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Published in:
Journal of Convention and Event Tourism

DOI:
[10.1080/15470148.2021.1949417](https://doi.org/10.1080/15470148.2021.1949417)

Published: 01/01/2022

Document Version
Publisher's PDF, also known as Version of record

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Please cite the original version:
Sihvonen, J., & Turunen, L. L. M. (2022). Multisensory experiences at travel fairs : What evokes feelings of pleasure, arousal and dominance among visitors? *Journal of Convention and Event Tourism*, 23(1), 63-85.
<https://doi.org/10.1080/15470148.2021.1949417>



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To cite this article: Jenniina Sihvonen & Linda Lisa Maria Turunen (2022) Multisensory experiences at travel fairs: What evokes feelings of pleasure, arousal and dominance among visitors?, Journal of Convention & Event Tourism, 23:1, 63-85, DOI: [10.1080/15470148.2021.1949417](https://doi.org/10.1080/15470148.2021.1949417)

To link to this article: <https://doi.org/10.1080/15470148.2021.1949417>



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Published online: 30 Jul 2021.



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Multisensory experiences at travel fairs: What evokes feelings of pleasure, arousal and dominance among visitors?

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ABSTRACT

This exploratory study concerns the evocation of multisensory experiences at travel fairs. In this context, stimulation of the senses is vital in engendering feelings of pleasure, arousal and dominance. The purpose of this study is to explore the ways in which travel fairs evoke multisensory experiences and internal responses in consumer visitors. To accomplish this task we gathered ethnographic data (pictures, videos and audio recordings) together with interview data from visitors, and applied the classic stimulus-organism-response conceptualization to the data analysis. The findings contribute to existing knowledge concerning the management of retail atmospherics in shedding light on customer experiences beyond (dis)-satisfaction in the little studied context of travel fairs. Our findings imply that the travel fair encompasses visually dominant stimuli whereas tactile stimuli are somewhat lacking. Although visitors to these fairs seem to find the experience manageable and pleasurable, the aspect of excitement is somewhat lacking. We suggest that the visually dominant environment that is characteristic of fairs should move in a multisensory direction in terms of offering visitors experiences that are more appealing. It is also crucial to manage the volume and intensity of senses effectively to prevent information overload and sensory overstimulation.

ARTICLE HISTORY

Received 9 November 2020

Accepted 28 May 2021

KEYWORDS

Customer experience;
experiential marketing;
sensory ethnography;
travel fair

Introduction

A common conception is that retail design affects the behavior of shoppers by attracting their attention, evoking emotional responses, and communicating different messages through signals and stimuli (Helmefalk & Hultén, 2017). Mattila and Wirtz (2001) emphasize that consumers perceive service-scapes holistically, and their responses are based on a combination of different stimuli. A thorough understanding of the multisensorial nature of the customer experience is a prerequisite for the successful management

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 Supplemental data for this article is available online at <https://doi.org/10.1080/15470148.2021.1949417>.

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of any service-scape or customer interface. As a starting premise, pleasantness of sensorial stimuli is likely to improve evaluations of the service experience and generate loyalty toward the service-scape (Lee, Fu, & Tsai, 2019).

Even though it is acknowledged that experiential elements play an important role in the perception and evaluation of service quality, thus far there has been little research interest in how visitors to fairs perceive service factors (Sung & Lee, 2015), determine their satisfaction and loyalty (Jung & Tanford, 2017), value atmospheric cues (Siu, Wan, & Dong, 2012), and experience fairs holistically (Rinallo, Borghini, & Golfetto, 2010). Sung and Lee (2015) have found that sensory experiences contribute to the excitement factor at specific events, which is positively related to both fair visitor satisfaction and loyalty. Jung and Tanford (2017) have concluded in their meta-analysis that visitor satisfaction is primarily related to getting something out of the event, but loyalty rather depends on the physical environment at the venue. Moreover, according to Siu et al. (2012) consumer fair visitors are likely to feel more impressed by the experience if the organizer can ensure a pleasant ambience, including aspects such as temperature, lighting, music, aroma, spatial layout, signage, and air quality (Siu et al., 2012). In a business-to-business fair context, Rinallo et al. (2010) have found that business visitors' overall trade show experience can be sub-optimal as it tends to be characterized by sensorial overwhelming, information overload and physical fatigue.

This study explores the ways in which travel fairs evoke multisensory experiences and internal responses in consumer visitors. Schmitt (1999) defines experience as specific events in reaction to a stimulus. In this context, stimulation of the senses—sight, hearing, touch, smell and taste—is vital in terms of appealing to the customer (Schmitt, 2009). According to Krishna (2012, p. 332), sensory marketing “engages the consumers’ senses and affects their perception, judgment and behavior.” She concludes in her review article (2011) that there is a substantial need for research within this domain. Hultén (2011) also calls for further research on multisensory interplay among the human senses in value-generating processes. To build upon these, this study aims to shed light on the multisensorial nature of a trade fair, and to analyze the contributions of the different senses to the holistic experience and its evaluation.

The research adapts an exploratory approach in natural settings in order to contribute to the prior research by making sense of how consumers perceive diverse sensory cues, especially in the fair context. We utilize a classic environmental psychological conceptualization by Mehrabian and Russell (1974) in our data analysis phase for 1) describing and analyzing the various types of environmental stimuli existing in the exhibition

environment, and 2) concluding about the consumers' primary emotional and cognitive responses to the stimuli as a whole. Next, we turn to review literature on retail atmospherics, consumer responses to environmental stimuli, and visitor experiences.

Literature review

Retail atmospherics

Baker et al. (1992) identified the three major dimensions of atmospherics as ambience, design, and social context. Retail atmospherics influence shopper cognition and emotions (Chang, Eckman, & Yan, 2011), and could potentially enhance the pleasantness of the environment and intensify feelings of arousal among shoppers (Helmefalk & Hultén, 2017). The atmospherics could also be a differentiating factor in the marketplace (Baker, Grewal, & Parasuraman, 1994), and encompass semantic meanings (Spence, Puccinelli, Grewal, & Roggeveen, 2014). All this emphasizes the relevance of sensory marketing and implies that manipulation of the atmospheric elements could potentially induce favorable shopping behaviors and drive sales (Soars, 2009; Tai & Fung, 1997).

Everything from the temperature to the softness of the furniture could send a subtle message to consumers about the retailer's offering (Ackerman, Nocera, & Bargh, 2010). Shoppers soak up the atmosphere in a retail setting through non-verbal and verbal sensory stimuli (Helmefalk & Hultén, 2017). Spence et al. (2014) describe perceptions as holistic and multisensory in nature. Vision is the most dominant of the senses (Hecht & Reiner, 2009), and in a retail space includes aspects such as color, brightness, size, and shape. Touch, on the other hand, is perhaps the most underutilized aspect of store atmospherics, despite evidence of its power in terms of increasing purchase likelihood if the potential customer touches the product (Grohmann, Spangenberg, & Sprott, 2007). According to Ackerman et al. (2010), basic tactile sensations influence higher socio-cognitive processing on the metaphorical level, for example. It has been shown in earlier research that physical properties (volume, pitch, rhythm, and tempo), emotional tone (positive or negative), and customer liking of these elements determine the influence of music and sound (see Ezeh & Harris, 2007 for a review). The aforementioned auditory atmospherics appear to be most effective when an optimal level of stimulation is achieved (Spence et al., 2014).

Introducing more sensory cues into a service-scape increases not only the number of sensory touch points, but also the risk of sensory overload and stimuli incongruency (Spence et al., 2014). Sensory-overload is especially likely to occur in the case of having more than two high arousal

the roles of different environmental stimuli, Bitner (1992) suggests that ambient cues in particular affect the five senses, imperceptibly or perceptibly, whereas layout and functionality are designed to facilitate consumer goals such as finding the product they are looking for. The third dimension includes signs, symbols, and artifacts, which serve the role of communicating to customers.

The focus in the study at hand is on the environmental stimuli that come into play in the experience of visitors at a travel fair, and on the kind of pleasure-arousal-dominance states they express. No matter in which context of experiencing (retail, leisure or business), an umbrella concept of atmospherics posits that the design and ambient cues in the environment have the capacity to influence people's affective, cognitive and behavioral responses via sensory and emotional mechanisms (Ballantine, Jack, & Parsons, 2010). However, it should be noted that consumer-environment interactions include more factors than environmental stimuli, such as consumer's expectations and goals (Massara, Liu, & Melara, 2010).

Visitor experience

Atmospheric cues are needed in providing an attractive and facilitating environment (Ballantine et al., 2010) no matter in which context. Exhibitions and fairs, unlike shopping malls or other service-scapes with retail-emphasis, tend to charge an entrance fee, meaning that the visitor experience should be suitably stimulating, inspiring and entertaining (cf. Pine & Gilmore, 1999). Siu et al. (2012) underline that fair visitors undergo value-for-money considerations and estimate perceived sacrifices to conclude about their overall satisfaction and desire to stay. The visit in these kinds of spaces tends to be occasional yet lengthy at a time, in contrast to multiple and quick visits to retail stores or malls (see e.g., Roy, 1994; Gilboa & Vilnai-Yavetz, 2013).

Rinallo et al. (2010) make a distinction between visitors' expectations for exhibitions for business and leisure. They (Rinallo et al. 2010) suggest that whereas business visitors to fairs value cognitive and relational outcomes providing instrumental value for their work, the consumer visitor is likely to be different, and value experiences as ends in themselves, in other words to appreciate fantasies, feelings and fun that the exhibitors can provide to them. In line with this assertion, Bloch, Ridgway, and Dawson (1994) have explored malls as consumption sites and elicited key benefit factors for consumers, such as esthetic appeal, escape, exploration, flow, epistemic needs, and social benefits. Interestingly, Forrest (2013) has brought up an analogy between visitor experiences taking place in museums and in retail environments.

As pointed out above, a visitor's experience is constructed by internal (e.g., expectations, motivations, behaviors) and external (e.g., physical space, atmospheric cues) factors. Different spaces are designed for different purposes, but still, overlapping similarities between retail- and museum servicescapes can be found (Forrest, 2013). For example, both museums and fairs have restricted opening times (varying from a few days to several months), continuously changing exhibitions and entrance fees, which may lead to rare visits. While fairs may have overarching themes that may aim to offer educational, experiential or inspirational content, they are targeted to different kinds of audiences when compared to carefully curated museums and art galleries. Managerial control is either high or moderate in these kinds of unique experience-related servicescapes. The visitor is being guided and the experience develops through interaction between visitor and exhibition (Forrest, 2013). The content of the exhibition (e.g., in museums and fairs) plays a more central role than the space itself. In contrast, retail servicescapes, such as shopping malls, offer a physical cluster of retail shops where retail atmospheric interplay has a clear aim to persuade visitors for consumption (Michon, Chebat, & Turley, 2005). Gilboa and Vilnai-Yavetz (2013) have concluded in the context of malls, eventually consumers come up with a holistic and subjective experience consisting of many micro variables. Next, we turn to describe the data collection procedure for grasping the visitor experience at travel fairs and to reveal how multisensory stimuli play a role in evoking feelings of pleasure, arousal and dominance to a visitor.

Methods and materials

This study represents the field of sensory ethnography (Valtonen, Markuksela, & Moisander, 2010), which is based on fieldwork comprising observation, visual data, and interviews. The research can be regarded as exploratory by nature, as it aims to capture multisensorial existence of the fair. The literature review on different dimensions of retail atmospherics guided our choice to collect observational data in the exhibition hall, whereas the Stimulus-Organism-Response -framework provided us a conceptual tool on how to explore and analyze consumers' responses to those external stimuli. Moreover, understanding how consumer experiences are constructed in different retail contexts brought us to approach visitor experiences in a holistic manner as metaphors, which are based on many micro experiences as well as internal and external factors to consumers.

Although S-O-R -studies have typically been quantitative in nature (e.g., Chang et al., 2011; Cheng et al., 2009; Doucé & Adams, 2020), qualitative design suits well to eliciting consumers responses and subjective

experiences, such as in the study by Lucia-Palacios, Pérez-López, and Polo-Redondo (2016) that was related to shopping trip experiences. We asked the interviewees about what they remembered seeing, hearing and touching (i.e., Stimuli), after which they were asked to describe their feelings after having visited the fair, their thoughts and home take-aways (concrete and abstract) (i.e., Organism).

Behavioral responses ('R') were not in the focus of our study, as on one hand, the consumer's decision to approach, that is to choose to visit the fair, has already been made, and on the other hand, many of the larger-level behavioral responses may happen post-fair. Instead, the interviewees were challenged to describe their experiences of the fair through metaphors, such as a painting, a gift package, an animal, or a type of music depending on the sense in focus. Association tasks such as these represent projective techniques that have the potential to generate tacit information related to customers' experiences and ideas, especially for the purposes of service development (see Helkkula & Pihlström, 2010). Also Rinallo et al. (2010) have found out that use of metaphors comes naturally to a fair visitor when making sense and describing the experience.

Data collection

The empirical research phase was conducted in January 2020 at the Nordic Travel Fair, which is arranged annually at a fair center in Helsinki: it attracted 68,300 visitors and almost 1,000 exhibitors. Over the years the Fair has become Northern Europe's biggest event focusing on travel (Messukeskus, 2020).

Three persons were engaged in gathering the data, each of whom focused on one sensory cue during the observation. All the observations concerned the chosen sensory stimuli: visual and tactile cues were reported in the form of pictures and videos, for example, and the auditory stimuli consisted of audio recordings. Each researcher aimed to block other senses during the data-collection process in order to sharpen the sense under observation. The data was collected during two (of three) fair days: the first day and the last day of the Nordic Travel Fair. Altogether, the observational data consists of 195 pictures, 42 audio recordings and 19 videos that were intended to capture sensory stimuli in the exhibition environment.

After the observation phase, 57 short interviews with the respondents to elicit their responses to the sensory stimuli were conducted. Similarly to observations, interviews were collected on two different dates: 36 interviews were done on the first fair day and the remaining 21 interviews on the last fair day. Convenience sampling was applied due to the large number of visitors and limited resources for data collection.

The interviews were conducted near the exit door of the fair center in order to get a grasp of the holistic top of mind experience of the fair. The interviewees were chosen to represent a heterogeneous population of fair visitors in terms of gender, age and accompanying persons. The largest number of interviewed visitors were visiting the fair alone (38%), but also visitors with friends (24%), visitors with children (22%) and couples (16%) were represented in the data. It is noteworthy to point out that female visitors were represented more at the fair space. [Table 1](#) summarizes the key demographics of the respondents.

The interviews were collected until the answers reached the point of saturation. As shown in [Table 1](#), interviews emphasizing the visual cues reached the point of saturation at 15 interviews, tactile cues required 17 interviews, whereas interviews concerning auditory cues needed 25 respondents to reach the saturation. Based on different saturation points, we may expect that visual and tactile cues may relate to more static aspects of the servicescape and exhibitors, while the auditory cues are the most varied depending on the number of visitors at the fair center and exact time of visit.

Data analysis

Data analysis started with thematic analysis of observational data. Our focus was on the visual, auditory and tactile cues in the exhibition environment, and we used observations and visitor interviewees to describe the multisensory atmospheric cues and to analyze the perceptions and semantics attached to the stimuli provided at the Nordic Travel Fair held in January 2020. First, we coded the observational data based on the stimuli content as follows:

- bright colors/large texts/shapes = visual
- flyers/carpets/aisles/properties and objects = visual & tactile
- testing/tasting/lottery = tactile

Table 1. Demographics of the interviewees.

		Sensory stimuli			Sum.
		Visual	Auditory	Tactile	
Age	Young adults	4	11	5	20
	Working age /middle aged	9	10	6	25
	Elderly	2	4	6	12
Gender		15	25	17	
	Female	10	19	11	40
	Male	5	6	6	17
		15	25	17	

- music/sounds/noise = auditory
- performances = auditory & visual
- other observations = ambience, space, engaging activities, overcrowding

Second, we conducted a micro-level ethnographic analysis, the aim being to explore the relationship between a market-provided stimulus and the individual consumer (Arnould & Price, 2006, 253). We focused on categorizing interviewees' atmospheric perceptions (i.e., which stimuli they remembered), and moved on to analyze the internal responses, that is, expressed emotional states as well as cognitive reactions to stimuli (see Forrest, 2013). The division of Pleasure-Arousal-Dominance from the S-O-R -conceptualization (Mehrabian & Russell, 1974) was used as an analytical tool to classify visitors' emotional and cognitive states.

Finally, we concluded the analysis by thematizing the metaphors and concluding about the nature of the holistic macro-level visitor experience, and the findings were set against the prior literature on multisensory atmospherics, consumer-responses to stimuli, and visitor experiences. The aim of this analytical process was to shed light both on the multisensory aspects of these experiences and on how they were evaluated. Visitors' behavioral responses were out of the scope of this present study, in which we focused on studying atmospheric perceptions in natural settings rather than approach and avoidance behaviors. The observational data complemented the analysis of interview data and enhanced the validity of conclusions.

Findings

It became evident during the analysis that the travel fair offers versatile stimuli ranging from travel-related marketing to food and entertaining. The topic attracted visitors who were interested in traveling generally, in alternative destinations and cultures, or in the methods and means of transport. Many interviewees were returning visitors and made their evaluation based on their experience the previous year: *"It was a nice visit once again – as it is every year"* (female, aged 35); *"There was nothing new this year, I even felt there were fewer exhibitors and things were going more virtual and online (...) big companies were missing"* (female, aged around 40). Others compared the experience to their expectations: *"I was surprised that nothing at the fair related to the current sustainability trend"* (male, aged around 25). The most positive responses were reported by visitors who had come with no expectations or pre-experiences to compare.

As expected, the experiences varied widely among the respondents. No single type of experience was dominant in the interview data, as the respondents primarily remembered different things about the event, which

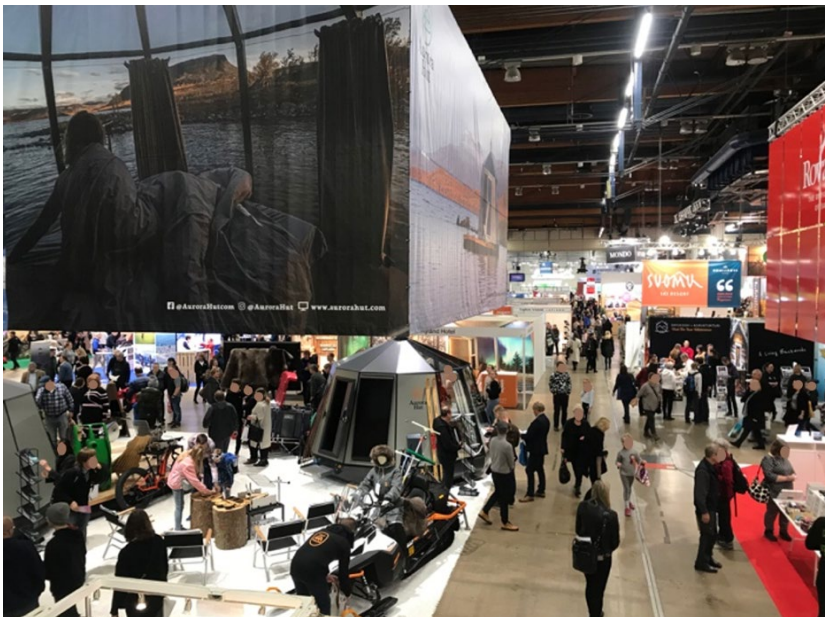
had evoked different images in their minds. For example, when asked what animal came first into their mind with regard to the exhibition, they mentioned 19 different species ranging from a turtle to a butterfly.

In the following section we discuss each sensory stimulus and the responses it evoked separately. We use quotations from the interviews and pictures from the fair to support our arguments, while ensuring the anonymity of the visitors.

Visual stimulus

Helsinki Messukeskus – the fair center – was familiar to many visitors as a space. Videos and pictures produced by the researchers illustrate the use of visual cues to support navigation (see [Picture 1](#)). For example, the extensive surface area was separated by exhibitor carpets and “walking lanes”. The carpets and other textile elements served the function of noise absorption.

Both the floor cues (visual and tactile stimuli) and the height of the ceilings enabled the exhibitors to build upwards as well as on the level (visual stimuli). For example, large text and balloons were used to guide visitors to the stand. Despite these visual navigation cues, however, the interviewees reported some challenges in terms of finding what they were looking for.



Picture 1: The exhibition area was vast, with high ceilings.

The visual stimuli offered by exhibitors were dominant. Bright colors, large canvases and life-sized cardboard cutouts were used as props representing archetypical cues linked to the country in question. One of the visitors (female, aged about 45 with two children) said that she liked the stands representing exotic countries because they were much more showy than those set up by domestic exhibitors. Visual diversity was described as a colorful mess or a peacock, with no specific exhibitor in mind.

Tactile stimulus

Given the huge number of available stimuli, a single visitor perceives very few of them. Visual dominance was striking, and despite various engaging activities, the tactile aspect was weak and one-sided. Many visitors talked about flyers and lottery cards being handed out by exhibitors, for example, but otherwise they found it difficult to remember what they had touched or felt. On the concrete level, tactile stimuli



Picture 2: Various visual stimuli give a feel of what is to be seen while traveling.

related to participation in activities, as one of the respondents (female aged about 16) reported having touched lucky wheels and pencils in connection with lotteries. In general, the lack of tactile-related experiences among visitors reflects the fact that they passed many of the stands without stopping by. Whereas the visuals largely created the atmospherics and the ambiance (see [Picture 2](#)), the main tactile stimuli derived from the softness of the carpet or the provision of armchairs to watch various performances. Only one interviewee recalled a tactile cue (see [Picture 3](#)) that led to a clear response: “*The new train seats were something I wanted to try*” (male aged around 50).

One sense-capturing (tactile and other) aspect of the visit was strongly evident, namely food. As one male respondent (aged around 30) put it: “*The food part always sticks in one’s mind*”. Moreover, in the opinion of two women (aged around 75), in the end “*the pizza was the best*”. The respondents reported eating food in situ and/or buying it to take away. For example, a female respondent who was asked to describe metaphorically what a gift package from the fair might be, she pictured a lunch box. This example emphasizes the role of food and catering in the multisensory experience, either supporting or confounding the overall experience.



Picture 3: The new train seats in action.

Auditory stimulus

Surprisingly, it appeared in the interviews that auditory stimuli were more memorable to the visitors. The interviewees described music performances as memorable and enjoyable, and as clearly associated with the country they represented. For example, Indonesian music performed on traditional instruments by players in costume gave visitors an arousing and multi-sensory experience (see [Picture 4](#)). Visitors lingered for longer listening to music performances, at least to those that caught their attention. Two females (aged around 20), for instance, recalled an alphorn, which had surprised and confused them somewhat when they were passing Switzerland's stand.

One of the interviewees (female, aged around 45) described the fair event as follows: *"... all instruments are played at the same time, as it is quite varied when you come across travelling in Finland and abroad - a vast assortment"*. Two interviewees (female and male aged around 25) likened the fair to *"heavy-metal screaming, because of all the noise. There must be some underlying information and meaning, but it goes unnoticed because of the hustle and bustle"*. The interviewees were also aware of the competition among exhibitors for the attention of visitors. African music was the first thing that came to the minds of two women aged around 75, because *"they played so loud. The exhibitor at the neighboring stand agreed that the noise was problematic."*



Picture 4: Music performance offers both auditory and visual stimuli.

On the auditory level, fatigue due to overstimulation tended to characterize the experience: the vast open area without separate spaces/rooms, attention-capturing signals from exhibitors, various performances going on and numerous visitors wandering around are conducive to tiredness. Interestingly, one of the interviewees (male aged around 25) had decided to choose his own sound sphere as he wandered around listening to Coldplay through his headphones.

Pleasure, arousal, or dominance?

Although we separated the senses (visual, auditory and tactile) when we collected and analyzed the data, we acknowledge that experiences of fairs are always multisensory by nature, and that it is impossible to block entirely or clearly separate different sensory stimuli (see Spence et al., 2014).

The majority of the interviewees described their visit to the exhibition as pleasurable, although not so exciting. Nevertheless, music in particular raised the level of arousal. Two females aged around 20 recalled that the kind of drumming they heard during their visit took them on an imaginary trip. *“It gives you a feeling of wanting to travel”*.

The general impression from the interviewees was that they felt tired rather than aroused after visiting the fair. One woman (aged 35) gave a metaphorical description: *“After the visit the total feeling brings to mind an elephant, and the imagined gift package would be heavy, full of brochures”*. Spending three or four hours at the fair was experienced as exhausting, and at the same time these visitors wondered whether their experiences had fulfilled their expectations.

With regard to dominance, the respondents suggested that the specific themes were not necessarily evident to visitors. Moreover, as one woman (aged around 30) observed: *“It was difficult to move around, and I had problems finding the stands of certain exhibitors”*. The fair generated feelings of positive arousal among some visitors, together with a plausible behavioral response. One woman aged around 45 explained that she *“was most interested in campervans, and after today it is more likely that I will buy one”*. Another woman, aged around 50, similarly concluded: *“I found my travel destination for next summer.”* In contrast, there were also indications of a lack of arousal. As an example of this less-than-ideal situation, one visitor (female aged around 60), despite feeling “quite good” about the visit, could recall almost nothing specific about the exhibition, and said that she did not take or touch anything while she was there.

These results imply overstimulation in general. It would therefore be worthwhile to rethink how the stimuli created by different exhibitors at the fair could, in combination, have a positive impact on the overall experience of visitors. Exhibitors compete for visitor attention, often via

visual or auditory stimuli, but our findings show that short-term and identical stimuli (e.g., lotteries and flyers) induce neither pleasure nor arousal despite the engagement. On the other hand, musical performances and prototype experiences seemed to generate pleasure, or even feelings that led to arousal.

Metaphors of visitor experience

Sensory stimuli created by atmospheric characteristics, exhibitors and other people in the fair area have an impact on visitor's macro experience. Visitor's macro experience consists of multisensory stimuli and many micro experiences, as discussed earlier. In order to understand the macro experience, we challenged respondents to describe their fair experiences through metaphors (see Appendix 1 for a detailed list of all metaphors).

The auditory landscape of the travel fair was summarized by 25 respondents as a disorganized mix of various kinds of instruments and voices, often something loud accompanied with noise. Characteristic to travel fair, also authentic and local rhythms were recalled. Fifteen respondents were asked to describe the travel fair as a picture or painting in order to grasp a visual interpretation of their holistic experience. Visually the travel fair was described as a mix and match of colorful pictures or a collage, which resemble the diversity of sensory stimulation recalled also by auditory respondents. In addition, some traditional visualizations were frequent, such as piles of travel brochures, traditional sightseeing postcards or holiday pictures with beach and palm trees.

Metaphors concerning tactile stimulation were imaginative and described by 17 respondents. Besides slow and heavy animals, such as *turtles*, *sloths* and *elephants*, also more colorful animals, such as *chameleons* and *peacocks*, were chosen to metaphorically describe the fair experience. The 'heaviness' and abundant manifoldness may reflect the hustle and bustle that the multisensory stimulation has created. Respondents were also asked to describe what kind of gift package the travel fair could be, and most descriptions related to something heavy, such as a package containing brochures or food. Imaginary unpacking also revealed something "nice-to-get" yet unsurprising content, such as wool stockings, or something that was not very personal such as gift cards or tickets to somewhere. A metaphor of a package containing a puzzle summarizes nicely the active role that a visitor has to take with regards to deciding on which stands to visit, and when making sense of the fair in its entirety. Package-related metaphors share similarities with other metaphors pointing that the fair visit gets easily overloaded with micro-experiences that may create a burdensome over-all experience.

In conclusion, Figure 1 illustrates how environmental stimuli and single exhibitors provide inputs to the fair visitor's macro-experience. Moreover, this holistic and subjective experience can be expressed by the visitors as metaphors. The metaphor elicitation of experience as music, image, animal, and package provided a good view to the visitor's responses to the stimuli at travel fairs and supported the stimuli perceptions. Certain metaphors, such as holiday visualizations and gift cards, are likely to be specific to a travel fair context, whereas, the metaphor of 'bag full of brochures', describes the traditional nature of the exhibition implementation.

Discussion and conclusions

Theoretical contribution

This study was set to explore the ways in which travel fairs evoke multisensory experiences and internal responses in consumer visitors. First, with regard to *retail atmospherics*, we have outlined and analyzed the sensory stimuli typical to exhibition environments, which has been lacking in the prior literature. We found that sensory stimuli are not equally present in the exhibition environment. Visual stimuli play a dominant role, whereas the sense of touch is not greatly supported. These findings

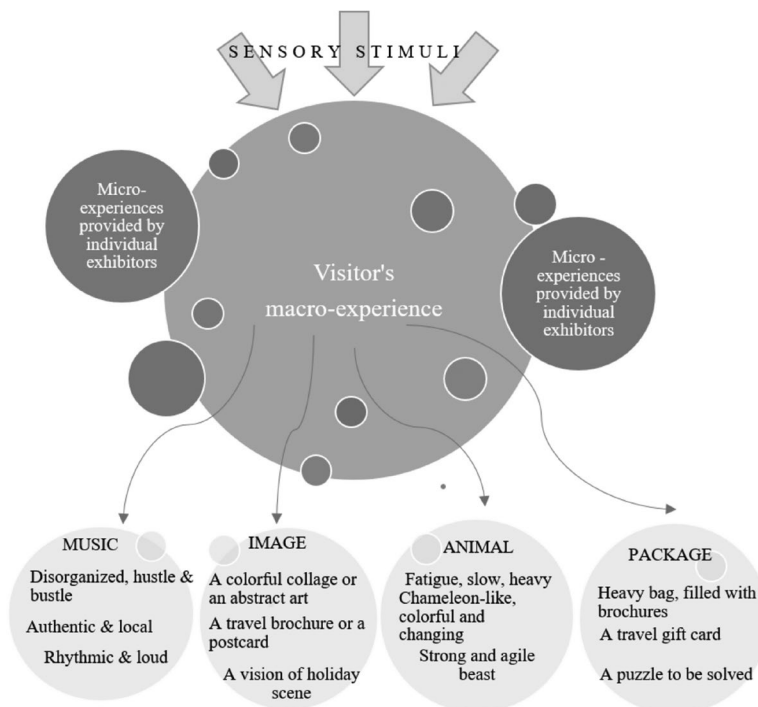


Figure 1. The travel fair experience evolves from sensory stimuli to metaphors.

do not contradict with prior assertions made in the retail atmospherics literature. Moreover, we have found that fairs share similarities with other environments, such as malls, museums, and art galleries, but also certain differences. To build on Forrest (2013), who points out the servicescape variables of retail and museum contexts, our findings position a servicescape of fairs in between these two. It is noteworthy to point out that the management of atmospherics plays an important role, as the visit to fairs tends to last for several hours, and the charge of an entrance fee is likely to raise the expectations. We suggest that the visually dominant environment that is characteristic of fairs should move in a multisensory direction in terms of offering curated environments that are more appealing.

Second, we have shown that *consumer responses to environmental stimuli* fall at two levels in the exhibition environment. We utilized the S-O-R model to analyze the consumers internal responses to environmental stimuli. Similarly to what Gilboa and Vilnai-Yavetz (2013) have found in a shopping mall context, we depict that on one hand, visitors to fairs respond to stimuli provided by single exhibitors, on the other, they form macro-level responses regarding larger exhibition areas. In practice, our notion of micro- versus macro experiences challenges the implementation of the quest for a congruence in multisensory cues (e.g., Mattila & Wirtz, 2001) in the retail environments that are difficult to control, such as fairs and shopping malls with many actors. Our findings suggest that although the visitors to fairs seem to find the experience manageable and pleasurable, the aspect of excitement is somewhat lacking. The findings also support the assertion that the retail environment may introduce a sensory overload to a consumer, which results in suboptimal levels of arousal (Doucé & Adams, 2020; Helmefalk & Hultén, 2017; Spence et al., 2014). Third, this study advances the understanding of a visitor experience at fairs by showing how visitors metaphorically elicit their experiences (Rinallo et al., 2010). The elicited metaphors for the visitors' macro-experiences reassert the need to develop exhibition atmospherics toward meaningful pleasure, arousal, and dominance states for the visitors. In contrast to Rinallo's et al. (2010) assertion, we find that consumer visitors may not be that far from business visitors when it comes to seeking for instrumental value as, for example, the consumer visitors reported seeking inspiration for the choice of a travel destination. However, it should be noted that there is likely to be a great variety in purposes to visit fairs across different topics and people.

Managerial implications

Each exhibitor, although representing one piece in the puzzle, has a crucial role in building a holistic experience for the visitor. Overstimulation leading to exhaustion could be prevented if the whole experience were managed

more consciously. Currently, the exhibition organizer decided on the overarching theme (such as “sustainability” or “indulgence”), and on the sub-topics or travel-related phenomena (such as “home country tourism”, “package tours”) that would attract potential exhibitors. The exhibitors only design their own presence, possibly acknowledging the general theme, but the big picture from a multisensory perspective is evaluated by no one. Our data reporting an extensive number of lotteries and lucky wheels is indicative of a repetitive experience that lacks arousal and excitement in the long term. In practice, exhibition organizers could use stimuli that trigger all the senses, such as themed colors, flavors, materials, smells and music to make the experience more attention-capturing, memorable, and manageable for the visitor. It is clear from the researchers’ videos and pictures that the coherent multisensory sets of stimuli put in place by the exhibitors attract the attention of and appeal to the crowd. For example, auditory stimuli combined with visual cues such as dance performances appear to leave pronounced traces in the memory.

The exhibition space has its challenges: exhibitors are not aware of and lack control over the actions of their competitors, or fellow-exhibitors. Creating a memorable visitor experience is always dependent on multiple aspects that are not always possible to control. These aspects include crowds and visitors (are they the target audience for the exhibitor?); fellow exhibitors (what kinds of stimuli they use); facilities and space design decided by the exhibition center (how is the area divided and organized; how do the facilities work for the crowd?); and schedules and performances (what kind of content and performances make the crowd move on or motivate people to visit the fair?).

Although visual stimuli featured regularly, more use should be made of tactile stimuli to attract visitors to the stand. Overcrowding was clearly something that the visitors wanted to avoid, however, such as by changing their route. A fair is a bodily experience, an opportunity to meet fellow visitors and to find out about exhibitors. One common reason for visiting a fair is to have personal contact with company representatives. Indeed, many visitors seek deeper connection with the brand or company to support their existing online/virtual knowledge. However, tactile stimulus is something the visitor cannot explore in an online context. Nevertheless, although it is impossible to create a fully-fledged multisensorial experience with smells and tactile stimuli in an online context, the exhibition situation should complement the online experience, or even exceed visitor expectations. Fairs may be a potential arena in which to meet old and discover new brands, with easy access to personal contact, but more becomes less if the visitor is overstimulated.

Thus far, research on the multisensory aspect has been confined mainly to the retail store context, hence there is a need for more extensive studies

on fairs and exhibitions. Retail companies and brands can control and manage sensory stimuli on a more detailed level, but fair and exhibition space has its own characteristics. As further research, it would be fascinating to examine how brands aim to imitate and deliver the brand experience in an exhibition space, and what kind of aspects they need to negotiate.

Future research avenues

This paper is based on visual, tactile, and auditory observation data combined with visitor interviews. From a sensory perspective, this means that taste and smell were neglected. We suggest that these stimuli should be observed in future research. Collected data could be conducted in the form of a descriptive field diary combined with visual reporting of the expected source of sensory stimulus. Further, the S-O-R paradigm could allow for even more depth if visitor motivations and expectations were considered in more detail. Visitors' observations and interpretations could be based on the motives behind the visit as well as the expectations emanating from previous visits to the same fair (first-timer vs. returning visitor).

The Nordic Travel fair was organized in January 2020, which was before Covid-19 brought restrictions to mass meetings. In addition to such restrictions, the specific topic of this fair – travel – will also face strong and longer-term impacts in the future, which may accelerate the development both of various new and related themes, and of alternative ways of executing such events. For example, organizing a fair as an online or hybrid event would bring to light relevant and fruitful new research topics related to the multisensory experience of trade fairs. Furthermore, it would be valuable to collect longitudinal data on multisensory experiences in order to shed light on and map the change of how fairs are used as a marketing tool and curated in terms of atmospherics.

Acknowledgements

We wish to thank the support of Finnish Fair Foundation.

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References

- Ackerman, J. M., Nocera, C. C., & Bargh, J. A. (2010). Incidental haptic sensations influence social judgments and decisions. *Science (New York, N.Y.)*, 328(5986), 1712–1715. doi:10.1126/science.1189993

- Arnould, E., & Price, L. (2006). Market-oriented ethnography revisited. *Journal of Advertising Research*, 46(3), 251–262. doi:[10.2501/S0021849906060375](https://doi.org/10.2501/S0021849906060375)
- Baker, J., Grewal, D., & Parasuraman, A. (1994). The influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science*, 24(4), 328–339. doi:[10.1177/00920703942240](https://doi.org/10.1177/00920703942240)
- Ballantine, P. W., Jack, R., & Parsons, A. G. (2010). Atmospheric cues and their effect on the hedonic retail experience. *International Journal of Retail & Distribution Management*, 38(8), 641–653. doi:[10.1108/09590551011057453](https://doi.org/10.1108/09590551011057453)
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57–71. doi:[10.1177/002224299205600205](https://doi.org/10.1177/002224299205600205)
- Bloch, P. H., Ridgway, N. M., & Dawson, S. A. (1994). The shopping mall as consumer habitat. *Journal of Retailing*, 70(1), 23–42. doi:[10.1016/0022-4359\(94\)90026-4](https://doi.org/10.1016/0022-4359(94)90026-4)
- Chang, H.-J., Eckman, M., & Yan, R.-N. (2011). Application of the Stimulus-Organism-Response model to the retail environment: The role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 21(3), 233–249. doi:[10.1080/09593969.2011.578798](https://doi.org/10.1080/09593969.2011.578798)
- Cheng, F.-F., Wu, C.-S., & Yen, D. C. (2009). The effect of the online store atmosphere on consumer's emotional responses – an experimental study of music and colour. *Behaviour & Information Technology*, 28(4), 323–334. doi:[10.1080/01449290701770574](https://doi.org/10.1080/01449290701770574)
- Decré, G. B., & Pras, B. (2013). Simulating in-store lighting and temperature with visual aids: Methodological propositions and S-O-R effects. *The International Review of Retail, Distribution and Consumer Research*, 23(4), 363–393. doi:[10.1080/09593969.2013.781050](https://doi.org/10.1080/09593969.2013.781050)
- Donovan, R. J., & Rossiter, J. R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing*, 58(1), 34–57.
- Doucé & Adams (2020). Sensory overload in a shopping environment: Not every sensory modality leads to too much stimulation. *Journal of Retailing and Consumer Services*, 57, 102154. doi:[10.1016/j.jretconser.2020.102154](https://doi.org/10.1016/j.jretconser.2020.102154)
- Eroglu, S. A., Machleit, K., & Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research*, 54(2), 177–184. doi:[10.1016/S0148-2963\(99\)00087-9](https://doi.org/10.1016/S0148-2963(99)00087-9)
- Ezeh, C., & Harris, L. (2007). Servicescape research: A review and a research agenda. *The Marketing Review*, 7(1), 59–78. doi:[10.1362/146934707X180677](https://doi.org/10.1362/146934707X180677)
- Forrest, R. (2013). Museum atmospherics: The role of the exhibition environment in the visitor experience. *Visitor Studies*, 16(2), 201–216. doi:[10.1080/10645578.2013.827023](https://doi.org/10.1080/10645578.2013.827023)
- Gilboa, S., & Rafaeli, A. (2003). Store environment, emotions and approach behaviour: Applying environmental aesthetics to retailing. *The International Review of Retail, Distribution and Consumer Research*, 13(2), 195–211. doi:[10.1080/0959396032000069568](https://doi.org/10.1080/0959396032000069568)
- Gilboa, S., & Vilnai-Yavetz, I. (2013). Shop until you drop? An exploratory analysis of mall experiences. *European Journal of Marketing*, 47(1–2), 239–259. doi:[10.1108/03090561311285538](https://doi.org/10.1108/03090561311285538)
- Grohmann, B., Spangenberg, E. R., & Sprott, D. E. (2007). The influence of tactile input on the evaluation of retail product offerings. *Journal of Retailing*, 83(2), 237–245. doi:[10.1016/j.jretai.2006.09.001](https://doi.org/10.1016/j.jretai.2006.09.001)
- Hecht, D., & Reiner, M. (2009). Sensory dominance in combinations of audio, visual and haptic stimuli. *Experimental Brain Research*, 193(2), 307–314. doi:[10.1007/s00221-008-1626-z](https://doi.org/10.1007/s00221-008-1626-z)

- Helkkula, A., & Pihlström, M. (2010). Narratives and metaphors in service development. *Qualitative Market Research: An International Journal*, 13(4), 354–371. doi:10.1108/13522751011078791
- Helmefalk, M., & Hultén, B. (2017). Multi-sensory congruent cues in designing retail store atmosphere: Effects on shoppers' emotions and purchase behavior. *Journal of Retailing and Consumer Services*, 38(9), 1–11. doi:10.1016/j.jretconser.2017.04.007
- Hultén, B. (2011). Sensory marketing: The multi-sensory brand-experience concept. *European Business Review*, 23(3), 256–273. doi:10.1108/09555341111130245
- Jung, S., & Tanford, S. (2017). What contributes to convention attendee satisfaction and loyalty? A meta-analysis. *Journal of Convention & Event Tourism*, 18(2), 118–134. doi:10.1080/15470148.2017.1290565
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), 332–351. doi:10.1016/j.jcps.2011.08.003
- Lee, T.H., Fu, C.-J., & Tsai, L.-F. (2019). How servicescape and service experience affect loyalty: Evidence from attendees at the Taipei International Travel Fair. *Journal of Convention & Event Tourism*, 20(5), 398–420. doi:10.1080/15470148.2019.1658002
- Lucia-Palacios, L., Pérez-López, R., & Polo-Redondo, Y. (2016). Cognitive, affective and behavioral responses in mall experience: A qualitative approach. *International Journal of Retail & Distribution Management*, 44(1), 4–21. doi:10.1108/IJRDM-05-2014-0061
- Massara, F., Liu, S.S., & Melara, M.D. (2010). Adapting to a retail environment: Modeling consumer–environment interactions. *Journal of Business Research*, 63(7), 673–681. doi:10.1016/j.jbusres.2009.05.004
- Mattila, A.S., & Wirtz, J. (2001). Congruency of scent and music as a driver of in-store evaluations and behavior. *Journal of Retailing*, 77(2), 273–289. doi:10.1016/S0022-4359(01)00042-2
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambridge: M.I.T. Press.
- Messukeskus. (2020). Matkamessut tuo maailma sinun luoksesi! Retrieved from <https://matka.messukeskus.com/>
- Michon, R., Chebat, J. C., & Turley, L. W. (2005). Mall atmospherics: The interaction effects of the mall environment on shopping behavior. *Journal of Business Research*, 58(5), 576–583. doi:10.1016/j.jbusres.2003.07.004
- Pine, B., & Gilmore, J.H. (1999). *The experience economy*. Boston, MA: Harvard Business School Press.
- Rinallo, D., Borghini, S., & Golfetto, F. (2010). Exploring visitor experiences at trade shows. *Journal of Business & Industrial Marketing*, 25(4), 249–258. doi:10.1108/08858621011038207
- Roy, A. (1994). Correlates of mall visit frequency. *Journal of Retailing*, 70(2), 139–161. doi:10.1016/0022-4359(94)90012-4
- Schmitt, B. H. (1999). *Experiential Marketing*. New York, NY: Free Press.
- Schmitt, B. H. (2009). The concept of brand experience. *Journal of Brand Management*, 16(7), 417–419. doi:10.1057/bm.2009.5
- Siu, N. Y.-M., Wan, P. Y., & Dong, P. (2012). The impact of the servicescape on the desire to stay in convention and exhibition centers: The case of Macao. *International Journal of Hospitality Management*, 31(1), 236–246. doi:10.1016/j.ijhm.2011.06.011
- Soars, B. (2009). Driving sales through shoppers' sense of sound, sight, smell and touch. *International Journal of Retail & Distribution Management*, 37(3), 286–298. doi:10.1108/09590550910941535

- Spence, C., Puccinelli, N. M., Grewal, D., & Roggeveen, A. L. (2014). Store atmospherics: A multisensory perspective. *Psychology & Marketing*, 31(7), 472–488. doi:[10.1002/mar.20709](https://doi.org/10.1002/mar.20709)
- Sung, H., & Lee, W. (2015). The effect of basic, performance and excitement service factors of a convention center on attendees' experiential value and satisfaction: A case study of the Phoenix convention center. *Journal of Convention & Event Tourism*, 16(3), 175–199. doi:[10.1080/15470148.2015.1034908](https://doi.org/10.1080/15470148.2015.1034908)
- Tai, S. H. C., & Fung, A. M. C. (1997). Application of an environmental psychology model to in-store buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 7(4), 311–337. doi:[10.1080/095939697342914](https://doi.org/10.1080/095939697342914)
- Valtonen, A., Markuksela, V., & Moisander, J. (2010). Doing sensory ethnography in consumer research. *International Journal of Consumer Studies*, 34(4), 375–380. doi:[10.1111/j.1470-6431.2010.00876.x](https://doi.org/10.1111/j.1470-6431.2010.00876.x)
- Vieira, V. A. (2013). Stimuli–organism–response framework: A meta-analytic review in the store environment. *Journal of Business Research*, 66(9), 1420–1426. doi:[10.1016/j.jbusres.2012.05.009](https://doi.org/10.1016/j.jbusres.2012.05.009)

Appendix 1. Metaphors

Auditory	Visual	Tactile	
If this exhibition were music or an instrument, what would it be like?	If this exhibition were a piece of art or a photo, what would it be like?	If this exhibition were an animal, how would it move and what would it feel like?	If this exhibition were a gift package, what would it be, and how would it feel to touch?
Dis-organized mix <ul style="list-style-type: none"> • Mix of many instruments x4 • Many languages (noise) • Accordion x2 • Variety of strings • Maraca 	A colorful collage <ul style="list-style-type: none"> • Colorful picture with many countries and variety of cultures • Collage of people from different cultures in the same picture • Abstract & colorful painting 	Fatigue, slow & heavy <ul style="list-style-type: none"> • Turtle ("slow and old") Sloth <ul style="list-style-type: none"> • Saimaa ringed seal ("maybe I saw it somewhere") • elephant ("heavy feeling") • wompat • Bear x2 • Panda ("maybe I saw it somewhere") 	Hard, heavy & basic <ul style="list-style-type: none"> • Heavy & hard, full of brochures • Sleek and hard, food inside • Middle size and very traditional, lottery • Woolen stockings ("nice to get, but nothing surprising") • Hard, contains offers
Rhythmic & loud <ul style="list-style-type: none"> • Drum x4 • Something rhythmic x2 • Heavy metal (hard to hear) • Rock (too loud) x2 	Brochures and travel postcards <ul style="list-style-type: none"> • A pile of travel brochures from abroad and Finland. • Traditional postcard with sightseeing with city name & country • Childrenbook-kind of worldmap of biggest countries and most traditional associations: Moscow with onion-shaped churches, New York with lights in skyscrapers, Tansania with Kilimanjaro and wild animals... 	Colorful and changing <ul style="list-style-type: none"> • Chameleon • Peacock (colorful and a lot to see) x2 • Small Tortoiseshell • Monkey ("maybe I saw it somewhere") 	Hard package x2 <ul style="list-style-type: none"> • Travel gift card • Gift card for a hotel • Hard, a ticket to Vladivostok • Hard, a ticket to somewhere x3 • Experiential: ticket to somewhere far
<ul style="list-style-type: none"> • Authentic & local • Folk-music x2 • Guitar 	Holiday scene <ul style="list-style-type: none"> • Picture with traditional signs of holiday: sun, palm-trees, ocean and airplane • Picture with white beach and blue ocean • Trailer parked near the beach Children's interpretations <ul style="list-style-type: none"> • Trailer on the road with Harri Hylje-character • Picture of Harri Hylje-character 	Strong and agile beast <ul style="list-style-type: none"> • Tiger • Lynx • Hyena • Crocodile • Fox ("maybe I saw it somewhere", "it is foxy /sneaky") x2 Uncategorized <ul style="list-style-type: none"> • Horse 	A puzzle to be solved <ul style="list-style-type: none"> • Hard, a puzzle