Individual interviews conducted outside the context of interest – in this case at home – will hardly grasp how everyday life is performed. By conducting interviews at home, practice-based talk can be combined with presenting, reconstructing or performing practices by including the material surroundings where the practices take place. Therefore, the second approach is what has been conceptualised as 'walk-along interviews' (Kusenbach 2003; Carpiano 2009; Pink 2007), which simply means to walk together with the participants in the relevant surroundings to incorporate the bodily and material elements of practices. It is commonly used in human geography to study place. Kusenbach (2003, 463) claims the following about walk-alongs:

When conducting go-alongs, fieldworkers accompany individual informants on their 'natural' outings, and – through asking questions, listening and observing – actively explore their subjects' stream of experiences and practices as they move through, and interact with, their physical and social environment.

A walk-along is a technique that enables both observation and interviewing while also engaging the materiality of practice, hence making sense of place. How the body (as materiality and performer of practices) moves in place (Degen and Rose 2012) and how place is sensorially perceived (Pink and Mackley 2012) is significant in walk-along interviews. Moreover, actively using objects from the home during a conversation is a tool for the researcher to learn about how these are used and connected to other objects and people. According to Klepp and Bjerck (2014), including material objects directs the conversation from the general to concrete and practice related, and the presence of an object reminds participants about the story of the object. When an item is present in a conversation, shared awareness is created between the researcher and participant.

Walking and talking (often combined with video) has been widely used in energy consumption research (e.g. Pink 2011; Pink and Mackley 2012; Wilson et al. 2014; Madsen 2017) to grasp the invisible energy infrastructure and dispersed practices that energy consumption is part of (Shove and Walker 2014). Similarly, informal preparedness is dispersed among many practices, and a walk-along method conducted in a home environment demonstrates informal preparedness through the ways in which ordinary tasks that are affected by the lack of energy would be performed (such as food storage in freezers and fridges, charging ICTs, keeping the house warm and lit, etc.).

Although a walk-along is a step towards comprehending the complexity of how informal preparedness is performed by including the material dimension, it does not offer data on the actual use of materials during a blackout. However, combined with performativity questions, it provides access to reenactments of events and simulations of future events. The following section outlines how walk-along provided access to the material dimension of informal preparedness in the current study.

## Connecting practice-based talk and walk-alongs



The implementation of practice-based talk by emphasising everydayness and performative questions was done in combination with walk-alongs in the participants' homes. Walking and talking created a space for articulating and contextualising informal preparedness, in this case how the risk of infrastructure breakdowns would be handled through the material elements that were part of the households' practices (e.g. different rooms in the house, panel ovens, wood stoves, lamps, flashlights, candles, fridges and freezers, food, batteries, radios, mobile phones, chargers, etc.). We started to walk around the home after presenting the what-if scenario: 'What would happen if the electricity and ICT infrastructure broke down right now?' We then walked with the participants through every room as they demonstrated which items would function and not (appliances, media technologies, heating systems, lighting, etc.) and how they would carry out ordinary tasks (cooking, cleaning, heating, food storage, mobile communication, etc.) without access to electricity and ICT infrastructure.

As the data collection progressed, an increasing amount of time was spent walking around the home instead of sitting still and talking. The participants showed us where they kept their candles, batteries and flashlights, who was in charge of acquiring and maintaining these, how these resources were used and what barriers they would encounter when trying to maintain ordinary activities at home. In addition, the walk-alongs brought forth two additional relevant outcomes. First, they provided a sensory storytelling (Pink and Mackley 2012), an understanding of what the home would feel like without electricity: It would be dark, cold and quiet. The following excerpt exemplifies how this was done:

Researcher: *What would you do when it becomes cold?*

Participant: *(thinking) No, I don't have a plan B (laughs). I would have to go to our cabin (laughs).*

Researcher: *So what you are saying is that if the electricity disappears...*

Participant: *I really cannot live here then (Woman 29, Oslo).*

While walking through the rooms, phrases such as 'after a few hours it would get cold here, what do you do then?' were used for the participants to intellectually and emotionally engage in a potential blackout. The above excerpt expresses that the participant perceived herself as unprepared when faced with the consequences of a breakdown. Her laughs indicate that she felt the discomfort of not being prepared and of not living up to the normative expectations of what it means to be prepared.

Second, the walk-alongs provided the researchers with a new angle to follow how the participants navigated through their own homes and lingering on items or rooms helped inspire storytelling instead of brief answers to predefined questions. The researchers were included in the participants' movements around the house, triggering new reflections. This also allowed the participants to define their own 'risky places' (Gieryn 2000) that would be affected by a breakdown. While walking, the participants were also asked to display flashlights, matches, batteries, candles, stoves, wood, power banks, radios and any other objects they would use during a blackout. Looking for, finding and showing the researchers these objects took time and brought about an opportunity to talk about them. Figure 4 illustrates such lingering, which is further elaborated on in the next section on photographing during the tours.

Figure 4. Two participants showing a researcher how they would cook without electricity using a primus and a grill. (Photos taken by the author.)



Together with practice-based talk, the walk-alongs contextualised performances and brought together talk and materiality, meaning that the participants were spurred to talk about how they would act within the structural constraints of their homes and present belongings. By including these structural and material constraints as an active part of the interview, we gained knowledge of what informal preparedness can consist of and how it could be important in the event of an infrastructure breakdown. To collect data about both talk and materiality, visual documentation is crucial. Hence, photographing and photographs, along with how visual methods reinforce the transition from general to concrete talk, are described in the next section.

## Visualisation

A challenge with walk-alongs is documenting how what participants *say* (which can easily be recorded) is connected to what they *do* (Jones et al. 2008). This is a critique born from an increasing number of studies that use walk-alongs but fail to include the interconnectedness of talk and materiality in their analyses (Vannini and Vannini 2017). Photographing during walk-alongs is a way of answering this critique by documenting the materiality of body and place.

Photographing and photographs have a long history in the social sciences, most notably as part of anthropologists' ethnographic research. In recent years, along with a massive technological development, photography – together with video – has been increasingly used as a supplement to language-based methods, such as interviews and walk-alongs (Murdock and Pink 2005; Rose 2012). Photographing and photographs have been applied in a variety of ways as a tool to grasp performativity. Using photographs in an interview, either taken by the researcher or participants themselves (photo elicitation), steers the conversation towards concrete situations, places or objects (Rose 2012). In this area, Wall (2014) is one of the few scholars using visual methods in risk research. In her study of young peoples' sense-making of risk, Wall uses participatory photography, handing cameras to young people to grasp what risk stories participants engage in and how they are told. She argues that allowing them to define their own risk milieus by photographing them opens up the field by including the spatial and social context in which risk is embedded.

However, it is important to remember that even though photographs give a richer ethnographic material than language-based methods alone, because vision is added, photographs are not a truer or purer vision of the world (Pink 2007, 21). The image captures a moment within a specific situation and is influenced by the involved actors' understanding of it. Thus, photographs should be analysed as a part of a process where the participants and researchers are working towards defining a narrative, in this case where and when blackouts would pose a risk to the household. The types of images produced are a result of this work (Banks and Zeitlyn 2015; Felstead, Jewson, and Walters 2004). The following section describes how photographing and photographs contributed to creating narratives on informal preparedness.

## Photographing during walk-alongs

Similar to explaining the research focus on everydayness and informal preparedness to the participants, the research team described what we wanted to photograph and why documenting the acquisition, use and maintenance of

material resources were important for understanding household preparedness. Our aim in using visual methods was twofold: first, to use photographing as an input and make it a part of the data collection, and second, to use the photographs as an output and part of the data material.

As an input, photographing opened up the homes of the families. Asking to photograph what the participants defined as their preparedness for infrastructure breakdowns was an excuse to conduct ethnographic interviews; it was an incentive for getting access to the house, for moving around the house, to follow the participants' lead and to engage with the material surroundings while talking. The stories related to material objects were made explicit as they were photographed. As aforementioned, the walk-along technique let us linger on certain items or rooms. Photographing extended this lingering, in particular when the participants were asked to demonstrate the functionality of various preparedness items (e.g. whether their flashlights had batteries, asking different family members to locate items or having them show us with what equipment they would cook dinner without electricity). [Figure 5](#) displays hands engaging with preparedness materials at home.

Figure 5. Participants identifying and showing the researchers material preparedness at home during the walk-along session. (Photos taken by the author.)



Photographing creates positions, making it interesting to pay attention to what objects are made visible and how they are constructed as significant (Rose 2012; Banks and Zeitlyn 2015). Participants decided what to focus on and not, what they wanted to show us and what they thought of as important objects or places at home. This gave a sense of how preparedness was conceptualised: What consequences does a blackout have for them as a household and as a family and for the home itself? In what ways are they prepared? The participants were eager to show the researchers that their households (their home and the family living there) were well prepared and thus that they were being 'good citizens'. This was done by pointing to and demonstrating certain objects and wanting us to photograph the places that would be unaffected and the objects they could use in case of a blackout. The participants were less eager to talk about, show and photograph the vulnerable places or situations that could occur and

were much quicker to move along to the next room or object. The participants' 'can and should' strategies were a way of trying to live up to the ideal of the prepared household, exemplified here by a household that did not own a wood stove:

Researcher: *Do you have a wood stove in the basement?*

Female participant: *No, but we could have had one*

Male participant: *Yes, we could just install one.*

Researcher: *There is a chimney here?*

Participant: *Yes, we could just put it in* (Woman 70, man 68, Oslo).

This normative positioning shows that it is not only important to focus on what is tacit but also on what is concealed. To avoid missing out on the important parts of how the risk of blackouts is *not* handled, we attempted to consistently walk through all rooms, prompting talk and photographing constraints and resources.

As the output, the photographs are the results of the positioning and work done in the interview situation to define informal preparedness. Photographs were used to capture the sociomaterial context in which informal preparedness takes place. The analysis of the images brings forth what sort of material resources the participants owned and engaged with, as well as where these were placed in the home. In this text, [Figures 4–6](#) gives texture (Geertz 2008) because they provide information about homes, people and objects. When seeing the photographs of material preparedness together, the consistency in the placement of family emergency resources became evident. 'Preparedness drawers', as shown in [Figure 6](#), was a common way of organising items such as batteries, flashlights, lighters, matches, candles and so forth at home that, even though participants did not reflect on, served as a way of mobilising materials to prepare for future breakdowns (Heidenstrøm and Kvarnlöf 2017).

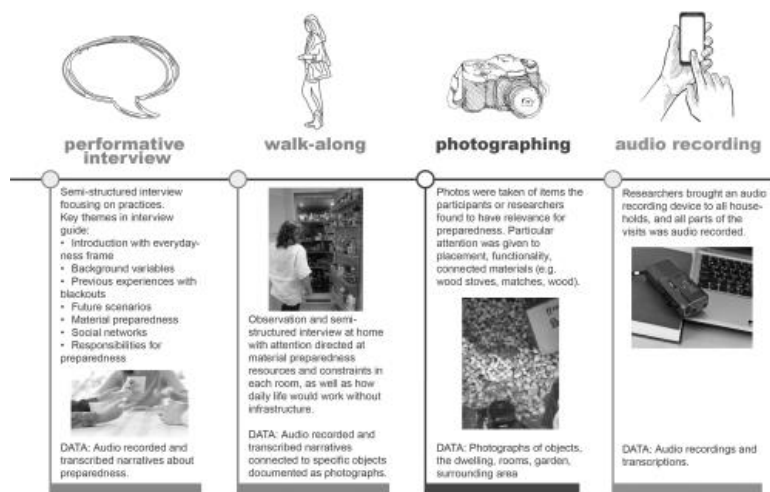
Figure 6. Preparedness drawers. (Photos taken by the author.)



## Summing up the approaches, limitations and further research

Based on the argument that household preparedness is part of everyday practices, three interconnected methodological approaches were used for studying informal household preparedness. Figure 7 sums up the approaches, data collection techniques and produced data material.

Figure 7. Summary of methods and data material.



The performative questions steered the interviews towards seemingly obvious everyday activities. The walk-along sessions reinforced the focus on routines and habits by walking through the taken-for-granted material surroundings of the practices the participants would engage in. Photographing and audio recording documented and interconnected talk and materiality, providing a rich data material consisting of narratives directly linked to the performed practices showing elements of preparedness. This method could easily be further developed and used to study other aspects of household preparedness beyond infrastructure breakdowns, such as the risk of flooding, fire, hurricanes, earthquakes and so forth.

Exploring informal household preparedness is a work in progress, and there are several limitations to the methodology. Currently, this method does not systematise what types of material preparedness objects that were present in each household; thus, this aspect is not consistent throughout the sample. In future studies, a predefined tool for registering the type, amount, placement, maintenance, usage and so forth of resources would contribute to a comprehensive overview of informal household preparedness, similar to what ‘wardrobe studies’ provide for textile consumption (Klepp and Laitala 2017; Klepp and Bjerck 2014).

Furthermore, the interviews and walk-alongs are language based and do not observe the actual performance of practices during a blackout. Gathering empirical data during crises is extremely difficult (Killian 2003). However, future studies might benefit from playing out scenarios within the household, such as cooking a meal without electricity, which is a version of the cook-along method (Jacobsen 2013). Finally, the method is limited to the household setting and does not consider the practices of actors with a formalised role in the emergency management system. How formal preparedness is carried out through the practices performed by these actors would generate highly interesting knowledge on how the concept of preparedness is produced and reproduced (Boholm, Corvellec, and Karlsson 2012). Studying preparedness as practice should not exclude the discourse-oriented perspective that risk literature has dealt with extensively, which includes sense-making, emotions, values and perceptions, all of which are important to understand how citizens deal with preparedness.

## Conclusion

The current article has shown that household preparedness is predominantly studied as a top-down and normative concept and that how preparedness is performed as a part of dealing with risk in everyday life has largely been neglected. The present study of informal household preparedness reinforces routinised everyday practices as important aspects of preparedness, and the three methodological approaches – performance of everyday practices, materiality and visualisation – are ways of recognising these practices in empirical studies of preparedness.



Turning the focus from formal to informal preparedness has revealed that preparedness is determined by not only formalised knowledge, the ownership of preparedness resources and awareness of potential risks, but also by how the routinised and embodied performance of ordinary practices contain important preparedness resources and vulnerabilities. As a formal concept, preparedness was not something the participants reflected on or dealt with. Regardless, they performed it through their everyday practices. Connecting performative questions with the materiality of the home provided knowledge on how this performance was done, for example, by showing how to use a primus, where batteries and flashlights are stored and who is responsible for maintaining these resources.

The informal perspective has the potential to inform policy developers, showing them that households are active and skilled actors that deal with preparedness in their everyday lives, not passive recipients of support. The knowledge produced by studying informal preparedness brings forth the work that is done by households to sustain their everyday practices during a crisis or emergency. Furthermore, households should play an active part in developing future national and local preparedness plans both as contributors of lay knowledge on informal preparedness and in establishing a link between the sender and recipient of formal preparedness information.

Notes

<sup>1</sup>*HOMERISK: Risk Management Strategies when Households Face Collapsing Electricity and Digital Infrastructures*. [www.homerisk.no](http://www.homerisk.no)

<sup>2</sup>The Norwegian Centre for Research Data (NSD) has approved the project, and all participants signed a written consent form after the visit, which contained a separate section for consenting to the use of photos in dissemination activities.

## Acknowledgement

This article is based on data from the Nordic research project HOMERISK: Risk management strategies when households face collapsing electricity and digital infrastructure.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

The article was financed by the Research Council of Norway (grant no. 238059).

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